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A Comparative Study of Self Concept and Academic Achievement of Physically Challenged and Normal Students

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Abstract

Self concept and academic achievement have been studied and many researchers have pointed out that self concept is the expected level of achievement of the individual where difference is obtained between person's performance in a task and his estimate of future in that task. The education of exceptional children represents an attempt on the part of the society to furnish equal opportunity to individuals who differ from the general population of students in their physical, mental and social characteristics. There are individuals who learn very fast. The present study was conducted on a sample of 60 secondary school students where 30 consists of physically challenged and 30 normal secondary school students of district Ambala & Yamunanagar. The data was collected with help of self-concept inventory (Real Self and Ideal Self) by Sagar and Sharma, 1971. The two groups of students i.e. physically challenged and normal secondary school students have been found to be significantly different on real self dimension and ideal self dimension of self concept inventory. And the two groups viz. physically challenged and normal secondary school students, were compared with each other on academic achievement, it was found that normal secondary school students have high academic achievement than physically challenged secondary school students.

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Self Concept

Self concept has been defined by several researchers. Cooley C. H. **(**1902) developed the concept of "The Looking Glass Self". He defines it "As we see our face, figure and dress in the glass and are interested in them because they are ours and pleased or otherwise with them …as in imagination we perceive in another's mind some thought of our appearance, manners, aims, deeds, character, friends and so we are variously affected by it". Self-concept includes the person's abstractions and evaluations about his physical abilities, appearance, intellectual capacities, social skills, psychological self image, self-confidence, self-respect and self adequacy. Further, many researchers have pointed out that self concept is the expected level of achievement of the individual where difference is obtained between person's performance in a task and his estimate of future in that task.

Academic Achievement

Trow (1956) defined academic achievement as "knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupil's performance". Good (1959) refers to academic achievement as, "the knowledge attained or skills developed in the school subjects usually designed by test scores or marks assigned by the teacher". Metha K. K. (1969) defined academic achievement as, "academic performance includes both curricular and co-curricular performance of the students. It indicates the learning outcome of the students. In class rooms students perform their potentials efficiently, as a result of it, learning takes place". The learning outcome changes the behavior

pattern of the student through different subjects. Academic achievement of pupils refers to the knowledge attained and skills developed in the school subjects. So, academic achievement means the achievement of pupils in the academic subjects.

The education of exceptional children represents an attempt on the part of the society to furnish equal opportunity to individuals who differ from the general population of students in their physical, mental and social characteristics. There are individuals who learn very fast. There are others who do not learn very fast, but with reasonable teaching learning inputs, can learn prescribed tasks, may be over a relatively long time segment. There are some individuals who find it difficult to learn without special inputs. These are the individuals who have special learning needs which arise out of sensory, intellectual, psychological or socio-cultural deficits. For example, persons with visual, hearing or neuro-muscular impairments have learning problems. So have persons with a low level of intellectual functioning and those with disorders in psychological processes. These conditions, impairments or disabilities, impede the normal development of individuals intellectually, socially, emotionally and physically. There are however, ways to reduce the discrepancy through restorative and rehabilitative techniques, including education. These persons can also be educated using special instructional methodology, instructional material, learning aids and equipments specific to special learning needs. It also requires additional teaching competencies in general teacher and in some cases special teachers are indispensable. According to the estimates of national survey organization, the number of disabled persons is above 120 lakhs presently. The government of India has established several special institutes for the handicapped such as, national institute for visually handicapped at Dehradun, National Institute of Handicapped at Mumbai, National Institute of Orthopedic at Kolkata and National Institute of Mentally Retarded at Hyderabad.

For the purpose of the present investigation physically challenged students includes the following categories i.e. hearing impaired, visually impaired and crippled. Hearing impaired are those in whom the sense of hearing is non functional for ordinary purposes of life. They do not hear or understand sound at all even with amplified speech. The cases included in this category will be those having hearing loss of more than 70 decibels (Graham Bell's Scale) in the better ear (profound) loss of hearing in both ears (ministry of social welfare 1987). Hearing impaired children are recognized by various symptoms such as, frequent pain in the ears, discharge from the ear, scratching the ear frequently, turning the head frequently towards the speaker and restlessness.

Sample

The total sample for the present investigation consists of 60 secondary school students, where 30 consists of physically challenged and 30 normal secondary school students of district Ambala & Yamunanagar. The details about the procedure of selecting the sample are given as under:

The physically challenged students were identified on the basis of information obtained from the offices of various secondary school institutions. Further, the investigator categorized them into three main categories viz hearing impaired N= 10, visually impaired N= 10 and Locomotor disability N= 10. All the three categories of physically challenged students were taken from 04 secondary schools and the normal secondary school students were taken from 03 institutions of district Ambala & Yamunanagar. For normal secondary school students, the total sample (N=30) was selected from the total population (N=300) by using

random sampling technique, however for physically challenged students whole population (N=30) was taken for sample by the investigator by using the purposive sampling technique.

The following schools were selecting randomly as sample for present investigation. The school-wise breakup of the sample is shown as under:

S. No.	Name of the School	Location	Normal Sec. S. Student's		Physically Challenged Sec. School Student's		Total Sample
			Total No.	Sample Taken	Total No.	Sample Taken	
01.	G.R.S.D Sen. Sec. School	Ambala	50	8	0	0	8
02.	A.S Sen. Sec. School	Ambala	50	7	0	0	7
03.	Swami Vivekanand School	Yamunanagar	50	8	0	0	8
04.	PKR Jain School	Ambala	40	7	0	0	7
04	SD Blind School	Ambala	0	0	15	10	10
05.	Asha School Ambala	Ambala	0	0	15	5	5
06.	Rotary School for Deaf	Ambala	0	0	15	8	8
07.	SL DAV School	Ambala	0	0	20	7	7
Total			190	30	65	30	60

Objectives

1. To study the difference between Physically challenged and normal secondary school students on real self dimension of self concept inventory.
2. To study the difference between Hearing impaired and visually impaired secondary school students on real self dimension of self concept inventory.
3. To study the difference between Hearing impaired and locomotor disabled secondary school students on real self dimension of self concept inventory.
4. To study the difference between Visually impaired and locomotor disabled secondary school students on real self dimension of self concept inventory.
5. To study the difference between Physically challenged and normal secondary school students on ideal self dimension of self concept inventory.
6. To study the difference between Hearing impaired and visually impaired secondary school students on ideal self dimension of self concept inventory.
7. To study the difference between Hearing impaired and locomotor disabled secondary school students on

ideal self dimension of self concept inventory.

8. To study the difference between Visually impaired and locomotor disabled secondary school students on ideal self dimension of self concept inventory.
9. To study the difference between Physically challenged and normal secondary school students on academic achievement.
10. To study the difference between Hearing impaired and visually impaired secondary school students on academic achievement.
11. To study the difference between Hearing impaired and locomotor disabled secondary school students on academic achievement.
12. To study the difference between Visually impaired and locomotor disabled secondary school students on academic achievement.

Hypotheses

1. Physically challenged and normal secondary school students differ significantly on real self dimension of self concept inventory.
2. Hearing impaired and visually impaired secondary school students do not differ significantly on real self dimension of self concept inventory.
3. Hearing impaired and locomotor disabled secondary school students do not differ significantly on real self dimension of self concept inventory.
4. Visually impaired and locomotor disabled secondary school students do not differ significantly on real self dimension of self concept inventory.
5. Physically challenged and normal secondary school students differ significantly on ideal self dimension of self concept inventory.
6. Hearing impaired and visually impaired secondary school students do not differ significantly, on ideal self dimension of self concept inventory.
7. Hearing impaired and locomotor disabled secondary school students do not differ significantly on ideal self dimension of self concept inventory.
8. Visually impaired and locomotor disabled secondary school students do not differ significantly, on ideal self dimension of self concept inventory.
9. Physically challenged and normal secondary school students differ significantly on academic achievement.
10. Physically challenged and normal secondary school students differ significantly on academic achievement.
11. Hearing impaired and locomotor disabled secondary school students do not differ significantly on academic achievement.
12. Visually impaired and locomotor disabled secondary school students do not differ significantly on academic achievement.

Selection of the Tool

The data for was collected with help of self-concept inventory (Real Self and Ideal Self) by Sagar and Sharma, 1971.

Administration of the test

Self – concept inventory is questionnaires in which subjects are required to give their own individual feelings.

Validity

The content validity of self-concept inventory was established by Sagar and Sharma and the validity co-efficient of this inventory were found to be 0.682.

Academic Achievement

Academic achievement refered to the aggregate marks obtained by the subjects in 8th and 9th classes and the average of marks was taken for analysis.

Procedure

The investigator visited various secondary schools of district Ambala & Yamunanagar in order to collect the data. The Sagar and Sharma's self – concept inventory was administrated to 60 students (30 Normal and 30 physically challenged) of 10th standard to assess their self–concept. These tests were administered on the students in their respective institutions and strictly in accordance with the instructions provided in the manuals. The academic achievement of past two years of the sample subjects was collected from the official records of the receptive secondary schools.

Statistical Treatment

The data was analyzed by applying mean, S. D. and t-test. As a result of this, the two groups of students, i-e, physically challenged and normal were compared on self concept (real self and ideal self) and academic achievement.

Self Concept (Real Self)

Table 1 : Showing the mean comparison of normal and physically challenged Secondary School Students on Real Self Dimension of Self Concept Inventory (N = 30) in each group).

Group	N	Mean	S.D	t-test
Normal	30	254.43	6.14	62.9*
Physically Challenged	30	164.7	4.8	

*p<0.05**p<0.01

Table 1 shows the mean comparison of physically challenged and normal secondary school students on real self dimension of self concept inventory. The calculated t-value (62.9) exceeds the tabulated t-value (2.66) at 0.05 level of significance, which depicts that there is significant difference between physically challenged and normal secondary school students on real self dimension of self concept inventory. Thus from the confirmation of the results from the above table, the hypothesis, "physically challenged and normal secondary school students differ significantly on real self dimension of self concept inventory", stands accepted.

Table 2 : Showing the mean comparison of Hearing Impaired and Visually Impaired Secondary School Students on Real Self Dimension of Self Concept Inventory (N = 10 in each group).

Group	N	Mean	S.D	t-test
Hearing Impaired	10	166.10	5.84	1.09
Visually Impaired	10	163.5	4.67	

*p<0.05**p<0.01

Table 2 shows the mean comparison of hearing impaired and visually impaired secondary school students on real self dimension of self concept inventory. The calculated t -value (1.09) is less than the tabulated t-value (2.086) at 0.05 level of significance, which depicts that there is no significant difference between hearing impaired and visually impaired secondary school students. The above result clarifies that hearing impaired and visually impaired secondary school students have the similar attitudes, knowledge of themselves and evaluation of their achievements. Thus from the confirmation of the results from the above table, the null hypothesis "hearing impaired and visually impaired secondary school students do not differ significantly on real self dimension of self concept inventory", stands accepted.

Table 3 : Showing the mean comparison of Hearing Impaired and Locomotors disabled Secondary School Students on Real Self Dimension of Self Concept Inventory (N = 10 in each group).

Group	N	Mean	S.D	t-test
Hearing Impaired	10	166.10	5.84	0.72
Locomotor disabled	10	164.5	3.83	

Table 3 shows the mean comparison of hearing impaired and locomotors disabled secondary school students on real self dimension of self concept inventory. The calculated t-value (0.72) is less than the tabulated t-value (2.086) at 0.05 level of significance, which depicts that there is no significant difference between hearing impaired and locomotors disabled secondary school students. The above result clarifies that hearing impaired and locomotors disabled secondary school students have the same actual outlook towards their personality make – ups such as there attitudes, sentiments, temperaments, Knowledge and achievements. Thus from the confirmation of the results from the above table, the null hypothesis , "hearing impaired and locomotors disabled secondary school students do not differ significantly on real self dimension of self concept inventory", stands accepted.

Table 4 : Showing the mean comparison of Visually Impaired and Locomotors disabled Secondary School Students on Real Self Dimension of Self Concept Inventory (N = 10 in each group).

Group	N	Mean	S.D	t-test
Locomotor disabled	10	164.50	3.83	0.523
Visually Impaired	10	163.5	4.67	

Table 8 shows the mean comparison of visually impaired and locomotors disabled secondary school students on ideal self dimension of self concept inventory. The calculated t-value (0.35) is less than the tabulated t-value (2.086) at 0.05 level of significance, which depicts that there is no significant

difference between visually impaired and locomotors disabled secondary school students. The above result clarifies that hearing impaired and visually impaired secondary school students have the similar attitudes, knowledge of themselves and evaluation of their achievements. Thus from the confirmation of the results from the above table, the null hypothesis, "visually impaired and locomotors disabled secondary school students do not differ significantly, on ideal self dimension of self concept inventory", stands accepted.

Academic Achievement

Table 9 : Showing the mean comparison of Normal and Physically Challenged Secondary School Students on Academic Achievement (N = 30 in each group).

Group	N	Mean	S.D	t-test
Normal	30	80.8	8.36	16.17**
Physically Challenged	30	52.2	4.88	

*p<0.05**p<0.01

Table 9 shows the mean comparison of physically challenged and normal secondary school students on academic achievement. The calculated t-value (16.17) exceeds the tabulated t-value (2.66) at 0.01 level of significance, which depicts that there is significant difference between physically challenged and normal secondary school students on academic achievement. The above result clarifies that physically challenged and normal secondary school students do not have the same academic achievement. Thus from the confirmation of the results from the above table, the hypothesis, "physically challenged and normal secondary school students differ significantly on academic achievement", stands accepted.

Table 10 : Showing the mean comparison of Hearing Impaired and Visually Impaired Secondary School Students on Academic Achievement (N = 10 in each group).

Group	N	Mean	S.D	t-test
Hearing Impaired	10	53.1	4.58	0.37
Visually Impaired	10	52.3	4.99	

Table 10 shows the mean comparison of hearing impaired and visually impaired secondary school students on academic achievement. The calculated t -value (0.37) is less than the tabulated t-value (2.086) at 0.05 level of significance, which depicts that there is no significant difference between hearing impaired and visually impaired secondary school students. The above result clarifies that hearing impaired and visually impaired secondary school students have the similar academic

achievement. Thus from the confirmation of the results from the above table, the null hypothesis, "hearing impaired and visually impaired secondary school students do not differ significantly on academic achievement", stands accepted.

Table 11 : Showing the mean comparison of Hearing Impaired and Locomotors disabled Secondary School Students on Academic Achievement (N = 10 in each group).

Group	N	Mean	S.D	t-test
Hearing Impaired	10	53.1	4.58	0.85
Locomotor disabled	10	51.2	5.39	

Table 11 shows the mean comparison of hearing impaired and locomotors disabled secondary school students on academic achievement. The calculated t -value (0.85) is less than the tabulated t-value (2.086) at 0.05 level of significance, which depicts that there is no significant difference between hearing impaired and locomotors disabled secondary school students. The above result clarifies that hearing impaired and visually impaired secondary school students have the similar academic achievement. Thus from the confirmation of the results from the above table, the null hypothesis, "hearing impaired and locomotors disabled secondary school students do not differ significantly on academic achievement", stands accepted.

Table 12: Showing the mean comparison of Visually Impaired and Locomotors disabled Secondary School Students on Academic Achievement (N = 10 in each group).

Group	N	Mean	S.D	t-test
Locomotor disabled	10	51.2	5.39	0.47
Visually Impaired	10	52.3	4.99	

Table 12 shows the mean comparison of visually impaired and locomotors disabled secondary school students on academic achievement. The calculated t -value (0.47) is less than the tabulated t-value (1.98) at 0.05 level of significance, which depicts that there is no significant difference between visually impaired and locomotors disabled secondary school students. The above result clarifies that hearing impaired and visually impaired secondary school students have the similar academic achievement. Thus from the confirmation of the results from the above table, the null hypothesis, "visually impaired and locomotors disabled secondary school students do not differ significantly on academic achievement", stands accepted.

Discussion

The two groups viz. physically challenged and normal secondary school students, were compared with each other on real self dimension of self concept inventory. It was

found that normal secondary school students have high real self than physically challenged secondary school students, which means the actual outlook of an individual towards his/her total personality make – up such as attitudes, sentiments, temperaments and knowledge. The normal secondary school students have no impairments which makes them realistic in approach, the results reveals that normal secondary school students have high real self than physically challenged secondary school students. The results reveal that hearing impaired, visually impaired and locomotors disabled secondary school students have same ideal self, which means the possible outlook of an individual towards his/her total personality make up such as attitudes, sentiments knowledge etc.

The two groups viz. physically challenged and normal secondary school students, was compared with each other on academic achievement, it was found that normal secondary school students have high academic achievement than physically challenged secondary school students, because normal secondary school students have balanced physical health which energizes them to become high academic achievers. The results reveal that hearing impaired, visually impaired and locomotors disabled secondary school students have same academic achievement.

Conclusion

On the basis of the data analysis the following conclusions have been drawn.

- The two groups of students i.e. physically challenged and normal secondary school students have been found to be significantly different on real self dimension of self concept inventory. The mean differences favours the normal group of secondary school students, which clearly indicates that normal group of secondary school students have a high real self concept as compared to physically challenged secondary school students.
- The two groups of students viz. hearing impaired and visually impaired secondary school students have not shown any significant difference on real self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.
- The two groups of students viz. hearing impaired and locomotors disabled secondary school students have not shown any significant difference on real self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.
- The two groups of students viz. visually impaired and locomotors disabled secondary school students have not shown any significant difference on real self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.
- The two groups of students i.e. physically challenged and normal secondary school students have been found to be significantly different on ideal self dimension of self concept inventory. The mean differences favours the physically challenged secondary school students, which clearly indicates that physically challenged secondary school students have a high ideal self concept as compared to normal secondary school students.
- The two groups of students viz. hearing impaired and visually impaired secondary school students have not shown any significant difference on ideal self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.

- The two groups of students viz. hearing impaired and locomotors disabled secondary school students have not shown any significant difference on ideal self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.
- The two groups of students viz. visually impaired and locomotors disabled secondary school students have not shown any significant difference on ideal self dimension of self concept inventory. This indicates that the two groups of students have similar attitudes, knowledge and evaluation of their achievements.
- The two groups of students i.e. physically challenged and normal secondary school students have been found to be significantly different on academic achievement. The mean differences favours the normal secondary school students, which clearly indicates that normal secondary have a high academic achievement as compared to physically challenged secondary school students.
- The two groups of students viz. hearing impaired and visually impaired secondary school students have not shown any significant difference on academic achievement. This indicates that the two groups of students have almost similar in academic achievement.
- The two groups of students viz. hearing impaired and locomotors disabled secondary school students have not shown any significant difference on academic achievement. This indicates that the two groups of students have almost similar in academic achievement.
- The two groups of students viz. visually impaired and locomotors disabled secondary school students have not shown any significant difference on academic achievement. This indicates that the two groups of students have almost similar in academic achievement.

Educational Implications

The research has the following educational implications for educators:

- Special schools, special instructional methods, instructional material and supportive services should meet their needs so that we get good academic results.
- Resource persons and trained teachers should be appointed in normal as well as special schools, so that they will guide these students in choosing the different courses according to their aptitudes.
- Vocational education should form an integral part of their curriculum, so that they may earn their livelihood.
- Innovative teaching-learning strategies such as peer tutoring, cooperative learning, individualized instruction and consultation among teachers should be adopted by professionals.
- There should be a definite teacher student ratio, interaction between the teacher and the physically challenged child, continuous evaluation and remedial instruction for physically challenged children and it will help us to develop the positive self concept and level of aspiration among these children.
- Equality of educational opportunities must be provided in the field of whole education.
- Individual attention should be given towards the physically challenged students, so that these children may develop real self concept among themselves.

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