



## A STUDY OF FUNCTIONAL ABILITY OF HEARING IMPAIRED (HI) STUDENTS WITH REFERENCE TO THEIR GENDER AND SCHOOL CATEGORY

Mr. Jitendra Pratap Singh<sup>1</sup>, Yash Pal Singh<sup>2</sup>, Ph.D. & Anju Agarwal<sup>3</sup>, Ph.D.

<sup>1</sup>Research Scholar, IASE, MJP Rohilkhand University, Bareilly, Uttar Pradesh

<sup>2</sup>Professor, IASE, MJP Rohilkhand University, Bareilly, Uttar Pradesh

<sup>3</sup>Professor, IASE, MJP Rohilkhand University, Bareilly, Uttar Pradesh

**Paper Received On:** 25 JAN 2023

**Peer Reviewed On:** 31 JAN 2023

**Published On:** 1 FEB 2023

### Abstract

Present study focuses on studying the functional ability of HI students in inclusive and special schools. The objectives of the study were - (i) to study the functional status of hearing impaired (HI) students in special schools on (a) 'learning and applying knowledge', (b) 'general task & demands' and (c) 'communication' dimensions with reference to their gender (ii) to study the functional status of hearing impaired (HI) students in inclusive schools on (a) 'learning and applying knowledge', (b) 'general task & demands' and (c) 'communication' dimensions with reference to their gender and (iii) to study the functional status of hearing impaired (HI) students on (a) 'learning and applying knowledge', (b) 'general task & demands' and (c) 'communication' dimensions with reference to their school category. This study was performed on 113 HI students in inclusive schools and 69 HI students in special schools selected using purposive sampling method from inclusive and special schools of Bareilly district of Uttar Pradesh, India. Major findings of the study were – (i) there were no significant differences found between the functional status of hearing impaired (HI) students (boys and girls) in special schools on 'learning and applying knowledge' and 'general task & demands' dimensions (ii) the significant difference was found between hearing impaired (HI) students (boys and girls) in special schools in 'communication' dimension (iii) the differences were significant between the functional status of hearing impaired (HI) students (boys and girls) in inclusive schools on 'learning and applying knowledge' and 'communication' (iv) the difference between the functional status of hearing impaired (HI) students (boys and girls) in inclusive schools was not significant on 'general task & demands' dimension (v) hearing impaired (HI) boys and girls were not significantly differing on the functional status of 'learning and applying knowledge' dimension over their school categories and (vi) hearing impaired (HI) boys and girls were differing significantly on the functional status of 'general task and demands' and 'communication' dimensions over their school categories.

**Key words:** Functional status, Learning and applying knowledge, General task and demands, Communication, Inclusive Education



Scholarly Research Journal's is licensed Based on a work at [www.srjis.com](http://www.srjis.com)

### Introduction

Children with disabilities have a number of challenges in participation and functioning in the education settings as well as in the society. In recent decades national and international movements have been led by many educationists and organisations for the education and rehabilitation of children with disabilities. The nature, type and severity of the disability limits the participation and functioning of children with disabilities. Hearing impairment affects the speech and language development of the children, which leads to poor academic achievement and limits the participation and functional ability of hearing-impaired (HI) students. In special schools, students with disabilities including HI students could use the available support services which led them for better learning and in minimising the learning barriers; in contrast students with disabilities face the challenges in their learning and participation due to the presence of significant barriers in the educational setting.

This is a fact supported by different national and international research studies that students with hearing impairment face different barriers in inclusive as well as in special education settings. Most researches revealed that different issues and barriers in educational settings limit the participation of deaf or hard of hearing students in inclusive classrooms Alasim (2018). The barriers also affect the functional ability of HI students on various dimensions of learning and daily life activities. Alasim (2018) identified a variety of strategies that facilitate the participation and interaction of d/Deaf or hard of hearing students in inclusive classrooms. Minimising the barriers may increase the functional ability/skills among hearing impaired students in various dimensions of life. Enhancement in functional ability of HI students will increase their participation in the different domains of life in the community.

Our education system and the government both are putting their efforts for making the educational settings conducive for education of students with disabilities. National Education Policy (NEP)-2020 also recommends and supports the provisions of different legislations related to equitable inclusive education for all the children regardless of their difficulties. In inclusive education settings the presence of barriers is significantly influencing the participation and functional ability of HI students in relation to the adequate learning environment and learning resources, the availability of support services, availability of friendly equipments etc. on various dimensions of functioning. Research studies pointed out that the financial constraints, family background, socio-cultural and geographic factors are important for determining the barriers for inclusive education (Mishra, and Negari, 2021).

## **Review of Related Literature**

A comprehensive review was carried out to understand the research gap with reference to this study. Following national and international research conducted in recent years those covered barriers and facilitators in relation to functional status of hearing-impaired students on various learning domains. In 2016 Kigotho concluded that hearing-impaired students felt that the institution had not provided the adequate resources and infrastructure as mentioned in the institution's disability policy. Integration with peers, faculty and administration staff seemed to be strained due to factors such as communication barriers, perceived attitudes, and lack of information on deafness. The level of deafness and nature of acquisition affected the way interactions with the hearing occurred. Further, Alasim (2018) concluded in the study that deaf or hard of hearing students face barriers that concern their participation and interaction in inclusive classrooms. Specific strategies were identified in order to facilitate the participation of deaf and hard of hearing students in inclusive classrooms.

Later, in a Swedish study Olsson, Bengtsson, Granlund, Huus, Andersson and Kåreholt (2020) pointed out that when children and adolescents with disabilities were integrated into mainstream schools, the teachers in mainstream schools were not aware about the available services and could not help the primary caregivers in contacting the concerned authorities. Students were facing another barrier with transportation between school and home. Self-advocacy and its benefits to help DHH students to manage the challenges faced by them in the mainstream classrooms; the consistent use of facilitative teaching strategies by the teachers and background noise should be managed for better classroom engagement of hearing-impaired students (Michelle, Karyn, Renée, Sharon and Field, 2021). Recently, Goodall, Mjoen, Wisto, Horghagen, and Kvam (2022) concluded that the barriers and facilitators in the transition from higher education to employment for students with disabilities must often work beyond their capacity in order to succeed in higher education and access opportunities for meaningful employment. Still much to be done in creating inclusive education and employment environments on an international level. A disparity exists between the availability of professional support services available to families and children of rural districts experiencing greater difficulty in accessing appropriate support than their counterparts in the metropolitan city. The lack of opportunities for training and professional development is perceived to be a major obstacle to the progress of inclusive education as required by national legislation in both locations (Rose, Narayan, Matam, and Reddy, 2021).

The review of related research studies evidenced that the students with hearing impairment face the challenges in functioning and participation due to presence of significant barriers. Studies support that availability of the facilitators is limited to the cities as compared in rural areas Rose, et. al. (2021).

### **Need and Significance of study**

Students with hearing impairment have different learning needs as compared to students without disabilities. HI students face many challenges in learning in inclusive setting because number of barriers exists in educational settings as discussed by Mishra and Negari (2021), Rose, Narayan, Matam, & Reddy (2021) and Olsson, Bengtsson, Granlund, Huus, Andersson & Kåreholt (2020). Most studies explored the barriers and facilitators that exist in education settings with reference to education of HI students. This study explored the functional ability of HI students in special and inclusive schools on ‘learning and applying knowledge’, ‘general task and demands’ and ‘communication dimensions’ of ICF-FAS. The findings of present study will be useful to teachers and rehabilitation professionals in planning and creating a suitable learning environment for HI students in any educational setting. Present study focuses on comparison of functional ability/status among HI students in special and inclusive schools with reference to their gender and school category.

### **Objectives of the study**

Following objectives of the study have been framed to compare the functional ability of HI students in special and inclusive schools on (a) ‘learning and applying knowledge’, (b) ‘general task & demands’ and (c) ‘communication’ dimensions.

1. To study the functional status of hearing impaired (HI) students in special schools on (a) ‘learning and applying knowledge’, (b) ‘general task & demands’ and (c) ‘communication’ dimensions with reference to their gender.
2. To study the functional status of hearing impaired (HI) students in inclusive schools on (a) ‘learning and applying knowledge’, (b) ‘general task & demands’ and (c) ‘communication’ dimensions with reference to their gender.
3. To study the functional status of hearing impaired (HI) students on (a) ‘learning and applying knowledge’, (b) ‘general task & demands’ and (c) ‘communication’ dimensions with reference to their school category.

### **Hypotheses of the study**

Following null hypotheses were formulated to compare the functional status of HI students -

1. There is no significant difference between functional status of hearing impaired (HI) students in special schools on 'learning and applying knowledge' with reference to their gender.
2. No significant difference exists between functional status of hearing impaired (HI) students in special schools on 'general task & demands' with reference to their gender.
3. There exists no significant difference between functional status of hearing impaired (HI) students in special schools on 'communication' with reference to their gender.
4. No significant difference exists between functional status of hearing impaired (HI) students in inclusive schools on 'learning and applying knowledge' with reference to their gender.
5. The difference between functional status of hearing impaired (HI) students in inclusive schools does not exist significant on 'general task & demands' with reference to their gender.
6. There is no significant difference between functional status of hearing impaired (HI) students in inclusive schools on 'communication' with reference to their gender.
7. No significant difference exists between functional status of hearing impaired (HI) boys on 'learning and applying knowledge' with reference to their school category.
8. The significant difference does not exist between functional status of hearing impaired (HI) girls on 'learning and applying knowledge' with reference to their school category.
9. There is no significant difference between functional status of hearing impaired (HI) boys on 'general task and demands' with reference to their school category.
10. No significant difference exists between functional status of hearing impaired (HI) girls on 'general task and demands' with reference to their school category.
11. The significant difference does not exist between functional status of hearing impaired (HI) boys on 'communication' with reference to their school category.
12. There is no significant difference between functional status of hearing impaired (HI) girls on 'communication' with reference to their school category.

### **Design of the study**

#### *Method*

This research paper is part of Doctoral research work in education and the main objective of the present research work was to study the facilitators and barriers that restrict functioning of hearing-impaired students in special and inclusive schools. The study is based on the

descriptive approach of research and the survey method is being adopted to collect the data for this study.

#### *Sample and Sampling Technique*

Bareilly district of Uttar Pradesh is distributed in 6 sub-divisions / *tehsils*. Researcher employed a multi-stage random sampling method to draw the sample for present study. A total sample of 113 HI students from inclusive schools and 69 HI students from special schools was selected with a purposive sampling method for this study of Bareilly district of Uttar Pradesh, using purposive sampling method.

#### *Tool used*

The International Classifications of Functioning, Disability and Health- ICF a functional assessment scale (ICF-FAS) is based on the indicators and qualifiers of ICF for children with disabilities who were attending regular schools. Further, researcher used the ICF- based Functional Assessment Scale tool for rational assessment of functioning of HI students developed, modified and standardised by Mishra, A. and Rangasayee, R. (2006, 2010). This tool contains 82 items covering all domains of 'Activity' and 'Participation' in the second level classification system of ICF-FAS. Three dimensions i.e., 'learning and applying knowledge' (16 items), 'general task and demands' (4 items) and 'communication' (12 items) dimensions of this tool were selected to collect the data on functioning of HI students in inclusive and special schools. The reliability of ICF-FAS full scale was found to be 0.72 (Based on Rasch Analysis), similarly a test-retest reliability coefficient was found 0.71 and an inter-rater reliability was calculated 0.78.

#### *Delimitations of the study*

1. Present study was delimited to hearing impaired students who were studying in special and inclusive schools of Bareilly district of Uttar Pradesh state.
2. In this study HI students of classes I-V were included who were studying in special and inclusive schools of Bareilly district of Uttar Pradesh state.
3. Researcher selected only three dimensions i.e., 'learning and applying knowledge', 'general task and demands' and 'communication' of the ICF-FAS tool.

#### **Analysis and Interpretation of Data**

The data received from 106 and 69 hearing-impaired students selected inclusive and special schools respectively were analysed according to the objectives of the study.

H<sub>01</sub> There is no significant difference in functional status on ‘learning and applying knowledge’ of Hearing Impaired (HI) students in special schools with reference to their gender.

**Table-1: Comparison of functional status of HI students in special schools on ‘learning and applying knowledge’ with reference to their gender**

Gender	N	Mean	Std. Deviation	df	t-value
Boys	44	41.00	8.27	67	1.70 (N.S.)
Girls	25	44.52	8.31		

\* - Significant at 0.05 level, \*\* - Significant at 0.01 level and N.S. - Not Significant

The table-1 indicates that the difference between hearing impaired boys and girls of special schools in relation to the scores obtained on the ‘learning and applying knowledge’ dimension of ICF is insignificant (t=1.70, N.S., p>0.05). The mean score of girls (M=44.52, SD=8.31) is slightly larger than their counterparts (M=41.00, SD=8.27), which implies that the functional status of girls in the said dimension seems to be better than boys. Therefore, the null hypothesis that there is no significant difference in functional status on ‘learning and applying knowledge’ of Hearing Impaired (HI) students in special schools with reference to their gender is accepted. The girls’ brain is responsible for sharp memory, attention, strong thought process and fast language development, therefore, the functioning status of the girls could be better than the boys on ‘learning and applying knowledge’ dimension.

H<sub>02</sub> No significant difference exists between functional status of hearing impaired (HI) students in special schools on ‘general task & demands’ with reference to their gender.

**Table-2: Comparison of functional status of HI students in special schools on ‘general task and demands’ with reference to their gender**

Gender	N	Mean	Std. Deviation	df	t-value
Boys	44	14.75	0.94	67	0.63 (N.S.)
Girls	25	14.60	0.96		

Table-2 indicates that the difference between hearing impaired boys and girls of special schools in relation to the scores obtained on ‘general task and demands’ dimension of ICF is not significant (t=0.63, N.S., p>0.05). The mean score of boys (M=14.75, SD=0.94) is marginally larger than their counterparts (M=14.60, SD=0.96), which reflects that the functional status of boys and girls on the said dimension seems to be similar. Therefore, the null hypothesis that no significant difference exists between functional status of hearing impaired (HI) students in special schools on ‘general task & demands’ with reference to their gender is accepted. In

general task and demands dimension, boys and girls are similar because such daily life activities can be done easily by both the sexes.

H<sub>03</sub> There exists no significant difference between functional status of hearing impaired (HI) students in special schools on ‘communication’ with reference to their gender.

**Table-3: Comparison of functional status of HI students in special schools on ‘communication’ with reference to their gender**

Gender	N	Mean	Std. Deviation	df	t-value
Boys	44	33.73	5.09	67	3.66**
Girls	25	37.92	3.46		

Table-3 shows that the difference between hearing impaired boys and girls of special schools in relation to the scores obtained on ‘communication’ dimension of ICF is highly significant ( $t=3.66$ ,  $p<0.01$ ). The mean score of girls ( $M=37.92$ ,  $SD=3.46$ ) is larger than their counterparts ( $M=33.73$ ,  $SD=5.09$ ), which implies that the functional status of girls on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that there exists no significant difference between functional status of hearing impaired (HI) students in special schools on ‘communication’ with reference to their gender is rejected. In the communication dimension girls are better than their counterparts because their brain is capable of storing huge verbal memory, which helps them in communication.

H<sub>04</sub> No significant difference exists between functional status of hearing impaired (HI) students in inclusive schools on ‘learning and applying knowledge’ with reference to their gender.

**Table-4: Comparison of functional status of HI students in inclusive schools on ‘learning and applying knowledge’ with reference to their gender**

Gender	N	Mean	Std. Deviation	df	t-value
Boys	69	40.84	7.79	67	2.83**
Girls	37	45.24	7.54		

The table-4 reveals that the difference between hearing impaired boys and girls of inclusive schools in relation to the scores obtained on ‘learning and applying knowledge’ dimension of ICF is highly significant ( $t=2.86$ ,  $p<0.05$ ). The mean score of girls in inclusive schools ( $M=45.24$ ,  $SD=7.54$ ) is larger than their counterparts ( $M=40.84$ ,  $SD=7.79$ ), which shows that the functional status of girls on the said dimension seems to be better than the boys. Therefore, the null hypothesis that no significant difference exists between functional status of hearing impaired (HI) students in inclusive schools on ‘learning and applying knowledge’ with



reference to their gender is rejected. The functional status of girls in inclusive schools could be better than their counterparts because they are quick learners in the diverse peer groups.

H<sub>05</sub> The difference between functional status of hearing impaired (HI) students in inclusive schools does not exist significant on ‘general task & demands’ with reference to their gender.

**Table-5: Comparison of functional status of HI students in inclusive schools on ‘general task and demands’ with reference to their gender**

Gender	N	Mean	Std. Deviation	Df	t-value
Boys	69	12.68	1.60	104	0.91 (N.S.)
Girls	37	12.97	1.50		

Table-5 indicates the difference between hearing impaired boys and girls of inclusive schools in relation to the scores obtained on ‘general task and demands’ dimension of ICF is not significant ( $t=0.91$ , N.S.,  $p>0.05$ ). The mean score of girls ( $M=12.97$ ,  $SD=1.50$ ) is marginally larger than their counterparts ( $M=12.68$ ,  $SD=1.60$ ), which reflects that the functional status of girls on the said dimension seems to be marginally better than their counterparts. Therefore, the null hypothesis that the difference between functional status of hearing impaired (HI) students in inclusive schools does not exist significant on ‘general task & demands’ with reference to their gender is accepted. The functional status of girls and boys seems to be similar because the training for general tasks and demands is given equally to boys and girls. Even sometimes, girls perform better in daily life activities or homemaking activities.

H<sub>06</sub> There is no significant difference in functional status on ‘communication’ of Hearing Impaired (HI) students in inclusive schools with reference to their gender.

**Table-6: Comparison of functional status of HI students in inclusive schools on ‘communication’ with reference to their gender**

Gender	N	Mean	Std. Deviation	Df	t-value
Boys	69	29.92	4.54	104	2.95**
Girls	37	32.59	4.23		

Table-6 shows that the difference between hearing impaired boys and girls of special schools in relation to the scores obtained on ‘communication’ dimension of ICF is highly significant ( $t=2.95$ ,  $p<0.05$ ). The mean score of girls ( $M=32.59$ ,  $SD=4.23$ ) is larger than their counterparts ( $M=29.92$ ,  $SD=4.54$ ), which implies that the functional status of girls on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that there is no significant difference in functional status on ‘communication’ of Hearing Impaired (HI) students in inclusive schools with reference to their gender is rejected. In the communication

dimension girls' brains work faster than the boys because they have huge vocabulary and good memory.

H<sub>07</sub> No significant difference exists between functional status of hearing impaired (HI) boys on 'learning and applying knowledge' with reference to their school category.

**Table-7: Comparison of functional status of HI Boys on 'learning and applying knowledge' dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	69	40.84	7.79	111	0.10 (N.S.)
Special Schools	44	41.00	8.27		

Table-7 reveals that the difference between hearing impaired boys of inclusive and special schools in relation to the scores obtained on 'learning and applying knowledge' dimension of ICF is insignificant ( $t=0.10$ , N.S.,  $p>0.05$ ). The mean score of special school boys ( $M=41.00$   $SD=8.27$ ) is marginally larger than inclusive school boys ( $M=40.84$ ,  $SD=7.79$ ), which shows that the functional status of inclusive school boys on the said dimension seems marginally better than their counterparts. Therefore, the null hypothesis that no significant difference exists between functional status of hearing impaired (HI) boys on 'learning and applying knowledge' with reference to their school category is accepted. The functional status of boys in special schools may be better than their counterparts because they avail the adequate support services and learning environment etc. on 'learning and applying knowledge' dimension.

H<sub>08</sub>The significant difference does not exist between functional status of hearing impaired (HI) girls on 'learning and applying knowledge' with reference to their school category.

**Table-8: Comparison of functional status of HI Girls on 'learning and applying knowledge' dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	37	45.24	7.54	60	0.36 (N.S.)
Special Schools	25	44.52	8.31		

The table-8 indicates that the difference between hearing impaired girls of inclusive and special schools in relation to the scores obtained on 'learning and applying knowledge' dimension of ICF is not significant ( $t=0.36$ , N.S.,  $p>0.05$ ). The mean score of inclusive school girls ( $M=45.24$   $SD=7.54$ ) is marginally larger than special school girls ( $M=44.52$ ,  $SD=8.31$ ), which implies that the functional status of special school girls on the said dimension seems to be marginally better than their counterparts. Therefore, the null hypothesis that the significant difference does not exist between functional status of hearing impaired (HI) girls on 'learning and applying knowledge' with reference to their school category is accepted. The functional

status of girls in inclusive schools on ‘learning and applying knowledge’ dimension could be better than their counterparts because they seem to be good learners in mixed ability groups.

H<sub>09</sub> There is no significant difference between functional status of hearing impaired (HI) boys on ‘general task and demands’ with reference to their school category.

**Table-9: Comparison of functional status of HI Boys on ‘general tasks and demands’ dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	69	12.68	1.60	111	7.74**
Special Schools	44	14.75	0.94		

Table-9 shows that the difference between hearing impaired boys of inclusive and special schools in relation to the scores obtained on ‘general tasks and demands’ dimension of ICF is highly significant ( $t=7.74, p<0.05$ ). The mean score of special school boys ( $M=14.75, SD=0.94$ ) is larger than inclusive school boys ( $M=12.68, SD=1.60$ ), which indicates that the functional status of special school boys on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that there is no significant difference in functional status of ‘general tasks and demands’ of Hearing Impaired (HI) Boys with reference to their school category is rejected. The functional status of boys in special schools could be better than their counterparts because they avail good support services, training, guidance and counselling in their special schools.

H<sub>10</sub> No significant difference exists between functional status of hearing impaired (HI) girls on ‘general task and demands’ with reference to their school category.

**Table-10: Comparison of functional status of HI Girls on ‘general tasks and demands’ dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	37	12.97	1.50	60	4.80**
Special Schools	25	14.60	0.96		

Table-10 indicates that the difference between hearing impaired girls of inclusive and special schools in relation to the scores obtained on ‘general tasks and demands’ dimension of ICF is highly significant ( $t=4.80, p<0.05$ ). The mean score of special school girls ( $M=14.60, SD=0.96$ ) is quite larger than the inclusive school girls ( $M=12.97, SD=1.50$ ), which reflects that the functional status of special school girls on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that no significant difference exists between functional status of hearing impaired (HI) girls on ‘general task and demands’ with reference to their school category is rejected. The functional status of girls in special schools could be

better than their counterparts in inclusive schools because they had good support and resource system in their special schools and they are also quick learners.

H<sub>11</sub> The significant difference does not exist between functional status of hearing impaired (HI) boys on ‘communication’ with reference to their school category.

**Table-11: Comparison of functional status of HI Boys on ‘communication’ dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	69	29.92	4.54	111	4.14**
Special Schools	44	33.73	5.09		

Table-11 reveals that the difference between hearing impaired boys of inclusive and special schools in relation to the scores obtained on ‘communication’ dimension of ICF is highly significant ( $t=4.14$ ,  $p<0.05$ ). The mean score of special school boys ( $M=33.73$   $SD=5.09$ ) is larger than inclusive school boys ( $M=29.92$ ,  $SD=4.54$ ), which implies that the functional status of special school boys on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that the significant difference does not exist between functional status of hearing impaired (HI) boys on ‘communication’ with reference to their school category is rejected. The boys in special schools are better than their counterparts in ‘communication’ dimension because they trained to communicate in different ways including sign language.

H<sub>12</sub> There is no significant difference between functional status of hearing impaired (HI) girls on ‘communication’ with reference to their school category.

**Table-12: Comparison of functional status of HI Girls on ‘communication’ dimension with reference to their school category**

Schools	N	Mean	Std. Deviation	df	t-value
Inclusive Schools	37	32.59	4.23	60	5.22**
Special Schools	25	37.92	3.46		

The table-12 shows that the difference between hearing impaired girls of inclusive and special schools in relation to the scores obtained on ‘communication’ dimension of ICF is highly significant ( $t=5.22$ ,  $p<0.05$ ). The mean score of special school girls ( $M=37.92$   $SD=3.46$ ) is larger than inclusive school girls ( $M=32.59$ ,  $SD=4.23$ ), which reflects that the functional status of special school girls on the said dimension seems to be better than their counterparts. Therefore, the null hypothesis that there is no significant difference in functional status of ‘communication’ of Hearing Impaired (HI) girls in inclusive and special schools with reference to their school category is rejected. The girls in special schools are also better than their

counterparts in 'communication' dimension because they are trained to communicate in different ways including sign language. They are also good in communication due to good language development.

### **Results**

1. There were no significant differences exhibited between the functional status of hearing impaired (HI) students in special schools on 'learning and applying knowledge' and 'general task & demands' dimensions with reference to their gender.
2. The significant difference was found between the functional status of hearing impaired (HI) students in special schools on 'communication' dimension with reference to their gender.
3. The differences were significant between the functional status of hearing impaired (HI) students in inclusive schools on 'learning and applying knowledge' and 'communication' with reference to their gender.
4. The difference between the functional status of hearing impaired (HI) students in inclusive schools was not significant on 'general task & demands' with reference to their gender.
5. Hearing impaired (HI) boys and girls were not significantly differing on the functional status of 'learning and applying knowledge' dimension over their school categories.
6. Hearing impaired (HI) boys and girls were differing significantly on the functional status of 'general task and demands' and 'communication' dimensions over their school categories.

### **Conclusion**

The findings of the study suggest that hearing impaired students differ significantly on various dimensions. It was observed during the study that barriers limit the participation and functioning of hearing-impaired students in inclusive as well as special schools. Functional ability of hearing-impaired status may be enhanced by providing facilitators in inclusive settings. HI students are different in various dimensions. It may be caused by minimising the barriers and maximising the facilitators and other adequate support services. Teachers, educational administrators, rehabilitation professionals and parents should try to provide an adequate learning environment and support services to enhance the functional ability of HI students in different domains of life.

## References

- Alasim, K. N. (2018). *Participation and interaction of deaf and hard-of-hearing students in inclusion classroom. International Journal of Special Education*, 33(2), 493-506.
- Goodall G, Mjøen OM, Witsø AE, Horhagen S & Kvam L (2022). *Barriers and facilitators in the transition from higher education to employment for students with disabilities: A rapid systematic review. Front. Educ.*, 7: 882066. DOI: 10.3389/feduc.2022.882066. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000373662?posInSet=1&queryId=N-EXPLORE-47ee1cba-7976-4915-91e3-1f55b36d325a>
- Kigotho, L W (2016). *Barriers faced by students with hearing impairment in inclusive learning environment: a case of the University of Nairobi. Retrieved on 17/09/2022 from [http://erepository.uonbi.ac.ke/bitstream/handle/11295/98908/Kigotho\\_Barriers%20Faced%20by%20Students%20With%20Hearing%20Impairment%20in%20Inclusive%20Learning%20Environment%2C%20a%20Case%20of%20the%20University%20of%20Nairobi.pdf?sequence=1](http://erepository.uonbi.ac.ke/bitstream/handle/11295/98908/Kigotho_Barriers%20Faced%20by%20Students%20With%20Hearing%20Impairment%20in%20Inclusive%20Learning%20Environment%2C%20a%20Case%20of%20the%20University%20of%20Nairobi.pdf?sequence=1)*
- Kothari commission (1964-66). *A report of commission on education. GOI.*
- Mishra, A. & Rangasayee, R. (2006, 2010). *Development of ICF based functional assessment scale for student with hearing impairment. [https://www.dinf.ne.jp/doc/english/asia/resource/apdrj/vol21\\_2\\_2010/6icfinedu.html](https://www.dinf.ne.jp/doc/english/asia/resource/apdrj/vol21_2_2010/6icfinedu.html)*
- Michelle Todorov, Karyn Galvin, Renée Punch, Sharon Klieve & Field Rickards (2021). *Barriers and facilitators to engaging in mainstream primary school classrooms: voices of students who are deaf or hard-of-hearing, Deafness & Education International*, 24(1), 2-23. DOI: 10.1080/14643154.2021.1992829
- Mishra, M. K. & Negari, W. (2021). *Analytical study of inclusive education in India. IJARIE*, 7(3), 2612-2616. [https://ijarii.com/AdminUploadPdf/Analytical\\_Study\\_of\\_Inclusive\\_education\\_in\\_India\\_ijarii\\_e14656.pdf](https://ijarii.com/AdminUploadPdf/Analytical_Study_of_Inclusive_education_in_India_ijarii_e14656.pdf)
- MoE (2020). *National Education Policy-2020, GOI*
- Olsson, L.M., Bengtsson, S., Granlund, M., Huus, K., Andersson, E.E., & Kåreholt, I., (2020). *Social service utilisation in relation to class setting-a longitudinal study among children with mild intellectual disability in Sweden', European Journal of Special Needs Education* 35(4), 1–15. [Google Scholar]
- Rose, R.; Narayan, J.; Matam, S.; & Reddy Sambram, P. A. (2021). *Comparison of provision and access to inclusive education for children with disabilities in a metropolitan city and a rural district in Telangana state, India. Education Sciences*, 11, 111. <https://doi.org/10.3390/educsci11030111>
- United Nations (2006). *Article-24, UNCRPD-2006, UN*