



BARRIERS AND FACILITATORS IN PARTICIPATION OF HEARING IMPAIRED STUDENTS IN INCLUSIVE AND SPECIAL SCHOOLS

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Abstract

Presence of barriers in participation of HI students in inclusive and special schools has negative impact on their functional ability/status. This explores on the functional limitations and barriers in participation of hearing impaired students in inclusive and special schools with reference to learning and applying knowledge, general task & demands and communication. A total number of 113 HI students (inclusive schools) and 69 HI students (special schools) Bareilly district of Uttar Pradesh were included in this study selected using purposive sampling method. The data was collected using researcher used 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).

The major significant barriers observed were i.e. non availability of hearing aid, lack of suitable educational opportunities, lack of speech/auditory training and speech therapy, lack of suitable instructional methods/procedures, lack of appropriate learning material, lack of self-advocacy and lack of parent support. Further, facilities were emerged i.e. availability of hearing aid, adequate support services such as auditory and speech training, availability of speech therapy facilities, provision of suitable educational opportunity, training of formal sign language, and availability of appropriate visual learning material. It can be concluded that HI students in inclusive schools are affected by barriers at large as compared to special schools and in terms of presence of facilitators in participation of HI students in special schools were availing the adequate facilities at large as compared to their counterparts in inclusive schools.

Key words: *Barriers, Facilitators, Participation, Inclusive and Special schools*

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Introduction

Every child has the right that s/he should be treated with respect and ensured equal opportunities to learn together with their counterparts. It is established fact that disability limits the participation of functioning of children with disabilities. As we know education is the only tool which can give wings to any person to achieve his/her goals. Educators as shared responsibility and privilege must view the education of children with disabilities as part of their duties. Most important is that every child must have a place and be made welcome to

the goal of the Universalization of Elementary Education. This has given a new twist to the education of children with special needs. UNCRPD (2007) also emphasizes inclusion of children with disabilities in regular schools. “Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building inclusive society and achieving education for all: “moreover, they provide an effective education to the majority of children and improve the

efficiency and ultimately the cost effectiveness of the entire education system”

(Article 2, Salamanca Framework for Action 1994).

Government and department of education are focusing to make the education accessible by all children. Number of barriers and challenges are present in participation of students with hearing impairment in educational activities. Many barriers are observed in different research studies, which create hindrance in adequate learning to children with disabilities RPWD Act, 2016 and NEP-2020 is focusing on accessible education system and inclusivity in educational institutes, but the real ground situation at grass-root exists with different types of barriers.

Barriers are factors in an individual environment that through their absence or presence, limit functioning and create disability. These include aspects such as a physical environment that is inaccessible, lack of relevant assistive technology, and negative attitudes of people towards disability as well as services, systems and policies that are either non-existent or that hidden the involvement of all people with a health condition in all areas of life (WHO, 2001). In contrast the facilitators are the factors which may maximize the participation or functioning of children with disabilities including hearing impairment (HI).

Children with disabilities may face different barriers according to the nature, type and severity of their disabilities. In case of HI students they face challenges in language development, speech and communication and these challenges aroused by the presence of barriers in their surroundings. Minimization of barriers improves the level of participation and functioning of HI students as well as others too. In our education system HI students are receiving their education in inclusive and special schools and the school systems are providing the learning facilities according their needs. But in case of inclusive schools it is observed that very few inclusive schools have trained special

educators to teach such children to support in learning and enhance their learning outcome. Many researches evidenced that children with HI faces number of barriers in inclusive schools (Taneja-Johansson, Singal, and Samson, 2021; Mishra, and Negari, 2021; Rose, Narayan, Matam, and Reddy, 2021).

Review of LiteratureL

Arishi (2020) studied the facilitators and barriers to full participation of male and female students who are Deaf or hard of hearing in Saudi elementary inclusive school. Investigator reported that the participants did not fully understand inclusive education, inclusive teaching and full participation and they referred to inclusion as integration and inclusive teaching as active teaching approaches. Full participation was conceptualized in terms of access to inclusive schools. Students who are deaf/hard of hearing expressed the desire to learn with their peers without a disability, they only had the opportunity to socialise with their peers during break and mealtimes, and were pulled out into disability groups in their own self-contained classrooms or resource rooms; the schools thus treated students who are deaf or hard of hearing as an add-on to their student population on a socialising basis.

Further, Michelle, Karyn, Renée, Sharon and Field (2021) identified the ‘barriers and facilitators to engaging in mainstream primary school classrooms: Voices of students who are deaf or hard of hearing’. Investigators developed four themes from this analysis; barriers to engagement, student strategies, support to students, and teacher actions. The findings of the study also indicate the importance of self-advocacy and the potential benefits of implementing self-advocacy programmes to help DHH students to manage the challenges to engagement faced by them in the mainstream classroom. The study revealed the importance of consistent use of facilitative teaching strategies by the teacher and background noise should be managed to better classroom engagement.



In the same line of time Taneja-Johansson, Singal, and Samson (2021) examined the perceptions and practices of mainstream teachers in rural government schools of Haryana. Study focused on how teachers understand and respond to the needs of students with disabilities. The study concluded that deficit-oriented views dominate teachers' thinking, but they were ready to engage with disability issues. Teachers in schools struggled in the classroom practices to meeting diverse learner needs and exclusionary practices were further amplified for children with disabilities. Teachers were unwilling to take responsibility for the learning of children with disabilities, expressing significant concerns about their own preparedness, while highlighting the lack of effective and appropriate support structures.

Recently, Croft and Fraser (2022) conducted a scoping review of barriers and facilitators affecting the lives of people with disabilities during COVID-19. As a result of this review the barriers were emerged i.e. access to information, ease of communication, financial impacts, mental health impacts, access to essential services, physical safety, educational challenges and changes to care and rehabilitation. In this review significant facilitators also emerged i.e. changes to care and rehabilitation practices, innovations, social and family support and inclusive policy measures.

Need and Significance of the Study:

As we know we are passing through the process of inclusion in various domains of life. If we talk about the educational inclusion, it is important to discuss about the barriers to children with HI and other disabilities because our all designs are structured as per the needs of children without disabilities. In this order the rigid structures create different barriers for children with disabilities in inclusive setting. Without knowing about barriers in inclusive education children with disabilities are facing we cannot lead to make the education inclusive ideally. HI students face major

challenges in learning applying knowledge, speech and communication areas. These are the major areas which are affected by the presence of the different barriers in teaching learning process. Therefore, the need of this study aroused to identify the barriers for children with HI in inclusive education. Identification of barriers will be helpful to teachers and curriculum planners.

Objectives of the Study:

1. To study the functional limitations and barriers in participation of hearing impaired students in inclusive and special schools with reference to –
 - (a) learning and applying knowledge
 - (b) general task and demands
 - (c) communication
2. To examine the facilitators in participation of hearing impaired students in inclusive and special schools with reference to –
 - (a) learning and applying knowledge
 - (b) general task and demands
 - (c) communication

Research 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 limits the functional ability of HI students in special and inclusive schools. The survey method of descriptive research method was employed to collect the data from selected sample.

Population:

The population of the present study is constructed by the students with HI students who were studying in inclusive and special schools located in Bareilly district of Uttar Pradesh state.

Sample and Sampling Technique:

Bareilly district of Uttar Pradesh is distributed in 6 subdivisions / *tehsils*. Researcher employed multi-stage random sampling method to draw the sample for present study. Firstly, researcher selected four *tehsils*

randomly using lottery method and secondly, researcher selected seven blocks randomly also using lottery method of simple random sampling to draw the regular schools. Thirdly, ten inclusive schools (I-V classes) have been chosen from each block using lottery method. Finally, 70 inclusive schools were selected using lottery method.

Further, a total sample of 113 HI students in inclusive schools was selected purposive sampling method for this study. Further, researcher selected a sample of 69 HI students who were studying in special schools 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 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' at 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 HI 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 ICF-FAS tool.

Analysis and Interpretation of Data:

Researcher received 106 and 69 filled up tools from HI students in inclusive and special schools respectively. The data received from selected sample of HI students of both the schools was analysed according to the objectives of the study. Analysis of barriers and facilitators in participation of HI students in inclusive and special schools was done with reference to learning and applying knowledge, general task and demands, and communication dimensions as below -

(i) Identification of barriers in inclusive and special schools

Objective-1

To study the functional limitations and barriers in participation of hearing impaired students in inclusive and special schools with reference to –

- (a) learning and applying knowledge
- (b) general task and demands
- (c) communication

Table-1: Identification of barriers in participation of HI students in inclusive and special schools on learning and applying knowledge dimension

ICF Code	Items	Barriers	% of affected students in inclusive schools	% of affected students in special schools
D-110	Watching- Watches children playing/enjoying seeing TV.	Not identified	0.00	0.00



D-115	Listening- Listen to music / radio / listens to someone speaking / singing	(a) No availability of hearing aid (b) No Support services such as auditory and speech training (c) Inadequate language development	93.39 86.79 100.00	07.24 07.24 100.00
D-120	Other purposeful sensing- Explores objects by touching, tasting or smelling	Not identified	0.00	0.00
D-130	Copying- Imitates sounds, gestures / copies an alphabet or simple pattern / picture	(a) No Support services such as auditory and speech training (b) Lack of appropriate Visual Learning material (c) Difficulty in access to information	86.79 86.79 86.79	07.24 37.68 37.68
D-135	Rehearsing- Rote counting of numbers or arranges picture cards in sequence of a story being told	(a) No availability of hearing aid (b) Lack of appropriate / quality instruction (c) No Support Services such as auditory and speech training (d) Lack of self-advocacy (e) Lack of parent support	93.39 86.79 93.39 93.39 69.81	07.24 37.68 07.24 07.24 30.43
D-140	Learning to read- Reads words / phrases / sentences / paragraphs or identified word / name	(a) No availability of hearing aid (b) Lack of appropriate Visual Learning material (c) Not suitable instructional procedures used (d) Lack of suitable educational opportunity (e) Lack of self-advocacy (f) Lack of parent support	93.39 86.79 86.79 86.79 93.39 69.81	07.24 37.68 37.68 30.43 07.24 30.43
D-145	Learning to write- Writes words / phrases / sentences / paragraph	(a) No availability of hearing aid (b) Lack of suitable educational opportunity (c) Not suitable instructional procedures used (d) Lack of appropriate Visual Learning material	93.39 86.79 86.79 86.79	07.24 30.43 37.68 37.68



		(e) Lack of self-advocacy (f) Lack of parent support	93.39 69.81	07.24 30.43
D-150	Learning to calculate- Add / subtracts / multiplies / divides numbers	(a) No availability of hearing aid (b) Lack of suitable educational opportunity (c) Lack of self-advocacy (d) Lack of parent support	93.39 86.79 93.39 69.81	07.24 30.43 07.24 30.43
D-155	Acquiring skills- Plays games involving rules / uses tools for solving simple problems	Not identified	0.00	0.00
D-160	Focusing attention- Concentrates while doing something	Not identified	0.00	0.00
D-163	Thinking- Thinks before giving reply, example “what would happen if sky falls?”	Not identified	0.00	0.00
D-166	Reading- Reads / refers to newspaper, calendar, maps etc. to collect information for use	(a) No availability of hearing aid (b) Lack of suitable educational opportunity (c) No Support Services such as auditory and speech training (d) Lack of self-advocacy (e) Lack of parent support	86.79 93.39 86.79 93.39 69.81	07.24 30.43 07.24 07.24 30.43
D-170	Writing- Writes message / letter or makes important record by writing	(a) No availability of hearing aid (b) Lack of suitable educational opportunity (c) No Support Services such as auditory and speech training (d) Lack of self-advocacy (e) Lack of parent support	86.79 93.39 86.79 93.39 69.81	07.24 30.43 07.24 07.24 30.43

D-172	Calculating- Solves problems by correct calculation by applying mathematical principles	(a) No availability of hearing aid (b) Lack of suitable educational opportunity (c) No Support Services such as auditory and speech training (d) Lack of self-advocacy (e) Lack of parent support	86.79 93.39 86.79 93.39 69.81	07.24 30.43 07.24 07.24 30.43
D-175	Solving Problem- Solves problem such as “arranges alternative if things break” or “solving disputes between two people”	Not identified	0.00	0.00
D-177	Making decision- Makes choice for dressing, eating, or while purchasing dress or any material	Not identified	0.00	0.00

Table-1 elaborates the item wise percentages of affected students on learning and applying knowledge dimension in relation to functional limitations and barriers in inclusive and special schools. Out of 16 items of learning and applying knowledge dimension of ICF-FAS, 8 items were affected due to the presence of barriers. HI students in inclusive and special school were found having limited functional skills in listening, reading, writing, and calculation because of inadequate educational interventions in their school. The above table indicates the presence of significant barriers in both the schools. Inadequate educational intervention may be described here as lacks of appropriate / quality

education or the students were intervened lately in both the schools. The major significant barriers observed were i.e. non availability of hearing aid, lack of suitable educational opportunities, lack of speech/auditory training and speech therapy, lack of suitable instructional methods/procedures, lack of appropriate learning material, lack of self-advocacy and lack of parent support were emerged from the above analysis which create the functional limitation and barriers in learning and applying knowledge dimension. It can be concluded from the table that HI students in inclusive schools are affected by barriers at large as compared to special schools.

Table-2 Identification of barriers in participation of HI students in inclusive and special schools on general task and demands dimension

ICF Code	Items	Barriers	% of affected students in inclusive schools	% of affected students in special schools
D-210	Undertaking a single task- Prepares tea / makes bed / arranges (decorates) a room	Not identified	0.00	0.00
D-220	Undertaking multiple tasks- Manages home on the absence of	Not applicable	-	-

	other family members/planning, purchasing and preparing menu for a party			
D-230	Carrying out daily routine- Carries out daily routine i.e., all activities from waking up in the morning till going to the bed	Not identified	0.00	0.00
D-240	Handling stress and other psychological demands- Taking care of complete group / family while in crisis	Not applicable	-	-

It can be concluded from the above table that out of 4 items of general task and demands dimension of ICF-FAS, 2 items were found to be not applicable to the HI students in inclusive and special schools because they

were found too young to perform. There were no barriers identified against the rest of the items as given in table-2.

Table-3: Identification of barriers in participation of HI students in inclusive and special schools on communication dimension

ICF Code	Items	Barriers	% of affected students in inclusive schools	% of affected students in special schools
D310	Communicating with receiving spoken messages- Gives response whenever being said something / follows verbal instructions	(a) No availability of hearing aid	93.39	07.24
		(b) No support services such as auditory and speech training	86.79	07.24
		(c) No adequate speech therapy available	86.79	37.68
		(d) Inadequate language development opportunities	100.00	100.00
		(e) Lack of interpersonal communication opportunities	93.39	37.68
D315	Communicating with receiving Non-verbal messages- Gives response whenever being said through gestures / follows non-verbal (gestures) instructions	Not identified	0.00	0.00
D320	Communicating with receiving formal sign language- Gives response to the message made through sign language	(a) Lack of formal sign language training	93.39	37.68
		(b) Students use own learnt Sign and Signals	0.00	37.68
			86.79	30.43

	/ follows instructions through sign language	(c) Lack of suitable educational opportunities		
D325	Communicating with receiving written messages- Follows sight words such as ‘Gents / Ladies’, ‘Toilet’, ‘PCO’, ‘Entry / Exit’, Fills a simple form	(a) No availability of hearing aid (b) No Support services such as auditory and speech training (c) No facility for speech therapy (d) Inadequate language development opportunities	93.39 86.79 86.79 100.00	07.24 07.24 37.68 100.00
D330	Speaking- Speaks (in words / phrases /sentence) at home, school, outside	(a) No availability of hearing aid (b) No Support services such as auditory and speech training (c) No facility for speech therapy (d) Inadequate language development opportunities (e) Lack of interpersonal communication opportunities (f) Lack of parent support	93.39 86.79 86.79 100.00 93.39 69.81	07.24 07.24 37.68 100.00 37.68 30.43
D335	Producing non-verbal messages- Express (words / phrases / sentences) through body language / facial expression	(a) No formal sign language training provided	100.00	07.24
D340	Producing message in formal sign language- Express (words / phrases / sentences) through formal sign language (ISL)	(a) No availability of hearing aid (b) No Support Services such as auditory & speech training (c) Lack of suitable educational opportunity	100.00 86.79 86.79	07.24 07.24 30.43
D345	Writing message- Express through writing a message / letter / note	(a) No availability of hearing aids (b) No Support Services such as auditory and speech training (c) Inadequate language development	93.39 86.79 100.00	07.24 07.24 100.00

D350	Conversation- Initiates, maintains conversation at home / school / outside	(a) No availability of hearing aid (b) Inadequate language development (c) Face problem in oral discussion (d) Lack of parent support (e) Lack of self advocacy	93.39 100.00 100.00 69.81 93.39	07.24 100.00 100.00 30.43 07.24
D355	Discussion- Initiates, maintains discussions (with arguments / debates)	Not applicable	-	-
D360 (a)	Using communication devices / techniques- Uses telephones / internet / mobile / SMS services etc. for communicating with family members/friends etc.	Not applicable	-	-
D360 (b)	Uses speech reading / lips reading during conversation, discussion	Not applicable	-	-

Table-3 indicates the percentage of affected HI students in inclusive and special schools. In the above table out of 12 items of communication dimension of ICF-FAS, 8 items were found to be affected due to the presence of barriers. However, three items of ICF-FAS was found to be not applicable to the sample because they were found too young to perform. HI students in inclusive and special schools were found having limited functional ability in communication, production of verbal message because of inadequate language development. Inadequate language development was due to (a) unavailability of hearing aids (b) no support services such as auditory and speech training or speech therapy. The major significant barriers observed were i.e. non availability of hearing aid, lack of suitable educational opportunities, lack of speech/auditory training and speech therapy, lack of

interpersonal communication opportunities, lack of self-advocacy and lack of parent support were emerged from the above analysis which create the functional limitation and barriers in communication dimension.

It can be concluded from the table that HI students in inclusive schools are affected by barriers at large as compared to their counterparts in special schools.

(ii) Identification of facilitators in inclusive and special schools

Objective - 2

To examine the facilitators in participation of hearing impaired students in inclusive and special schools with reference to –

- (a) learning and applying knowledge
- (b) general task and demands
- (c) communication



Table 4: Identification of facilitators in participation of HI students in inclusive and special schools on learning and applying knowledge dimension

ICF Code	Items	Facilitators	% of affected students in inclusive schools	% of affected students in special schools
D-110	Watching- Watches children playing / enjoying seeing TV.	Not required	-	-
D-115	Listening- Listen to music / radio / listens to someone speaking / singing	(a) Availability of hearing aid	6.61	92.76
		(b) Support services such as auditory and speech training	13.21	92.76
D-120	Other purposeful sensing- Explores objects by touching, tasting or smelling	Not required	-	-
D-130	Copying- Imitates sounds, gestures / copies an alphabet or simple pattern / picture	(a) Availability of hearing aid	6.61	92.76
		(b) Support services such as auditory and speech training	13.21	92.76
		(c) Suitable educational opportunity	100.00	62.32
D-135	Rehearsing- Rote counting of numbers or arranges picture cards in sequence of a story being told	(a) Availability of hearing aid	6.61	92.76
		(b) Appropriate / quality instructions provided	13.21	62.32
		(c) Support services such as auditory and speech training	13.21	92.76
D-140	Learning to read- Reads words / phrases / sentences / paragraphs or identified word/name	(a) Availability of hearing aid	6.61	92.76
		(b) Appropriate visual learning material available	13.21	62.32
		(c) Suitable instructional procedures used	13.21	62.32
		(d) Suitable educational opportunity	100.00	69.57



D-145	Learning to write- Writes words / phrases / sentences / paragraph	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-150	Learning to calculate- Add / subtracts / multiplies / divides numbers	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-155	Acquiring skills- Plays games involving rules / uses tools for solving simple problems	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-160	Focusing attention- Concentrates while doing something	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-163	Thinking- Thinks before giving reply, example “what would happen if sky falls?”	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57



D-166	Reading- Reads / refers to newspaper, calendar, maps etc. to collect information for use	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-170	Writing- Writes message / letter or makes important record by writing	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-172	Calculating- Solves problems by correct calculation by applying mathematical principles	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-175	Solving Problem- Solves problem such as “arranges alternative if things break” or “solving disputes between two people”	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57
D-177	Making decision- Makes choice for dressing, eating, or while purchasing dress or any material	(a) Availability of hearing aid (b) Appropriate visual learning material available (c) Suitable instructional procedures used (d) Suitable educational opportunity	6.61 13.21 13.21 100.00	92.76 62.32 62.32 69.57

Table-4 reflects the status of observed facilitators provided for improving functional ability in participation of HI students in inclusive and special schools on learning and applying knowledge dimension

of ICF-FAS. HI students in special schools as compared to HI students in inclusive schools were provided the adequate number of facilities according to their education needs to improve their functional ability/skills in learning and applying knowledge. It was observed during the study that in inclusive and special schools HI students were provided the major facilities were (a) availability of hearing aid (b) adequate support services such as auditory and speech training (c) availability of speech therapy facilities (d)

provision of suitable educational opportunity (e) training of formal sign language, and (f) availability of appropriate visual learning material etc. The presence of facilitators increases the participation of HI students in inclusive and special schools on learning and applying dimension. The above table concludes that HI students in special schools were availing the adequate facilities at large as compared to their counterparts in inclusive schools.

Table-5: Identification of facilitators in participation of HI students in inclusive and special schools on general task and demands dimension

ICF Code	Items	Facilitators	% of affected students in inclusive schools	% of affected students in special schools
D-210	Undertaking a single task- Prepares tea / makes bed / arranges (decorates) a room	Not required	0.00	0.00
D-220	Undertaking multiple tasks- Manages home on the absence of other family members / planning, purchasing and preparing menu for a party	Not applicable	-	-
D-230	Carrying out daily routine- Carries out daily routine i.e., all activities from waking up in the morning till going to the bed	Not required	0.00	0.00
D-240	Handling stress and other psychological demands- Taking care of complete group / family while in crisis	Not applicable	-	-

Table-5 concludes that there were no support services or facilities required because there were no barriers identified on general task and demands dimension of

ICF-FAS among HI students in inclusive and special schools. Two items were not applicable because the students were too young to perform.

Table-6: Identification of facilitators in participation of HI students in inclusive and special schools on communication dimension

ICF Code	Items	Facilitators	% of affected students in inclusive schools	% of affected students in special schools
D310	Communicating with receiving spoken messages- Gives response whenever being said something / follows verbal instructions	(a) Availability of hearing aid	12.09	92.76
		(b) Support services such as auditory / speech training and speech therapy	13.20	92.76
		(c) Encourage / train to respond the spoken messages	13.20	92.76
D315	Communicating with receiving Non-verbal messages- Gives response whenever being said through gestures / follows non-verbal (gestures) instructions	(a) Students use own learnt Sign and signals	12.09	62.32
		(b) Training provided to understand non-verbal instructions	13.20	69.57
D320	Communicating with receiving formal sign language- Gives response to the message made through sing language / follows instructions through sing language	(a) Formal sign language training provided	6.60	62.32
		(b) Students use own learnt Sign and Signals	100.00	62.32
		(c) Suitable educational opportunities	6.61	69.57
D325	Communicating with receiving written messages- Follows sight words such as ‘Gents / Ladies’, ‘Toilet’, ‘PCO’, ‘Entry / Exit’, Fills a simple form	Not required	-	-
D330	Speaking- Speaks (in words / phrases /sentence) at home, school, outside	(a) Availability of hearing aid	12.09	92.76
		(b) Support services such as auditory / speech training and speech therapy	13.20	92.76
		(c) Suitable instructional procedures used	13.20	92.76
		(d) Encourage / train to respond the spoken messages	13.20	92.76
D335	Producing non-verbal messages- Express (words / phrases / sentences) through body language / facial expression	(a) Formal sign language training provided	13.20	92.76
D340	Producing message in formal sign language-	(a) Formal sign language training provided	13.20	92.76

	Express (words / phrases / sentences) through formal sign language (ISL)			
D345	Writing message- Express through writing a message / letter / note	Not required	-	-
D350	Conversation- Initiates, maintains conversation at home / school /outside	(a) Availability of hearing aid (b) Oral conversation opportunities provided at school and home (c) Provide speech and auditory training or speech therapy	12.09 13.20 13.20	92.76 100.00 92.76
D355	Discussion- Initiates, maintains discussions (with arguments / debates)	Not applicable	-	-
D360 (a)	Using communication devices / techniques- Uses telephones / internet / mobile / SMS services etc. for communicating with family members/friends etc.	Not applicable	-	-
D360 (b)	Uses speech reading / lips reading during conversation, discussion	Not applicable	-	-

Table- 6 summarises the status of observed facilitators provided for improving functional ability in participation of HI students in inclusive and special schools on communication dimension of ICF-FAS. HI students in special schools as compared to HI students in inclusive schools were provided the adequate number of facilities according to their education needs to improve their functional ability/skills in communication dimension. It was observed during the study that in inclusive and special schools HI students were provided the major facilities were (a) availability of hearing aid (b) adequate support services such as auditory and speech training (c) availability of speech therapy facilities (d) provision of suitable educational opportunity (e) training of formal sign language, and (f) availability of appropriate visual learning material etc. The above table concludes that HI students in special schools were availing the adequate facilities at large as compared to their counterparts in inclusive schools.

Conclusion:

It can be concluded from above analysis that HI students in inclusive schools are affected by barriers at large as compared to special schools and in terms of presence of facilitators in participation of HI students in special schools were availing the adequate facilities at large as compared to their counterparts in inclusive schools. Increment in facilitators will improve the functional ability of HI students in inclusive and special schools.

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