Impact of Academic Anxiety on Deaf and Dumb Students

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Received: 11th Oct. 2014, Revised: 20th Oct. 2014, Accepted: 2nd Nov. 2014

ABSTRACT
Education essentially includes the process of encouraging, strengthening, and guiding the faculties, whether of mind or body, so as to make them fit and ready instruments for the work they have to do; and, where the need exists, it must include, moreover, the awakening for the first time into activity and usefulness of some faculty which, but for the awakening, might remain forever dormant. As regards intellectual development, the deaf individual is the most handicapped of the afflicted class. The term “deaf and dumb”, so frequently is applied to that class of individuals who neither can hear nor speak is becoming obsolete among the educators of the deaf, as it implies a radical defect in both the auditory and the vocal organism. Persons who are born deaf, or who lose their hearing at a very early age, are unable to speak, although their vocal organs may be unimpaired. They become dumb because, being deprived of hearing; they are unable to imitate the sounds which constitute speech. To correct the error involved in the term dumb, it is customary to speak of human beings who do not hear and speak as deaf-mutes, a term which implies that they are silent, but not necessarily incapable of speaking. Brute animals that are deaf are deaf and dumb; the little child, before it has learned to speak, is mute, but not dumb. There are found individuals who can hear, but cannot speak. To such may be applied the term dumb, in as much as they are either destitute of the power of speech or are unwilling to speak and are lacking in intelligence. The paper here is presented to show a comparison of the impact of Academic Anxiety on deaf and dumb students.

Keywords: Education, Education for Deaf and Dumb students, Anxiety and Academic Anxiety.

INTRODUCTION AND REVIEW
Education in its general sense is a form of learning in which the knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next through storytelling, discussion, teaching, training, and or research. Education may also include informal transmission of such information from one human being to another. Education frequently takes place under the guidance of others, but learners may also educate themselves (autodidactic learning). Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship. The science and art of how best to teach is called pedagogy.
A right to education has been recognized by some governments. At the global level, Article 13 of the United Nations’ 1966International Covenant on Economic, Social and Cultural Rights recognizes the right of everyone to an education. Although education is compulsory in most places up to a certain age, attendance at school often isn’t, and a minority of parents chooses home-schooling, sometimes with the assistance of modern electronic educational technology (also called e-learning). Education can take place in formal or informal settings.
Every child has the right to educate himself. However we come across children who are physically challenged especially with regards to their hearing ability and speaking ability. Such children should not be deprived education.
A. DEAF STUDENTS:
Students who are deaf or hard of hearing require different accommodations depending on several factors, including the degree of hearing loss, the age of onset, and the type of language or communication system they use. They may use a variety of communication methods, including lip reading, cued speech, signed English and/or American Sign Language.

Characteristics:
Deaf or Hard of Hearing Students may-
1. be skilled lip readers, but many are not; only 30 to 40 percent of spoken English is distinguishable on the mouth and lips under the best of conditions
2. also have difficulties with speech, reading and writing skills, given the close relationship between language development and hearing
3. use speech, lip reading, hearing aids and/or amplification systems to enhance oral communication
4. be members of a distinct linguistic and cultural group; as a cultural group, they may have their own values, social norms and traditions
5. use American Sign Language as their first language, with English as their second language

Deaf Education is the education of students with a variety of hearing levels which addresses their differences and individual needs. This process involves individually-planned, systematically-monitored teaching methods, adaptive materials, accessible settings and other interventions designed to help students achieve a higher level of self-sufficiency and success in the school and community than they would achieve with a typical classroom education. A number of countries focus on training teachers to teach deaf students with a variety of approaches and have organizations to aid deaf students.

Identifying deaf students
Children may be identified as candidates for deaf education from their audiogram or medical history. Hearing loss is generally described as slight, mild, moderate, severe, or profound, depending upon how well a person can hear the intensities of frequencies.

Individual needs:
Deaf education programs must be customized to each student’s needs, and deaf educators provide a continuum of services to deaf students based on individual needs. In the United States, Canada and the UK, education professionals use the acronym IEP when referring to a student’s individualized education plan.

Inclusion: Deaf students spend all, or most, of the school day with non-deaf students. Since inclusion requires considerable curriculum modification, it is considered best practice only for mildly-to-moderately deaf students. Specialized services may be provided inside or outside the regular classroom, and students may leave the regular classroom to attend smaller, intensive instructional sessions in a resource room or to receive other services requiring specialized equipment or which might be disruptive to the rest of the class (such as speech and language therapy).

Mainstreaming refers to the education of deaf students in classes with non-deaf students for specified time periods, based on the deaf students’ skills; deaf students learn in separate classes for the remainder of the school day.

Segregation (in a separate classroom or school): In this model, deaf students spend no time in non-deaf classes or with non-deaf students. Segregated students may attend a school where non-deaf classes are provided, but spend their time in a separate classroom for students with special needs. If their special-needs class is in a mainstream school, they may have opportunities for social integration (for example, eating meals with non-deaf students); alternatively, deaf students may attend a special school
**Exclusion:**
A student unable to receive instruction in any school is excluded from school. Most deaf students have historically been excluded from school, and exclusion may still occur where there is no legal mandate for special-education services (such as developing countries). It may also occur when a student is in hospital. Housebound Excluded students may receive individual or group instruction, and students who have been suspended or expelled are not considered "excluded" in this sense.

**B. DUMB STUDENTS:**
Deaf - mute is a term which was used historically to identify a person who was either deaf using a sign language or both deaf and could not speak. The term continues to be used to refer to deaf people who cannot speak an oral language or have some degree of speaking ability, but choose not to speak because of the negative or unwanted attention atypical voices sometimes attract. Such people communicate using sign language. Some consider it to be a derogatory term if used outside its historical context; the preferred term today is simply "deaf". The simple identity of "deaf" has been embraced by the community of signing deaf people since the foundations of public deaf education in the 18th century and remains the preferred term of reference or identity for many years. Within the deaf community there are some who prefer the term "Deaf" to "deaf" as a description of their status and identity.

Classification as a deaf-mute has a particular importance in Jewish law. Because historically it was impossible to teach or communicate with them, deaf-mutes were not moral agents, and therefore were unable to own real estate, act as witnesses, or be punished for any crime. However, today when techniques for educating deaf people are known, they are no longer classed as such.

Academic achievement or (Educational Achievement is the outcome of education — the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important — procedural knowledge such as skills or declarative knowledge such as facts. In California, the achievement of schools is measured by the Academic Performance Index.

**INDIVIDUAL DIFFERENCES INFLUENCING ACADEMIC PERFORMANCE**
Individual differences in academic performance have been linked to differences in intelligence and personality. Students with higher mental ability as demonstrated by IQ tests and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness.

Children’s semi-structured home learning environment transitions into a more structured learning environment when children start first grade. Early academic achievement enhances later academic achievement.

Parent’s academic socialization is a term describing the way parents influence students' academic achievement by shaping students' skills, behaviors and attitudes towards school. Parent influence students through the environment and discourse parents have with their children. Academic socialization can be influenced by parents' socio-economic status. Highly educated parents tend to have more stimulating learning environments. Children's first few years of life are crucial to the development of language and social skills. School preparedness in these areas help students adjust to academic expectancies.

Another very important enhancer of academic achievement is the presence of physical activity. Studies have shown that physical activity can increase neural activity in the
Exercise specifically increases executive brain functions such as attention span and working memory.

**EDUCATING THE DEAF AND DUMB STUDENTS**

Education is important for deaf and dumb students for their academic growth as well as for the development of their all-round personality. These impaired children lack the ability to use language and communication skills for educational purposes like their normal peers. That’s why, different approaches and methods are employed for teaching

**USE OF DEVELOPED TECHNOLOGIES APPROACHES**

**Total Communication Approach:**
It is combined use of aural, oral and manual modalities. • Use of sign language • Lip reading • Listening • Auditory practice • Speech practice

**Manual Communication Approach:**
Oral/Aural communication approach: This approach advocates that children must be helped in developing their listening and speaking abilities. It uses following methods.

**Amplification of sound:**
It means to amplify sound with help of hearing aids.

**Auditory training:**
To develop listening ability and ability to discriminate among sounds. • Awareness of sound • Localization of sound • Discrimination of sound • Identification of sound

**Lip reading:** It means to imitate the message by observing and imitating movement of lips of speaker, his expressions and gestures in same context. Speech readiness: Exercises of tongue movement, gliding movement and breathing exercises.

**Speech therapy:**
It is training to produce sounds. Vowel sounds: these sounds are taught with reference to their place of vibration. Consonant sounds most visible and easy sounds are taught first like p, b, s, t gliding sounds are taught in the end. Then sounds are taught in combination like ‘pa’

Education is a powerful instrument of social change, and often initiates upward movement in the social structure. Thereby helping the bridge the gap among the different sections of society the educational scene in the country has undergone major change over the years, resulting in better provision of education and better educational practices. In 1944, the Central Advisory Board of Education (CABE) published a comprehensive report called the Sergeant Report on the post-war educational development of the country. As per the report, provisions for the education of the handicapped were to form an essential part of the national system of education, which was to be administered by the Education Department. According to this report, handicapped children were to be sent to special schools only when the nature and extent of their defects made this necessary. The Kothari Commission (1964–66), the first education commission of independent India, observed: “the education of the handicapped children should be an inseparable part of the education system.” The commission recommended experimentation with integrated programmes in order to bring as many children as possible into these programs (Alur, 2002).

Until the 1970s, the policy encouraged segregation. Most educators believed that children with physical, sensory, or intellectual disabilities were so different that they could not participate in the activities of a common school (Advani, 2002). Christian missionaries, in the 1880s, started schools for the disabled as charitable undertakings (Mehta, 1982). The first school for the blind was established in 1887. An institute for the deaf and mute was set up in 1888. Services for the physically disabled were also initiated in the middle of the twentieth century. Individuals with mental retardation were the last to receive attention.
The first school for the mentally challenged being is established in 1934 (Mishra, 2000). Special education programmes in earlier times were, therefore, heavily dependent on voluntary initiative. In the 1970s, the government launched the Centrally Sponsored Scheme of Integrated Education for Disabled Children (IEDC). The scheme aimed at providing educational opportunities to learners with disabilities in regular schools, and to facilitate their achievement and retention. The objective was to integrate children with disabilities in the general community at all levels as equal partners to prepare them for normal development and to enable them to face life with courage and confidence. A cardinal feature of the scheme was the liaison between regular and special schools to reinforce the integration process. Meanwhile, the National Council of Educational Research and Training (NCERT) joined hands with UNICEF and launched Project Integrated Education for Disabled Children (PIED) in the year 1987, to strengthen the integration of learners with disabilities into regular schools. An external evaluation of this project in 1994 showed that not only did the enrollment of learners with disabilities increase considerably, but the retention rate among disabled children was also much higher than the other children in the same blocks. In 1997 IEDC was amalgamated with other major basic education projects like the DPEP (Chadha, 2002) and the Sarva Shiksha Abhiyan (SSA) (Department of Elementary Education, 2000).

**Academic Anxiety:**

In order to understand Anxiety, we need to understand the term Anxiety. Anxiety is an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination. It is the subjectively unpleasant feelings of dread over anticipated events, such as the feeling of imminent death. Anxiety is not the same as fear, which is a response to a real or perceived immediate threat; whereas anxiety is the expectation of future threat. Anxiety is a feeling of fear, worry, and uneasiness, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. It is often accompanied by muscular tension, restlessness, fatigue and problems in concentration. Anxiety can be appropriate, but when experienced regularly the individual may suffer from an anxiety disorder. Academic anxiety is a common phenomenon of everyday life. It plays a crucial role in human life because all of us are the victim of anxiety in different ways. In the present study academic anxiety is a kind of anxiety which related to the impending danger from the environment of the academic institutions including teacher in certain subjects like Mathematics, English and Science etc.

**Review of related Literature:**

Jason and Hannah (2011) in his study found that students with learning disability had higher mean scores on measure of anxiety than non learning disabled students. The overall effect size was statistically significant and medium n magnitude, although substantial heterogeneity of results was found. Manjula etal.(2009) in their study revealed that 93% of academically low achieving children were found to be having reading difficulty while 58% had writing difficulty. In writing 87% of high achieving students were good and 5% were found to be having difficulty. On attention task, difficult children made more errors than normal children. In recalling words, numbers and for immediate and delayed recalling, significantly lowest scores were observed among difficult children. Bhavani (2007) revealed that children with learning disability compared to slow learners have significantly less externalizing behavior problems. The children with disturbance in one area of learning disability and having disturbance in more than one area do not show significant difference in their behavior. Lata and Dwivedi (2001) found that music reduced anxiety significantly. Srivastava and Afiah (1992) in his study found that there was no significant difference between boys
and girls in their disabilities in reading, arithmetic, language and spelling but sex had a definite bearing on the writing disability of the learning disabled. Sharma and Pandey (1992) found significant difference on age variables but not so on gender variables among the hearing impaired in both the settings. It was also found that medium of instruction had no impact on science achievement of the hearing impaired. Bhattacharya (1998) found that students developed more learning disability in understanding linear equation sums in one unknown than in solving them while they did not develop learning disabilities in the application level. Students developed more learning disability in the application than in the knowledge of linear equation sums in one unknown rather than in solving such sums.

**METHODOLOGY AND INTERPRITATION**

**SAMPLE:** The total sample of 60 children comprised of 30 hearing impaired children selected from two schools- Anand Niketan Badhir Vidyalaya and, Bilaspur and Special School for blind and deaf, Bilaspur. Rest of 30 learning disabled children were selected from Satya sai Help way, Bilaspur from where researcher have consulted teachers for the appropriate selection of sample.

**Method:**
Schools use a number of approaches to provide deaf-educational services to identified students. These may be grouped into four categories, according to whether (and how much) the deaf student has contact with non-deaf students (using North American terminology)

![Diagram](image)

**Instrument Used:**
Considering the objectives of present study researchers used anxiety scale named as “Academic Anxiety Scale for Children” developed by Dr. A.K.Singh and Dr. (Mrs.) A.Sen Gupta This tool comprising 20 items for which responses have to give yes or no.

**OBJECTIVES**

- To study about the level of academic anxiety among hearing impaired children.
- To study the Academic Anxiety among dumb children

**HYPOTHESIS**

1. There is no significant difference in the level of academic anxiety between male and female hearing impaired children.
2. There is significant difference in the level of academic anxiety of male and female dumb children.

**ANALYSIS AND INTERPRETATION:**

Hypothesis 1: There is no significant difference in the level of Academic Anxiety between Male and Female hearing impaired (Deaf) children
Table 1: Mean, S.D. and T value of Academic Anxiety of Male and Female Hearing Impaired Children

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>df</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>12.41</td>
<td>3.13</td>
<td>28</td>
<td>0.61</td>
<td>significant at .05 level</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>11.36</td>
<td>4.44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean scores for males are 12.41 while for females scores are 11.36. S.D. for both groups is 3.13 and 4.44 respectively. The calculated t value is .61 which is found not significant at .05 level of significance. Hence no significant difference found between male and female hearing impaired children.

The result reveals that no gender difference is found between male and female hearing impaired children (deaf) hence both the groups present similar level of academic anxiety.

Hypothesis 2: There is no significant difference in the level of Academic Anxiety between Male and Female dumb children

Table 1: Mean, S.D. and T Value of Academic Anxiety of Male and Female Hearing Impaired Children

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>df</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>25</td>
<td>10.16</td>
<td>2.66</td>
<td>28</td>
<td>0.94</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>11.4</td>
<td>2.73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean scores for dumb male children are 10.16 (S.D. = 2.66) while for dumb female children scores are 11.40 (S.D. = 2.73). The calculated t value is .94 which found not significant at any level of significance.

Hence no significant difference found between male and female learning disabled children, hence it can be said that both the groups present similar level of academic anxiety.

RESULT

1. There exists no significant difference between the Academic Anxiety between hearing impaired male and female children. It suggests that there is no role of sex variable among hearing impaired children.
2. There is no significant difference between dumb male and female children in Academic Anxiety levels. It suggests that there is no role of sex variable among dumb children. They have the same problem in the area of Academic Achievement.

RECOMMENDATION

1. To communicate with a person who is deaf in a one-to-one situation:
2. Get the student’s attention before speaking. A tap on the shoulder, a wave, or another visual signal usually works. Clue the student into the topic of discussion. It is helpful to know the subject matter being discussed in order to pick up words and follow the conversation. This is especially important for students who depend on oral communication.
3. Speak slowly and clearly. Do not yell, exaggerate, or over enunciate. It is estimated that only three out of 10 spoken words are visible on the lips. Overemphasis of words distorts lip movements and makes speech reading more difficult.
4. Try to enunciate each word without force or tension. Short sentences are easier to understand than long ones.
5. Look directly at the student when speaking. Even a slight turn of your head can obscure the speech reading view. Do not place anything in your mouth when speaking. Mustaches that obscure the lips and putting your hands in front of your face can make lip reading difficult.
6. Maintain eye contact. Eye contact conveys the feeling of direct communication. Even if an interpreter is present, speak directly to the student. He or she will turn to the interpreter as needed. Avoid standing in front of a light source, such as a window or bright light. The bright background and shadows created on the face make it almost impossible to speech read.

7. First repeat, and then try to rephrase a thought rather than repeating the same words. If the student only missed one or two words the first time, one repetition will usually help. Particular combinations of lip movements sometimes are difficult to speech read. If necessary, communicate by paper and pencil or by typing to each other on the computer email or fax. Getting the message across is more important than the method used. Use pantomime, body language, and facial expression to help communicate.

8. Be courteous during conversation. If the phone rings or someone knocks at the door, excuse yourself and tell him or her that you are answering the phone or responding to the knock. Don’t ignore the student and talk with someone else while he or she waits.

9. Use open-ended questions, which must be answered by more than "yes", or "no." Do not assume that the message was understood if the student nods his or her head. Open-ended questions ensure that your information has been communicated.

10. Test anxiety can be minimized if addressed at an early age. Students need to have good study skills and test taking skills (Bensoussan, 2012). More research is needed to show teachers how they can help Students combat anxiety every day in the classroom.

11. By working closely with parents, teachers can assure that parents understand the effects of test preparation on academic achievement and levels of anxiety. Reducing anxiety levels in students is important for helping to increase academic achievement.

12. Anxiety can be a big problem for students with disabilities. Students with disabilities cannot change the fact that they have a disability, and according to the Attribution Theory, it is something they feel they cannot change and will not succeed.

13. As a teacher of elementary students with learning disabilities, I see students who are so frustrated because they are not performing as well as their general education peers. They are scared to try anything because they do not want others to see them struggle. Several of my students freeze up when doing timed assessments. These students feel much more comfortable if they are not being timed, but certain school wide assessment tools require timing. The scores are not valid if the assessment is not timed.

14. Teachers can try to accommodate the students and stretch the rules as much as possible, but it is not always an option

15. Teachers can teach students to use methods such as mindfulness meditation, but training is required. Many schools do not have the extra funds to bring in a trainer or send teachers out for training.

REFERENCES


9. Communicating with a Student who is Deaf, Seattle Community College; Regional Education Center for Deaf Students.


22. Transcription. This article was transcribed for New Advent by Douglas J. Potter. Dedicated to the Immaculate Heart of the Blessed Virgin Mary.