

Case study: hearing and visual impairments

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This document discusses the most prevalent sensory impairments: hearing and visual impairments. The impact caused on academic and individual development are addressed as well as the significant role which educators of these special categories of people can play in the education sector in order to make learning possible.

Visual impairment

This refers to occurrences of partial or complete vision loss. Milder forms of visual impairment are treatable with glasses or even contact lenses while others require surgery or some medication. Severe cases of visual impairments are irreversible.

Types and causes of visual impairment

Four categories of visual impairment exist. Partially sighted refer to individuals with some level of difficulty in identifying information and as such special assistance in learning and reading is required. Low vision is a more serious visual impairment which does not permeate reading at normal distances. Supportive tools like the popular use of Braille assist people diagnosed of low vision to read. Legally blind is a vision which is less than 20/200 or characterized by limited range of vision. Totally blind refers to a person with no vision at all thus such individuals cannot process any images. They utilize non-visual resources like Braille in order to learn. Several factors cause blindness in individuals. Congenital blindness occurs at birth due to heredity or infection. Cataracts which are cloudy collections of protein in the eye lens cause light not to pass through the lens leading to the condition. Amblyopia is a condition of the eye which results into blindness due to the <https://assignbuster.com/case-study-hearing-and-visual-impairments/>

brains discontinued processing of images present in the misaligned eye. The degeneration of macular situated at the retina of the eye especially in older people results into visual impairment or even loss of vision (Webster & Roe, 1998).

Hearing impairment

The disability Act defines hearing impairment as the limited ability to effectively detect process or differentiate sound.

Types and causes

Conductive hearing loss is exhibited when sounds are unable to go through the inner ear from the outer ear. This is as a result of blockage of the ear canal caused by build-up of earwax or fluid. Sensorineural hearing loss is caused by the perceived damage to the hair cells located at the cochlea or auditory nerve. The damage would occur due to aging or perhaps injuries. Mixed hearing loss is present when the above two hearing loss types are present.

Impact of visual and hearing impairments on a person's development

Sensory Development

A child born with hearing and visual impairment is negatively affected especially in regard to sensory development. This is because other senses appear to diminish. For instance, the child gets inconsistent, unverified as well as discrete fragments of information. Although hearing is usually the only sense available to the blind child, control over the available sound

present in their environment is not present. Vision is vital in verifying sounds otherwise lack of verification means that the sound is noise emanating from a non-specified location (Webster & Roe, 1998).

Motor development

A person who is sensory impaired possesses significant developmental delays in the ability to implement the functionality of hands. Even at 5 months, a blind child's hands are normally held up in a fist at shoulder height. Mutual fingering as well as midline engagement with the hands common with sighted children of this particular age are not exhibited. Ultimately, delays in hand utilization results in delayed development of fine and gross motor skills. Achieving appropriate posture for the blind child takes considerable a longer duration of time. Developmental achievements requiring self initiated mobility like elevating arms in prone or walking alone are significantly delayed. Passive behavior like self-stimulation is exhibited in blind children due to the inability to move around the environment.

Cognitive development

The ability to coordinate elements in high levels of abstraction is limited. Thus a different construct of world and reality is developed contrary to that given by sighted persons. A blind person has problems in establishing the concept of defining attributes as well as relationships due to the limited guidance available (Webster & Roe, 1998). Though the blind child is continually involved in problem solving, the activity is certainly difficult and less rewarding for her/him. The ability to obtain object permanence is

achieved on sound clues only. Blind children achieve this almost a year later than the sighted children. Sensory impaired persons have difficulties in forming and maintaining casual relationships due to the inability to retain pleasurable stimuli.

Social development

Due to inexistent subtle clues and facial expressions, the social interactions of visually and hearing impaired persons are complicated. While a sighted child will signal attachment and recognition to familiar people through a smile, a blind child will smile upon recognition of his mother's voice after about 2 months. Sensory impaired persons have ambivalent emotional involvement with peers. They also appear non-communicative and disinterested on the on-goings thus they are overprotected or rejected by their peers, relatives as well as strangers. Language development is also limited in sensory impaired children (Webster & Roe, 1998).

Impact of visual impairments on a person's academic achievement

Vision loss impacts negatively a person's academic achievement since special adaptations are required to steer the student to success. Vision is important in understanding the underlying concepts being taught in a classroom situation thus most visually impaired students often complete schooling without good mastery of skills and knowledge which is vital in enabling them further their education or gain employment (Sacks, 2001). Visually impaired students are taught using critical skills like Braille and travel skills like ' canes'. Shortage of mobility specialists as well as qualified

visually impaired teachers restricts dissemination of education. Visually impaired persons require the use of large print formats as well as audiotapes to learn. Making presentations from these materials slows down the learning process considerably.

Impact of hearing impairments on a person's academic achievement

Hearing impairments affect learning and teaching of the hearing impaired students thereby causing substantial difficulties in academic achievement. The deaf learners experience massive linguistic problems owing to the inability to develop spoken language and understandable utterances (Sacks, 2001). Many difficulties are exhibited in written work whereby glaring mistakes are seen in written work. For example wrong sentence structures, omissions of words as well as wrong tense and verb usage is prevalent. Due to the complexity of lip reading, most deaf learners find it difficult to undertake this task. Attributable to lack of hearing as well as auditory memory, hearing impaired learners are unable to adequately rehearse what they are able to write thus learning requires lengthy period. The syntax as well as the grammar of BSL is different from that of spoken English thus confusion arises in the course of disseminating the information. Deaf students take considerable long time to be able to read.

The developed vocabulary is minimal thus understanding the message being communicated becomes difficult. Unfamiliar words cannot be "lip read" thus continued advancement of vocabulary becomes difficult. Deaf learners thus require to research on technical jargon as well as the perceived simple and commonplace language in order to effectively communicate. Thus a lot of

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time is spent in doing simple assignments as compared to the hearing students. Unlike the case of hearing learners who gather information from reading newspapers, discussions with peers or listening and watching television, the deaf students have to rely of their instructors to learn. Thus their written work largely lacks in-depth analysis and is marked by uninformed opinions (Sacks, 2001). Group work and discussions prove problematic to hearing impaired students due to their inability to contribute equally as the other students.

What Educators can do

In order for the hearing and visually impaired students to adequately fit in the learning situation, teachers and trainers need carefully structure the learning modalities, learning environment as well as putting in place necessary resources (Chen & Downing, 2006). Classroom activities need be accessible to the hearing impaired students through incorporating tutorial groups as well as incorporating computer based learning. For the hearing impaired, course notes need be provided in advance so as to acquaint the learners beforehand what is expected of them. Through the use of visual aids like PowerPoint presentations will largely help in proper understanding of the spoken language.

For the visually impaired, educators must ensure that all the visual materials given to the students are accompanied by verbal descriptions. Narrations need be emphasized at all learning stages in order to enhance understanding. Learners with some functional vision should be given handouts printed out in large print so as not to have learners strain as they

read. Audiotapes as well as Braille formats of the class presentations and lessons should be given to students (Chen & Downing, 2006).

Conclusion

Owing to the several challenges confronting sensory impaired persons, several adjustments need be put in place to ensure such learners adapt adequately to the learning environment. Hearing and visual impairments are quite prevalent and cause severe consequences during the development of language, speech as well as cognitive skills. Through proper education, effects associated with hearing and visual impairments are identified thereby advancing early detection and management strategies.