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### RESEARCH ARTICLE

#### IMPEDIMENTS TO ORIENTATION AND MOBILITY TRAINING PROGRAMMES IN GHANAIAAN BASIC SCHOOLS: A CASE OF WA SCHOOL FOR THE BLIND

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#### Abstract

The purpose of the study was to explore the impediments to orientation and mobility (O&M) training programmes in the Ghanaian basic school using samples from Wa School for the Blind and suggest measures to curb such impediments. For the nature of the study, the descriptive qualitative design was used where six (6) participants were purposively sampled from a population of 20 final year pupils. Semi-structured interview and observations were used to collect data for the study and the gathered data was analysed using thematic analysis. The findings show that lack of teachers, unfriendly environment, inadequate white canes, stigmatisation, and lack of time for practice impede O&M training programmes. Again, the findings show that the measures that can be adopted to improve O&M training include training of teachers (specialists) to teach O&M techniques, provision of white canes, provision of O&M training time, and encouraging pupils who are visually impaired to use the white cane. The study concludes and draws implications based on the social model of disability that society ought to make the environmental modification which requires attitudinal and social change. Recommendations were made based on the findings and conclusions were drawn.

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#### Introduction:-

There is a worldwide concern about the serious limitation imposed on individuals with visual impairments' ability to get around and confidently use their environment. The limitation on children with visual impairment, cognitive and motor skills development can be even much greater without proper intervention, as a movement without vision requires the interpretation of information from the remaining senses for purposeful movement. A child with congenital visual impairment can encounter a number of developmental and educational challenges in his/her early years. Lowenfeld (as cited in Nasiforo, 2015) outlined such limitations in areas such as (a) range and variety of experiences, (b) ability to get around, and (c) interactions with the environment. Interestingly, He reported that these limitations are addressed through orientation and mobility (O&M) training. Welsh and Blasch (as cited in Nasiforo, 2015) defined O&M as "independently, safely, and purposeful movement through the environment" (p. 1). Without efficient skills in O&M, children with visual impairment access to and control of their environment can be limited. The World Health Organisation [WHO] (2014) stated that there is an estimated 285 million people worldwide with visual impairment and 19 million of those individuals are children. In Ghana, the 2010 Population and Housing Census estimated that the country's disability rate stood at 737,743 (which represent 3% of the entire population). It should be noted that visual impairment is the most prevalent impairment type in Ghana, affecting about 1.2% of the population (Ghana Statistical Services [GSS], 2012). Learners with visual impairment depend on the use of the

various techniques through the O&M training in accessing the environment. In order to access the environment around them and gain purposeful movement, pupils with visual impairment must develop appropriate mastery levels in these skill areas. This is because, the acquisition of independent travel skills is essential for pupils' participation in academic, non-academic, and extracurricular aspects of education, and add to their self-esteem, social and economic independence (Riley, 2000).

### **Literature Review:-**

The concept of visual impairment is an umbrella term used to describe those with low vision and those who are totally blind. Those with low vision have perception of light and those who are totally blind have no perception of light. Due to these conditions, individuals with visual impairment are required to develop and use their senses to establish their position in relationship with all other significant objects in their environment which calls for O&M services. Douglas et al. (2009) explained based on a sample from the United Kingdom that children in inclusive education settings are supported by teachers of children with visual impairment who are required to have a mandatory qualification in the education of learners with visual impairment. These teachers are solely responsible for providing services to meet their basic O&M needs given the shortage of qualified O&M specialists. Pavey, Douglas, McCall, McLinden and Arter (2002) recommended for the development of a mobility and independence curriculum framework, alternate methods of service delivery, and requirements for future training of professionals. As indicated by Scott (2009), many rehabilitation workers, whose training courses focus on adult intervention, felt unprepared and insufficiently trained to deliver mobility and independence skills to younger children or those with additional and complex needs. These challenges led to the establishment of the Mobility 21 project and the subsequent 2011 publication of a set of Quality Standards by Miller on O&M services (Wall & Garner as cited in Scott, 2015). Due to the relevance of O&M, Skellenger and Sapp (2010) suggested that creating awareness of the importance of O&M intervention and ensuring sufficient numbers of appropriately qualified O&M personnel are trained. In South Africa, a study conducted by Mutuelle and Odeku (2013) showed that the appointment of an O&M instructor in a public university drastically improves the lives of students with visual impairment.

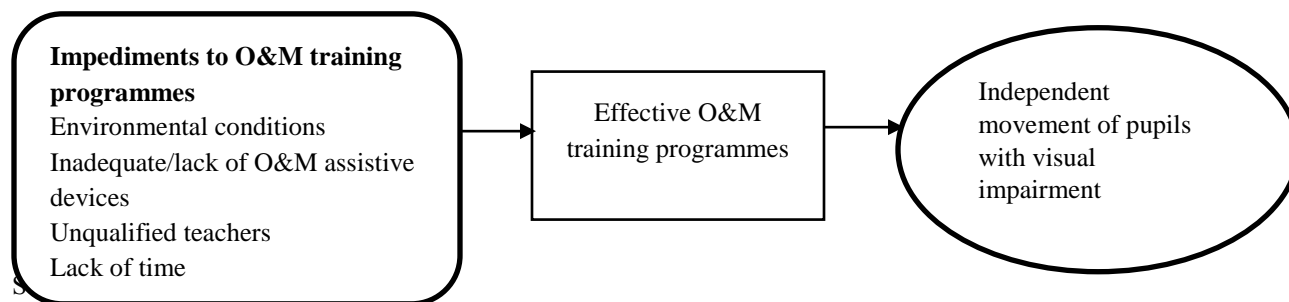
In Ghana, the training for persons with visual impairment has an extremely fascinating history. Persons with visual impairment were viewed as liabilities in their communities and thus implied that no cause of action was given for their balanced growth and advancement. These individuals were killed or overprotected or misdiagnosed such that they lived a life that was isolated and degraded (Ocloo, 2011). Organised efforts to educate children with visual impairment in Ghana are of comparatively recent origin. It was not until 1945 that the first School for the Blind was established at Akropong-Akuapem in the Eastern Region through the benevolence of Presbyterian missionaries. The British colonial government gave it recognition the following year in a bid to give it the needed support. Subsequently, another initiative by the Methodist Church, led to the setting up of the Wa School for the Blind in 1958 in the Upper West Region to serve the northern part of the country. In 1962, the Henderson Committee recommended that all special schools should be taken over by the Ministry of Education. In 1968, a resolution was adopted by the Conference of Teachers of the Disabled, demanding that a separate directorate was to set up to oversee the activities of all special schools in Ghana (Ocloo, 2011). As part of the goals, the syllabus, however, was modified and adapted to suit the educational needs of pupils who are blind which led to the introduction of O&M services. According to the Ghana Association of the Blind (GAB), O&M training is done theoretically through discussion and a practical demonstration of the skill until the person with visual impairment becomes perfect. Major areas of consideration in the curriculum include the following activities: sensory training (indoor and outdoor) room familiarisation, use of landmarks, and clues, introduction to the use of a white cane, route travel with white cane, sighted guide technique appropriate at various locations, market, farm, school among others, and body protective methods (GAB, 2014). Pupils with visual impairment could attain the full benefits of O&M skills if they are equipped with the needed competencies and dispositions in the use of O&M services.

Training in O&M is critical if pupils from schools for the blind are to function independently once they complete school and have to survive in their home areas or in the inclusive environment (Nasimiyu, 2011). O&M is expected to form an integral part in the education of pupils with visual impairment in the basic school in Ghana. Pupils' ability to master control of the environment depends on a certain extent on the quality of training programmes undertaken. However, this is not the case; criticisms have been levelled against pupils with visual impairment who graduate from our educational institutions. As Attia and Asamoah (2020) put it, pupils with visual impairment fail to use the white cane effectively, and core to this defect can be attributed to the training they receive in the use of the white cane. This is coupled with other factors such as motor vehicular movement, use of traffic and environmental unfriendliness (Attia & Asamoah, 2020). It is unclear whether or not pupils at schools for the blind in Ghana

receive instruction from teachers who possess the required knowledge with respect to the various O&M techniques. Ocloo (2011) observed that apart from the University of Education, Winneba which offers a course in basic O&M training, no other institution provides services for O&M training. This could be traced to lack of infrastructure and personnel to handle O&M issues for individuals with visual impairment. Ocloo further stated that our environment in terms of topography, roads and open gutters provide barriers to easy mobility. These concerns raised obstruct effective O&M training programme for individuals with visual impairment and do not only pertain to developing countries like Ghana. As indicated by Ravenscroft (2012), teachers of children with visual impairment, lack the training and qualifications to teach O&M skills, noting they “do receive some training in sighted guide techniques, but this does not commensurate with fully qualified orientation and mobility instructors” (p. 205).

Deverell and Scott (2014) also pointed out that there is a shortage of qualified O&M specialists which impact on the delivery and quality of education supported for pupils with visual impairment. This finding supports a previous finding of an Australian study by Brown and Beamish (2012). Another challenge regarding an effective training programme is found in the lack of confidence among teachers in understanding how expanded core curriculum techniques can be taught (Lohmeier, Blankenship & Hatlen, 2009; Skellenger & Sapp, 2010), highlighting an area of concern for personnel preparation programme. In addition, research has also indicated that there is a difficulty when it comes to making adequate time for O&M training. For instance, Wolffe et al. (2002), identified that teachers spend a significant amount of time teaching general academic skills rather than these specialist skills. More recently, the same sentiment by Lohmeier et al., (2009) affirmed that many teachers of pupils with visual impairment indicate they have difficulty finding time to teach the skills of the expanded core curriculum which includes O&M. According to Ker and Karen (as cited in Lohmeier et al., 2009), one significant finding found was that among both parents and educators also shows that the issue of time to teach O&M is a major impediment to an effective training programme. It must be noted that effective O&M training remains an ongoing challenge despite many efforts made to address this problem. It is in this respect that Long (2009) recommended the need to assess any educational or rehabilitation intervention for this is perhaps the most neglected areas of O&M. It must be emphasised that these issues raised exist in Ghana and especially in the schools for the blind. These difficulties may affect effective O&M skills training for pupils with visual impairment and this may have a continuing negative effect on the quality of life, social integration and the effective implementation of the inclusive education programme. Based on this, the study seeks to provide evidence of the aforementioned and other impediments towards O&M training among pupils in the Wa School for the Blind, and make suggestions to curb such impediments.

#### Theoretical model:



**Figure 1:-** A model illustrating orientation and mobility training programme in basic schools.

From Figure 1, impediments to O&M programmes has a direct effect on the effectiveness of O&M programmes, and an effective O&M programme then leads to pupils' competencies in independent movement in their environment. The conceptual framework shows that when pupils go through effective O&M training programmes, they master control of the environment. The ability of pupils to demonstrate these skills will show the degree of effectiveness of the training programme. In relating to the social model of disability which states that individuals with impairment are disadvantaged or excluded from participation not as a result of the impairment, but because of a number of environmental factors, including the nature of buildings, legislation, attitudes, language and culture, I explain that pupils with visual impairment in the Schools for the Blind in Ghana need effective training in order to attain equal access to the mainstream society. An effective O&M training programme is one critical educational component that pupils with visual impairment need to enable them to adjust effectively and independently travel in their environment.

## Methods:-

The study uses the descriptive qualitative design where a population of 20 (13 males and 7 female) final year pupils were used in the study. The study was mainly conducted in Wa Schools for the Blind which is one of the two schools for the Blind in Ghana. Through the use of purposive sampling technique, 6 pupils, which included 4 males and 2 females was used. The use of six participants is justified by Creswell (2009) who argued that selecting a large sample for qualitative research results in superficial information which diminishes the overall in-depth description of information. A semi- structured interview and an observation guide were used to collect data for the study. The validity and reliability of the instruments were ascertained through expert judgement taking cognisance the concept of creditability, transferability, dependability and confirmability as explained by (Lincoln & Guba, 1985). For instance, to ensure the credibility of information given, the participants were contacted afterwards to confirm what they meant by what they had said. Ethical issues such as informed consent, anonymity, confidentiality and voluntary participation were critically ensured. The data collection was done in the ICT laboratory where 55 minutes was used for all the six participants. During the data collection, audio recording were done to retain a full, un-interrupted record of what has been said and also to check against researcher's bias (Walliman, 2006). The inclusion criteria was pupils who were exposed to O&M training programmes as at the time the study was conducted. In order to deal with the limitation that comes with interview data, I took on the role of a participant observer which allowed me partake in the social world chosen for the study (Patton, 2009). The data was analysed thematically where major issues as raised during the interview were put in main themes. This agrees with Braun and Clark (2006) who stressed that thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within the data. Again, in the analysis, verbatim extracts were included which were chosen from the pool of responses based on their detail, clarity, relevance and vividness.

## Findings and Discussion:-

### Impediment to O&M training:

Pupils were asked about the factors that serve as impediments to O&M training in their school. Pupils were required to respond to questions which had to do with the factors that obstruct O&M training. The theme "pupils' concerns" was identified.

On factors that impede the effective O&M training programmes in the schools for the blind, participants were asked to mention their concerns in regard to O&M training in their school. It was realised that majority of the pupils cited factors relating to unfriendly environment, lack of inadequate teachers, lack of time for O&M training and inadequate white canes. These findings confirm the position of Deverell and Scott (2014) who reported that a shortage of qualified O&M specialists affect the delivery and quality of education for pupils with visual impairment.

A participant had this to say:

"We do not have teachers who will teach us the white cane technique. Our environment is not friendly; we do not have white canes" (Participant C).

Another participant also confirmed:

"We do not have teachers who can teach us the white cane technique, and sighted guide technique. We do not also have white canes that we can use to walk, and then again there are a lot of potholes, if care is not taken when walking one may fall" (Participant G).

On the other hand, issues such as time constraint were mostly mentioned by the pupils:

The views of the participants were amplified when a female pupil explained that:

"Most people look at you when you are holding the white cane; we are not even taught at all on the skills." (Participant E).

Another participant also confirmed that:

"They don't have much time" (Participant D). "The teachers are only teaching the other subjects in the school" (Participant C).

Form the responses of the participants, factors that serve as impediments to O&M training programmes in the basic school are: lack of teachers, unfriendly environment, inadequate white canes, stigmatisation, and lack of time for

practice. Ocloo (2011) reported on environmental factors like topography, roads and open gutters provide barriers to easy mobility to pupils with visual impairment. The implication is that when there are no instructors and coupled with environmental conditions that do not favour O&M programme; its purpose for ensuring independent movement will not be achieved. The stigma that comes with it will also demotivate pupils with visual impairment which will have consequences on their self-esteem and academic progress. Although friendly environment and adequate instructors are important in O&M training, it should be pointed out that O&M is an area that requires the services of specially trained professionals other than the qualified teacher who have the needed time for pupils with visual impairment. The teacher for pupils who are visually impaired is not necessarily qualified to teach such advanced skills as the white cane, and this skill needs to be taught in conjunction with, not separate from, other O&M techniques. Ravenscroft (2012) stressed that it is not enough to have instructors who are trained to work with adults who suddenly find themselves working with children. The implication that can be drawn from the findings is that pupils who are visually impaired would depend on well-defined paths and memorable landmarks to find their way; poorly defined environment may be difficult to orient. In the same way, because pupils with visual impairment depend on their cognitive maps, environments that are difficult to present mentally are also hard to orient in. Ocloo (2011) observed that the layouts of school environments for the blind in Ghana do not facilitate easy mobility of the pupils. Scott (2009) further observed that one of the major difficulties with O&M training is the worldwide shortage of specialised personnel to provide training and to advocate O&M training and this has been justified in the Wa School for the Blind.

#### **Suggestions for effective O&M training:**

As a means to overcoming the factors that obstruct the O&M training, the participants were asked to suggest measures that can be adopted to improve O&M training in their school. The pupils suggested measures such as ensuring that inclusive education is practiced in all basic schools, train teachers on the O&M skills, and educate the sighted to be able to use the O&M techniques appropriately, provide white canes for pupils who are visually impaired, allocate time for O&M training for pupils with visual impairment, and finally it was stated that the pupils with visual impairment should be encouraged to use the white cane. The pupils gave relatively different suggestions as to what should be done to improve O&M training for pupils with visual impairment.

#### **A participant remarked:**

“Government should try and bring inclusive education and get us teachers who will teach us how to move” (Participant B).

Inclusive education should be introduced to the basic school level for us to be with the sighted...” (Participant L).

It was also mentioned that the teachers are not well trained in the teaching of the various O&M techniques; therefore, teachers should be given the platform to equip themselves with the skills.

#### **One participant said:**

“Because some teachers are not well trained in orientation and mobility, they should open forum to train them” (Participant G).

Another participant mentioned the fact that there is the need for the pupils to be provided with white canes and yet mentioned the irony of the sighted helping them.

#### **A participant remarked:**

“Government should provide us with more white canes... So that the sighted people will help us” (Participant J).

Some participant also commented on making time for training pupils on O&M, provision of white canes, sighted education-on how to guide the visually impaired and encouragement for the pupils who are visually impaired to use the white cane, The issues mentioned by the participants have been summarised in the following statements:

“The time should be extended” (Participant A).

#### **Another participant said that:**

“The sighted should be educated on how to walk with the visually impaired” (Participant C). Another response had to do with encouraging pupils who are visually impaired to use the white cane: “pupils who are visually impaired should be encouraged to use the white cane” (Participant D).

Generally, it is revealed from the above statements that factors such as, allocating time and teachers for O&M training, provision of enough white canes for pupils, ensuring inclusive education in all basic schools and providing specialist teachers are critical in curbing the impediments to O&M training programmes. The result of the current study is well grounded in literature. The result of the study confirms findings by Adu (2015) who recommended that the government and authorities must buy enough white canes to advance pupils O&M skills. Giving sufficient time is an essential factor for a successful training programme. Competence and confidence in the independent movement with the white cane are specifically identified with what is described as road time. The pupils need to rehearse and practice more. To this end, Small and Marin (2007), suggested that between 80 and 400 hours of training is needed for a basic understanding of O&M to be achieved and this might have been missing in the Wa School for the Blind.

### Conclusion and Recommendations:-

The study sought to explore factors that serve as impediment to O&M training programme in the Wa School for the Blind and suggest measures of curbing the impediments. The study finds that lack of teachers or inadequate teachers, unfriendly environment, inadequate white canes, stigmatisation, and lack of time for practice were the factors that affect effective O&M training programmes in the school. Again, the study found that measures that can be adopted to improve O&M training for pupils in the basic schools include training of teachers (specialists) to teach pupils O&M skills, provision of white canes, provision of O&M training time and encouraging pupils to use the white cane. I conclude based on the social disability model that pupils with visual impairment require support services to enhance their social, psychological, emotional and academic potentials and these must be provided by O&M programmes. Owing to this, the impediments to O&M training programmes result from a multiple of factors and not asingle factor and that, O&M training programmes in Ghanaian basic schools are in a stage where a lot of revamping is required. This implies that processes have to be changed, personnel have to be trained and equipment has to be provided in the numbers that they are required. The study has the under listed recommendations for policy formulation:

1. The Ministry of Education, through the central government, should ensure that the environmental conditions in the schools for the blind are improved to enable easy orientation and mobility of pupils with visual impairment in their environment.
2. The Ghana Education Service, through the Ministry of Education should ensure curriculum in the schools for the blind is restructured in a way that will afford pupils the opportunity to have time to learn and practice the O&M skills.
3. The government of Ghana and the Ministry of Education should put measures in place to procure white canes for the pupils in schools for blind and encourage them to use the canes.
4. Government should educate the public on the need to refrain from the use of abusive- stigmatising words against pupils with visual impairment.

### References:-

1. Adu, G. I. (2015). Competency of students with visual impairment in the year 2015: A Wenchi study. Unpublished master's thesis, Kwame Nkrumah University of Science and Technology, Kumasi.
2. Attia, I., & Asamoah, D. (2020). The white cane. Its effectiveness, challenges and suggestions for effective use: The case of Akropong School for the Blind. *Journal of Education, Society and Behavioural Science*, 33(3), 47-55. DOI:10.9734/JESBS/2020/v33i330211.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
4. Deverell, L., & Scott, B. (2014). Orientation and mobility in Australia and situational analysis and census. *Journal of Visual Impairment & Blindness*, 108(1), 77-82.
5. Douglas, G., McCall, S., McLinden, M., Pavey, S., Ware, J., & Farrell, A. M. (2009). International review of the literature of evidence of best practice models and outcomes in the education of blind and visually impaired children. Ireland: National Council for Special Education.
6. Douglas, G., McCall, S., McLinden, M., Pavey, S., Ware, J., & Farrell, A. M. (2009). International review of the literature of evidence of best practice models and outcomes in the education of blind and visually impaired children. Ireland: National Council for Special Education.
7. Ghana Association of the Blind (2014). Retrieved October 10, 2017, from [http://www.bing.com/cr?Ig=adfe6ef1dd05486cb9b0f5c417b6f99a&cid=1349e59ca51d65570e3bee8ba41b6443&rd=1&h=id5o\\_mmyaj5ou2ne8yp918munifsyoyksqgmgoas&v=1&r=http%3a%2f%2fwww.ghanablind.net%2fcbr%2520manual.pdf&p=devex,5063.1](http://www.bing.com/cr?Ig=adfe6ef1dd05486cb9b0f5c417b6f99a&cid=1349e59ca51d65570e3bee8ba41b6443&rd=1&h=id5o_mmyaj5ou2ne8yp918munifsyoyksqgmgoas&v=1&r=http%3a%2f%2fwww.ghanablind.net%2fcbr%2520manual.pdf&p=devex,5063.1)

8. Ghana Statistical Service (2012). 2010 population and housing census. Summary report of final results. Accra: Sakoa Press Ltd.
9. Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic Inquiry*, 289-331.
10. Lohmeier, K., Blankenship, K., & Hatlen, P. (2009). Expanded core curriculum: 12 years later. *Journal of Visual Impairment and Blindness*, 103(2), 103-121.
11. Long, R. G. (2009). Orientation and mobility research: What is known and what needs to be known. *Peabody Journal of Education*, 67(2), 89-109.
12. Mutuelle, N. P., & Odeku, K. O. (2013). The role of an instructor in managing orientation and mobility of students with visual impairments at the University of Limpopo, South Africa. *Journal Social Science*, 36(2), 165-173.
13. Nasiforo, B. M. (2015). Academic impediments students with visual impairments encounter in the colleges of University of Rwanda. Unpublished Doctoral dissertation, Kenyatta University, Kenya.
14. Nasimiyu, L. M. (2011). Factors hindering teaching of orientation and mobility to students who are visually impaired in Thika primary school for the visually impaired Kenya. Unpublished master's thesis, Kenyatta University, Kenya.
15. Ocloo, M. A. (2011). Effective education for persons with visual impairments in Ghana. Winneba: Department of Special education, UEW, Ghana.
16. Patton, M.Q. (2009). *Qualitative research and evaluation methods* (3<sup>rd</sup> ed.). Sage Publications: Thousand Oaks, CA.
17. Pavey, S., Douglas, G., McCall, S., McLinden, M., & Arter, C. (2002). Steps to independence: The mobility and independence needs of children with a visual impairment. Recommendations and Summary Report. London: RNIB.
18. Ravenscroft, J. (2012). Visual impairment and mainstream education: Beyond mere awareness raising. *Special educational needs: A guide for inclusive practice*, 196-210.
19. Riley, R. (2000). Educating blind and visually impaired students; Policy guidance (No. 65 Fed. Reg. 36585-36594).
20. Scott, B. (2009). Orientation and mobility in the Australian education system: A challenge for professionals. *Journal of the South Pacific Educators in Vision Impairment*, 4(1), 30-33.
21. Scott, B. S. (2015). Opening up the world: Early childhood orientation and mobility intervention as perceived by young children who are blind, their parents, and specialist teachers. Unpublished Doctoral thesis, University of Sydney, Sydney.
22. Skellenger, A. C., & Sapp, W. K. (2010). Teaching orientation and mobility for the early childhood years. *Foundations of Orientation and Mobility*, 2, 163-207.
23. Skellenger, A. C., & Sapp, W. K. (2010). Teaching orientation and mobility for the early childhood years. *Foundations of Orientation and Mobility*, 2, 163-207.
24. Small, M., & Marin, L. (2007). Building confidence one step at a time. Paper presented at the SWOMA Conference, San Antonio.
25. Walliman, N. (2006). *Social research methods*. London: SAGE publication.
26. Wolffe, K. E., Sacks, S. Z., Corn, A. L., Erin, J. N., Huebner, K. M., & Lewis, S. (2002). Teachers of students with visual impairments: What are they teaching? *Journal of Visual Impairment and Blindness*, 96(5), 293-304.
27. World Health Organisation (2014). Visual impairment and blindness. Fact sheet No. 282. Updated August 2014.