

Orientation and Mobility Practices within the Expanded Core Curriculum with Effective Parental Involvement of Visually Impaired Learners in Pakistan

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Abstract

The aim of this study was to observe Orientation and Mobility (O&M) with effective parental involvement within the Expanded Core Curriculum (ECC) for visually impaired learners (VILs) to make them independent in their environment in Pakistan. O&M practices have become significant as these are essential in independence and one of the main components of the ECC for VILs. This research explores O&M practices within the ECC from the perspectives of the teachers by using a qualitative approach and semi-structured interviews of O&M teachers were conducted from two public secondary level institutes of VILs Lahore, Pakistan. This paper endeavors to answer the question: What are the O&M practices within ECC that needed for VILs to enhance their independence in classroom settings? The findings of the study indicate that VILs need to use the knowledge of O&M practices to get their independence in their environment. Therefore, it is appropriate for O&M teachers to add the skills of mobility techniques under the subsection of O&M practices within the guidelines of ECC. The VILs seemed to benefit from immediate instructions from their O&M teachers. However, the VILs still need more help in O&M practices with effective parental involvement under the guidance of ECC. So, in the context of the study, it is the urgent need of VIL to align their O&M practices with mentioned instructions in ECC.

Keywords: Orientation and mobility, expanded core curriculum, parental involvement, visually impaired learners

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Introduction

The importance of orientation and mobility (Barraga & Erin, 1992; Tuncer & Altunay, 1999) cannot be overstated. Effective use of O&M skills enables visually impaired learners (VIL's) to perform better and accomplish their daily routines as independent individuals (Rosen & Joffe, 1999). The skills are needed by VILs in moving towards the targeted goals safely, efficiently and independently (Hill & Ponder, 1976; Tuncer & Altunay, 1999). Moreover, VIL's need to perform the required level of mobility skills (Altunay, 2003; Tuncer & Altunay, 1999). For that reason, parental involvement in Pakistan and elsewhere in O&M for VILs is essential (Ames, Khoju, & Watkins, 1993; Ho & Willms Pang & Watkins, 2000).

Access to the core curriculum is often a challenge for any VIL's. The challenges include providing adaptation material and skills in a format that VIL's can access. Specialized equipment, adaptation materials, O&M skills and instructional strategies are developed in the ECC and recommended to address these challenges for VIL (Sapp & Hatlen, 2010). VIL's need to gain the benefits from visual information to aid in the development of the concepts (Anderson, 2010). The ECC is a model of successful instruction, which is designed to meet the unique needs of VIL, thus ECC-related instructions are incorporated into the VILs' curriculum (IEPs; Sacks & Rothstein, 2010; Sapp & Hatlen, 2010). Yet, little empirical research is available to document the ECC's effectiveness and its role in the transition to O&M. A lack of research in relation to effective O&M practices within the ECC with effective parental involvement of VILs is needed in Pakistan context.

To date, there are relatively few studies on the above aspects, mainly those that focus on the process, rather than the outcomes, of helping VIL to excel in the O&M skills (Weissberg, Kaspro, & Michael, 1999). In this case, most parents of VIL fail to fit in with the demanding requirements of the ECC on effective O&M skills (Sapp & Hatlen, 2010). As the literature indicates (Fernandez, 2004; Dean, 1998), limited research has been conducted to explore effective O&M practices with parental involvement. Only two studies were found with parental involvement in O&M outside Pakistan. Fernandez (2004) explored, the focus of parental involvement in O&M with Puerto Rican families. Secondly, Dean (1998) investigated Hispanic parents' perceptions of O&M services with relevance to ethnicity and culture. There is a lack of research with parental involvement in education of VILs (Aziz, 2007) especially in O&M within the ECC. For these reasons, this qualitative case study was conducted on effective O&M practices with parental involvement of VIL in Pakistan to add to the body of literature in the existing research.

Research Objective of the Study

1. To observe Orientation & Mobility practices within the Expanded Core Curriculum with effective parental involvement of VILs to become independent in classroom settings.

Research Question of the Study

1. What are the Orientation & Mobility practices within the Expanded Core Curriculum with parental involvement of VILs are needed to make their independence in classroom settings?

Literature Review

Visually Impaired Learners

Visually Impaired is a term used to define those individuals whose have limited visual abilities to a complete blindness. According to the Individuals with Disabilities Education Act (2004), “visual impairment, including blindness means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness” (Individual’s Disabilities Education Act, 2004). Blindness, “referring to the absence of usable vision, is often used to describe individuals who may be able to perceive light or images, but are not able to use residual vision for functional purposes” (Jan, Freeman, & Scott, 1977). In society, visually impaired learners face many challenges due to their impairment, which can cause isolation (Fatima et al., 2013). They face many difficulties in moving from one place to another due to their disability (Lahav, 2014). The VILs need an adapted education for their hidden needs, potential and capacities (Ajuwon, 2014). This adapted education includes a set of O&M skills for their independent movement. And this set of O&M skills for VIL is required in a developing country like, e.g. Pakistan.

Orientation & Mobility for Visually Impaired Learners

Orientation & Mobility are recognized as an integral component of the Expanded Core Curriculum for students with visual impairment (Hatlen, 1996). A learner with visual impairment requires direct and sequential instruction provided by an O&M specialist (Lohmeier, Blankenship, & Hatlen, 2009) to be able to acquire the skills necessary to interact with others (Pavey, Douglas, McLinden, & McCall, 2003). VIL could then facilitate their access to educational, vocational, social, and recreational opportunities (McDonnall, 2011; Riley, 2000; Wolffe & Kelly, 2011). Further, Leong (1996) explained that if there is no sight, other senses should be used alternatively, like touching and hearing. A spatial map is essential for successful orientation of VIL (Majerova, 2015).

With the use of other senses, VILs need to learn about their surroundings through cognitive skills (Guth & Rieser, 1997). Without vision, such individuals often face psychological difficulties and O&M support them in acquisition of conceptual and perceptual information (Lahav et al., 2015).

According to Hill and Ponder (1976), in the area of O&M, spatial orientation is defined as “the process of using the senses to establish one’s position and relationship to all other significant objects in one’s environment” (p. 3). Jacobson (1983) explained that it is also “the ability to use one’s remaining senses to understand one’s location in the environment at any given time”(p. 3), and “the ability to establish and maintain an awareness of one’s position in space” (LaGrow & Weessies, 1994, p. 9). Parents of VILs need to get support and information from O&M teachers to address the unique needs of VILs (Kirk, 2011). Cotuk (2015) concluded that VILs are encouraged by learning mobility skills with their siblings and utilization of these skills in their daily lives. This observation offers a vital set of O&M to develop the useful understanding of Pakistani parent involvement in O&M skills.

The Importance of the Expanded Core Curriculum

Education is the most common experience of children across the world. It is not about getting only special children into schools, but making sure that all schools work in the best interests of the children who are entrusted to them. Schools provide various learning experiences that prepare special children for their future lives. At the heart of these learning experiences is the curriculum (Oliebie, 2014). The ECC is also known as “disability specific curriculum” that was written to acknowledge the needs of VILs. The ECC reflects a body of knowledge and skills that are needed by VILs. It contains nine critical components and O&M is one of the most critical and important components of the ECC.

The word “curriculum” comes from the Latin word “currere” which means “a course to be run”. By this definition, curriculum signifies a course of studies followed by students in a learning institution. A curriculum is a “plan or program of all experiences which the learner encounters under the direction of a school” (Tanner & Tanner, 1995). It also specifies the main teaching, learning and assessment methods, and provides an indication of the learning resources required to support the effective implementation of the course.

The place of curriculum in education makes it axiomatic that concerted efforts be made at all times to implement a curriculum that meets the needs of a society. Ornstein and Hunkins (1998) note that curriculum implementation focuses on the processes and practices through which a curriculum is implemented. The task of curriculum implementation as described in Thomas (2012) involves putting into practice stipulated curriculum policies, content, and innovations. Curriculum implementation involves the performance of teaching tasks and rendering of expected services as specified in the curriculum. Provision of required learning support to VILs includes classroom adaptations, curriculum modifications and O&M within school boundaries. To achieve such required responsibility, the involvement of teachers, parents and community is considered necessary to accomplish the task (Habulezi & Phasha, 2012).

Implementing the curriculum is the most crucial and sometimes the most difficult phase of the curriculum development process. This is because the final destination of any curriculum (whether it be a school, college, university or training organization) is the classroom involving students, teachers, administrators and the community (parents). Implementation takes place as the learner acquires the planned or intended experiences, knowledge, skills, ideas and attitudes that are aimed at enabling the same learner to function effectively in a society (University of Zimbabwe, 1995, p. 8). Effective implementation requires, among other things, the involvement of parents in the education of their children (Olibie, 2014). Further, VILs need modifications in the existing curriculum, and also require special services along with the adopted materials and existing services (Ali & Hameed, 2015).

The Notion of Parental Involvement

Morrison (2007) emphasized that the children's performance at school is affected by parental involvement. Likewise, Kindiki (2009) asserted that when there is sufficient parental involvement in a child's education, an increase motivation and academic achievement can be observed. When a partnership between parents and teachers is found, students realize that their success is based on both environments coordinating and investing their time and resources. Parental involvement seems to be an active combination of commitment and participation between parent and teacher (Gonzalez-Mena, 2011). Further research by Anyikwa and Obidike (2012) explored parental involvement which includes parents' support and participation at home and in school, and contributed to the direct impact on the performance of their children's education.

Parental involvement is explained as parents' active roles to collaborate in their children's development, learning, and ensuring that they are well informed about the school lives of their children and have a partnership with school (Williams & Ullman, 2002). According to Chan (1995), "parental involvement is not something that is "done" to "parents" (p. 19). It is rather what parents and the school do collaboratively and collectively to ensure effective and adequate policy making and implementation, funding, discipline, staffing and facilities for their children's success. Anyikwa and Obidike (2012) identified that to maximize the potential for children schooling is required parental involvement.

Parental involvement and collaboration between parents of VILs and teachers contributes to students' academic success (Anderson & Minke, 2007). Several studies showed a connection in effective parental involvement in educational programs and student academic achievement, cognitive growth, and emotional well-being (Epstein, 2010). In education, parental involvement is part of an educational philosophy advocating a child-centered curriculum in special education practices. Furthermore, International research has emphasized with the involvement of parents in planning and implementing educational programs for disabled students (Angel, Stoner, & Shelden, 2009; Hobbs & Silla, 2008; Hui-Chen & Mason, 2008). Insufficient involvement of parents may result in less responsiveness to VIL's needs.

Some studies demonstrated a positive and direct association between parental involvement and motivation towards academic achievement (Crozier & Reay, 2005; Henderson & Berla, 1997). Cheeks (2012) added that parental involvement creates partnerships among schools, parents, and communities. The resulting partnerships develop effective communication among students, parents, and teachers from home to school and school to home. Through ongoing and active communication, teachers and parents share information and resources regarding students' academic and behavioral conduct. Together, these efforts establish a solid foundation for both. Therefore, parent-teacher communication is essential in promoting parental involvement (Ames, Khoju, & Watkins, 1993; Ho Willms; Pang & Watkins, 2000).

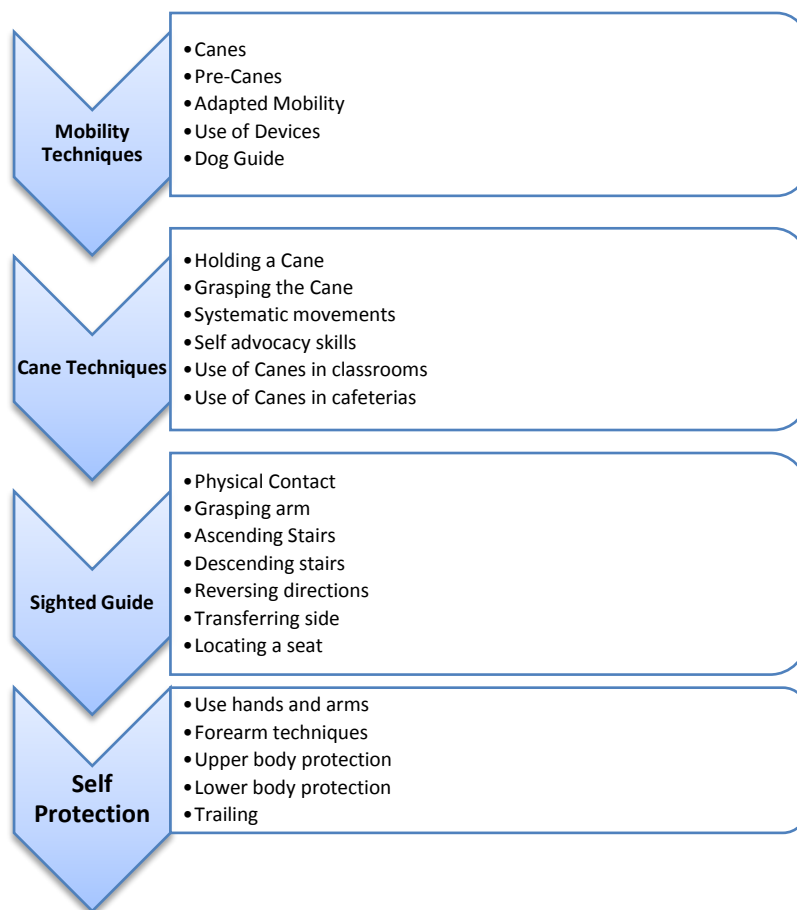
Furthermore, the research by Murray suggested that without effective hands-on experience and collaboration with each other, parents and educators may experience incompetent partnerships and face communication barriers (Murray et al., 2011). It is imperative that parents and families, communities, and schools work cooperatively and collaboratively with one another to improve the learning experience of children (Westwood-Robinette, 2014). This observation discovers useful understandings from the parents and teachers of VILs in respect to the involvement of parents in O&M.

Methodology

According to Merriam (1988), qualitative research methodology focuses on quality rather than quantity. She asserts that in qualitative research methodology, the main goals to investigate are understanding, description, discovery, and the generation of hypotheses (Merriam, 1988). Other factors of qualitative methodology are its setting, a sample, and the researcher as the primary instrument of data collection (Merriam, 1988). The data are collected through observations and interviews with using purposive sampling techniques. Merriam described that purposive sampling is based on the assumption that when one wants to discover, understand, or gain insight; one needs to select a sample from which one can get the most information (p. 48). With this aim, the participants were chosen purposefully by drawing on ten observational sessions and five semi-structured interviews with parents of VILs. Parents of VILs were from two secondary level public institutes of VILs Lahore, Pakistan. The qualitative data analysis process begins with the early phases of data collection. Coding and memo writing is the most important techniques for qualitative data analysis. In the present study, the interviews of VILs parents were recorded, transcribed verbatim, coded and analyzed according to the emerged themes. In qualitative data, the coding process involved organization of themes with data reduction; making a link between themes to reach a possible conclusion. Finally, to ensure the validity of the study, some additional procedures were incorporated like field notes and member checking (Merriam, 2009) through asking participants for confirmation, clarification and completion of information shared.

Findings of the Study

The practices of O&M, in which learners with visual impairment receive disability related skills to develop independent movement in their surroundings. Field notes served as the main data from which the themes were derived. Parents and teachers' perspectives served as the supporting data. It was decided at the start of the study that VILs would be observed in their classroom settings and parents and teachers would be interviewed. Therefore, VILs' observations were sought to be helpful in illuminating the questions under the present study. The themes of what the O&M practices in which learners with visual impairment learn these practices were generated. The emerged themes are presented in graph 0.1. Each theme is listed in order of occurring frequency.

Figure 1. *Themes on the O&M practices for VILs*

Source: Expected themes were summarized from literature review and observed in the context of the study.

Each salient theme has been defined according to the context of the study. The interpretation of the themes is based on the field notes of observations. When it was possible for the researcher, the words and phrases used are the themes for the data. The following section communicates the findings and the cross case analysis is presented with the practices of O&M for VILs. All practices of O&M were employed in the classroom settings with five VILs. In the institute, the O&M instructor was teaching these skills to the VILs. The instructor with relevant experience in the O&M field was equipped with all skills and techniques of the O&M practices. The following section presents O&M practices that were employed by an O&M instructor. Field notes were prepared by the researcher.

Mobility Techniques

O&M is basically a set of verbal instructions with some practical skills that need to be achieved by a trained instructor of O&M. O&M practices were included with four major themes, namely: Mobility techniques, Cane techniques, Sighted guide and Self protections. Based on the observations, the meaning of mobility techniques refer to the skills to help VIL to find his/her desired area without any help from others. Mobility techniques are including some skills that are necessary to learn for VIL from one place to another place with free and safely movement. Table 4.1 presents data on each component of the mobility techniques with the excerpts from data.

Table 1

Excerpts from field notes on Mobility Techniques

Theme: Mobility Techniques
O&M Teacher: O&M teacher asks the visually impaired learners to make a line and she brings the five visually impaired learners in a line to a grassy ground to show the researcher that what are the mobility techniques and it was demonstrated by the visually impaired learners. First of all, they did warm up, it was like an exercise to warm the body. (OBS 1: 15.10.2016)
O&M Teacher: O&M teacher next says to the visually impaired learners to make a circle, all five learners make a circle by holding the hands of each others. (OBS1: 15.10.2016)
O&M Teacher: Next session is to straight their arms, teachers ask to visually impaired learners to straight their arms one by one, they do this exercise. (OBS1: 15.10.2016)
O&M Teacher: O&M teacher asks to the learners to straight their arms and then rotate their hands. She also does this skill with the learners and guides the learners with visual impairment one by one. All the learners straight their arms and then they rotated their hands. (OBS1: 15.10.2016)
O&M Teacher: Teachers asks to the learners to get a deep breath and stand with their arm rotation, in this way, the purpose of the teacher is making them healthy and movement of their limbs. All the learners demonstrated the skill of arm rotation. (OBS2: 16.10.2016)
O&M Teacher: Next step is shoulder rotation, all the learners rotated their shoulders to right side and left side. The teacher also did this exercise with the learners and she was checking with all of them one by one. (OBS2: 16.10.2016)
O&M Teacher: Teacher advised the learners to jump on standing on their same place, all the learners jumped one by one. (OBS3: 17.10.2016)
O&M Teacher: Lastly, the teacher of O&M asks the learners to do the trailing to locate their desired spaces. The learners did the trailing with the help of their fingers to locate their classes, the way to the washrooms, the way to the staff rooms and the way to cafeterias. In this trailing the learners used the sensitive portion of their fingers to touch the space and feel the obstacles in their ways and tried to save themselves from hazards. (OBS3: 18.10.2016)

Source: Field Data

The way of practicing the O&M skills was differed from one another. The teacher was observing all the learners to help them when they need. This O&M practice was seen as a supporting to visually impaired learners to provide them in order to aid their learning towards the independence skills. The use of mobility skills was demonstrated with the teacher of O&M. Whenever, the learners find any difficulty, she helped them and she was focusing on their practices in many times so that they all get mastery in their skills with their independent movement. O&M teacher further explained to the researcher that it is more important about the settings of the classrooms. The classroom settings should be so comfortable that every learner finds his/her space without any difficulty and help. She further, emphasized on the circle shape of chairs and tables. The researcher made some pictures of the classroom to keep an evidence of the observations. In the Appendix... have attached some of the pictures of classroom observations. In most of the practices. The O&M teacher was much concerned for the movement of the learners. The teacher was aware that learners participant were understanding her instructions, she was helpful in the provision of OM skills. The findings of the study are not aligned with the instructions of the ECC. In the ECC, there are different techniques under the practice of mobility techniques. But in the school, these skills were used as the exercise skills for the learners with visual impairment.

The findings of the study indicate that the learner participants could use their knowledge and other senses to understand the meaning and the instructions of their O&M teacher. With the observation of O&M practices, the researcher noticed that the VIL have the knowledge of all those kills which were demonstrated in their classroom settings. Furthermore, the learners in this study were visually impaired and they were observed to use their other senses. Therefore, it is appropriate for the O&M teacher to add the skills of mobility techniques under the subsection of O&M practices with the provision of guidelines of the ECC. The findings could perhaps be explained and advised in the light of the guidelines of the ECC. The researcher found that mobility techniques could help the learners with visual impairment under the instructions of O&M teacher efficiently. In the context of the study, the use of mobility techniques provides the means through which the learners with visual impairment make their free and safe mobility from one place to another. The following section presents the cross case analysis on the cane techniques.

Cane Techniques

Cane or white cane is a stick that is used by blind persons to explore their desired way. Cane techniques are the practical practices of VIL with the proper usage of these skills under O&M practices. In this study, the learners with visual impairment were observed using cane techniques to demonstrate their O&M practices. Table 4.2 below provides the excerpts derived from the observation under the theme 'Cane techniques'.

Table 2

Excerpts from field notes on 'Cane Techniques'

Theme: Cane Techniques

O&M Teacher: (VIL/CT) O&M teacher asked the learners with visual impairment to demonstrate to hold the cane. First the VIL open the cane, it was folded white cane. After that, the learner holds the cane firmly and puts on the ground with right way. (OBS 4: 19.10.2016)

O&M Teacher: (VIL/CT) O&M teacher asks the learners to stand altogether and hold their white canes in a proper way, then show the systematic movement of the cane, then make an ARC, its mean to hold a cane in front of the VI with proper way and direction. (OBS 5: 20.10.2016)

O&M Teacher: (VIL/CT) Then, in the classroom setting, the teacher asks them to locate the area of door, seat and table, the learners demonstrated in a right way, one of the learner found some difficulty, then the teacher helped her and guide her how to grip and how to locate the desired area. (OBS 6: 23.10.2016)

Source: Field Data

The O&M teacher explains the guidelines about how to use a white cane to the learners with visual impairment. The way, in which teacher uses the instruction was very good and simple. This was also observed by the researcher, that the teacher was very helpful and was practicing O&M practices so many times with the purpose to make them a clear idea on how to use a white cane. In the steps of using a white cane was to hold a cane properly. The teacher was also demonstrated and holding the hands of the learners to make them experts. Secondly, the learners use the canes like how to put the cane on the grounds and how to locate the desired areas. The teacher was providing the verbal instructions to listen and follow her. The teacher explained the purpose of white canes. The way she did with learners with visual impairment was depicted in the data in table 4.2. The teacher wanted from learners to get the meaning to their experiences. The teacher informed the students early, if there were some things who can be harmful to the learners. This indicates that knowing the right knowledge is critical in helping the learners with visual impairment. The findings of the study indicate that the learners with visual impairment in the study may have used their conceptual understanding of the use of a white cane. In the present study, the practices of the cane techniques were aligned with the instructions of the ECC that could help the learners with visual impairment in their better independence in the environment. The next part describes the cross case analysis on the theme 'sighted guide'.

Sighted Guide

In the present study, the sighted guide is a person who can see the objects and is helpful for the learners with visual impairment to learn him/her the OM practices. This type of sighted guide is also a trainer or an expert of O&M skills. The following excerpts communicate data on the related theme.

Table 3

Excerpts from field notes on 'Sighted Guide'

Theme: Sighted Guide
O&M Teacher: Teacher describes that the purpose of sighted guide is to help the visually impaired in finding the desired location of VI. In this way, the sighted guide has to be trained enough that the VI could get the language of physical gestures of the sighted trainer with his/her movement. (OBS 7: 24.10.2016)
O&M Teacher: Teacher asks the VIL to come and hold the arm of the teacher. To demonstrate the skill of O&M teacher becomes the sighted person like sighted guide and trains his learner with visual impairment. In this way, the learners follow the guidelines of the teacher and grasp her arm in a such way that the sighted guide is in front of the visually impaired learner with covering one feet distance. (OBS 8: 24.10.2016)
O&M Teacher: Then the teacher performs as sighted guide and outside the class they both demonstrate to go up the stairs. The sighted guide orientates the learner and to go on the first step of the stairs. But the learner remains on the ground with covering the distance of one foot. The learners grasp the arm of sighted guide from little above the elbow and remains on the left side of the sighted guide. Now, the sighted guide goes on next step of the stairs and the learner follows the guide. In this way, they both demonstrated to going up the stairs. As the stair finish, the guide stops there with putting her two feet together to indicate the learner that the stairs are ended. Teacher practice this skill to every learner one by one. (OBS 9: 25.10.2016)
O&M Teacher: (VIL/SG) Now teacher again becomes the sighted guide and the learner first changes her side. In this way, the learner with trailing on the shoulder of the guide locates the other shoulder to grasp on the next side of the guide. Teacher practices this skill many times for each learner with visual impairment. (OBS 9: 25.10.2016)
O&M Teacher: (VIL/SG) Teacher asks the learner to get reverse and transfer her side, then in same position both start to go down the stairs. The guide gives pause to the learner to understand the pause. The guide stopped on every stair to train her learner. In this way, they both go down to the stairs. Like this, teacher of O&M trains and practice to every visually impaired learner in the class. (OBS 10: 26.10.2016)
O&M Teacher: (VIL/SG) With the help of sighted guide, the learner wants to go inside the classroom. They both go together and as the grasping on the arm of the guide, the learner understands that the arm of the learner is on the handle of the door. With this practical guidance, the sighted guide orientate the learner and they both go inside the class with finding a seat to sit in. The guide helps the learner to find and sit on the seat in the class. With this pattern, the teacher practices to every learner in the class with verbal instructions. Sometime, the teacher asks the two visually impaired learners to be one sighted guide and the second as a learner. (OBS 11: 27.10.2016)

Source: Field Data

All the five visually impaired students were observed to demonstrate the sighted guide techniques. O&M teacher seemed to be very helpful in the practices of O&M. The researcher found the O&M teacher very helpful and patience with her work. She asked the learners with visual impairment to demonstrate the skills of the sighted guide. There are some guidelines in the skill of sighted guide to follow by the O&M instructor. With the observation sessions of the researcher, the researcher found that two visually impaired learners from same classes were practicing the sighted guide skills on ascending and descending stairs. They were using the same skills and instructions provided by the instructor. The visually impaired participants were observed to seek the help of their teacher when they had problems with their tasks. They seemed to rely on the provided guidelines of the teacher in order to proceed with the skills. This was frequently observed throughout the observation sessions. The learners with visual impairment participants in the study preferred to seek help from their teacher of O&M. Getting help from their more capable peers is the means through which the learner with visual impairment learn the practices of a sighted guide. The sighted guide skill seems to be in line with the skills of O&M under the ECC. The following section is going to present the cross case analysis on the theme ‘self-protection’.

Self-Protection

Observations showed that self-protection is one of the ways, in which the VIL learn to protect him/herself from any object by using his/her own arms and hands. Table 4 presents data on the learners with visual impairment through their classroom observations.

Table 4

Excerpts from field notes on ‘self-protection’

Theme: Self Protection

O&M Teacher: Teacher describes that self-protection is the skill that a learner can learn and save his/herself from hitting any object with the use of his own arms and hands. The teacher asks the VIL to use the upper technique and go to the way outside the class. The learner uses her both arms as protection with folding one arm in front of her forearm and the second arm in front of her chest to get protection and to be saved herself. The teacher asked to all five learners to perform the upper protection skill one by one (OBS 2: 28.10.2016)

O&M Teacher: Teacher tells the guidelines for lower protection technique and asks the learner to perform that skill. The learner folds her both arms, first in front of her belly and the second in front of her chest to cover herself from and harmful object. With this technique, the learner can move without any fear and with using the sense of hearing and judging by herself about the way. (OBS 3: 29.10.2016)

O&M Teacher: Teacher explains the method and usage of trailing to the learners with visual impairment. In the trailing, the above part of the fingers used to touch the surfaces and feel and get an understanding with touching and finding the desired location. The teacher performs this skill with holding the fingers of the learners to give them the idea on how to use trailing. Learners perform trailing and easily locates the area of their desired location. (OBS 4: 01.11.2016)

O&M Teacher: Teacher first explains the verbal instructions to the learners with visual impairment on how to travel in the classroom. By using the trailing technique, a learner located her seat. Secondly, the other learner find the seat of the teacher with performing the trailing technique. (OBS 5: 03.11.2016)

Source: Field Data

The learners with visual impairment seemed to be benefiting from all O&M practices in the context with the proper usage of all skills under the guidance of O&M instructor. The learners with visual impairment received input and guidelines from their O&M teacher. Hearing the correct guidelines for the teacher of O&M could have a favorable support to the learners to use those skills. The VIL in the present study were observed to hear instructions and then training under the orientation provided from their teacher about the skills. The interaction between the teacher and learner may have a facilitative effect on the visually impaired participants' development of O&M practices towards their independence. The findings of the present study needed to be used all O&M practices under the instruction of O&M facilitator. There is a need to appoint more O&M teachers in the respective institutes to make the VIL independently in the environment. The following section presents a summary of the practices of O&M.

Discussion of the Study

In the context of the study, it was important for the VILs to align their O&M practices with the instructions mentioned in the ECC. The following section discusses the components of O&M with suggestions for parents and teachers of VILs.

Mobility Techniques

Based on the observations, the meaning of mobility techniques refer to the skills to help VIL to find his/her desired area without any help from others. Mobility techniques are including skills that are necessary to learn for VIL from one place to another place with free and safely movement. In the context of the study, parents emphasized to use all sub-components of O&M practices of O&M teachers to their VIL. These are essential for the independent movement of VIL. The findings of the study showed VIL need to get mastery of O&M practices with focusing the guidelines of the ECC. Mobility techniques are needed to instruct on directions. There is a significant need of professional guidance to use the tools and methods to acquire mobility techniques. On the traveler's cognitive

and physical ability, the instructions are modified to use a particular environment and several encountered hazards. Furthermore, human/sighted guide, instructions include: mobility systems also include pre-canes, canes, alternative or adapted mobility devices, electronic travel aids (ETAs), and dog guide. In addition, to make travel effective in different parameters, the techniques must be learnt along with the instructions of O&M experts to cope with several required systematic movements. For instance, there are different techniques used for descending and ascending stairs. In every step of techniques, there is a need of O&M qualified instructor.

The way of practicing the O&M skills differed from one another. The teacher was observing all the VIL to help them when they need. This O&M practice was seen as to provide them in order to aid their learning towards the independence skills. The use of mobility skills was demonstrated with the teacher of O&M. Whenever, the learners find any difficulty, the instructor helped them and was focusing on their practices in many times. So, they all get mastery in their skills with their independent movement. O&M teacher more explained to the researcher that it is more important about the settings of the classrooms. The classroom settings should be so comfortable that every learner finds his/her space without any difficulty and help. Instructor further emphasized on the circle shape of chairs and tables. The researcher also taken pictures of the classroom to keep an evidence of the observations. In Appendix Y, pictures of classroom observations are attached. The O&M instructor was much concerned for the movement of the VIL. The instructor was aware that VIL's were understanding the instructions. The findings of the study are not aligned with the instructions of the ECC. In the ECC, there are different techniques under the practices of mobility techniques. But in the school, these skills were used as the exercise skills for the learners with visual impairment.

Cane Techniques

In the present study, the O&M practices were observed to use cane techniques to demonstrate their O&M practices. The given example from observational data communicates with the O&M practices for learners. The O&M teacher explains the guidelines about how to use a white cane to the learners with visual impairment. The way, in which teacher uses the instruction was very good and simple. This was also observed by the researcher, that the teacher was very helpful and was practicing so many times to make them a clear idea on how to use a white cane. In the steps of using a white cane were to hold a cane properly. The teacher was also demonstrated and holding the hands of the learners to make them experts. Secondly, the learners use the canes like how to put the cane on the grounds and how to locate the desired areas. The teacher was providing the verbal instructions to listen and to follow. This indicates that knowing the right knowledge of O&M is critical in helping the learners with visual impairment. The

findings of the study indicate that the learners with visual impairment in the study may have used their conceptual understanding of the use of a white cane. In the present study, the practices of the cane techniques were aligned with the instructions of the ECC that could help the learners with visual impairment in their better independence in the environment.

Sighted Guide

In the present study, the sighted guide is a person who can see the objects and is helpful for the learners with visual impairment to learn him/her O&M practices. This type of sighted guide is also a trainer or an expert of O&M skills. The human guide technique (commonly known as human guides/sighted guide) is basically a system of mobility that was developed for VIL for their active participation in different environments. It includes travel with the assistance of sighted individual, who uses the senses of vision (Hill & Ponder, 1976). The specific skills or actions are taught to sighted guide for VIL, and they both demonstrate efficient movements like a team. There is a need of physical contact to maintain the guide's arm in grasping near the elbow and slightly above it. Particular techniques are applied and taught in travelling with sighted guide in various situations, it includes: descending and ascending stairs, in travel reversing directions, from one side of the guide transferring to the other side, negotiating in between narrow passageways, negotiating doors, and locating in class a seat. Furthermore, several skills/techniques of O&M are taught to VIL for refusing and accepting other's assistance, like holding a long cane with the help of a sighted guide. A sighted guide assists in many settings, including classrooms, auditoriums, cafeterias, and other areas. Provision of self-advocacy skills are needed for the sighted guide. Observations were carried out for O&M practices of VIL to demonstrate the sighted guide techniques. The researcher found the O&M teacher very helpful and patience with their work. In the observational sessions, it was observed that two VIL from same classes were practicing the sighted guide skills on ascending and descending stairs. They were using the same skills and instructions provided by the instructor.

Self-Protection Techniques

Many physical hazards can be avoided with the usages of effective protective techniques. The usage of hands and arms is required as bumpers in self-protection techniques. This way any injury to the face and body can be reduced. Jacobsen (1993), describes that upper- and lower hand and techniques of the forearm are useful in protecting the body positions. For upper body protection, the arms and hands extend over the body height from shoulder to get protection from different objects that are at the chest and head level. With the palm confronting outward, the hand and lower arm will contact objects, as a result, it will give a support to the abdominal area from contact with potential dangers, for

example, hanging appendages and jutting pharmaceutical cupboards. For lower body assurance, the hand and arm are set over the crotch range with the palm confronting internal. This technique will provide protection to the waist and the lower body, however, for open space techniques such as help by sighted guiding, trailing and the use of the cane is used. Observations were done for O&M practices of VIL when they had problems with their mobility tasks. They seemed to rely on the provided guidelines of the teacher in order to proceed with the skills. This was frequently observed for self-protection skills in throughout the observation sessions. The learners with visual impairment were found to seek help from their O&M teachers.

Conclusions

The findings of the study indicate that VILs could use their knowledge and other senses to understand the meaning and the instructions of their O&M teacher. Furthermore, the learners in this study were visually impaired and they were observed using their other senses to locate their locations. Therefore, it is appropriate for the O&M teacher to add the skills of mobility techniques under the subsection of O&M practices with the provision of guidelines of the ECC. The findings could perhaps be explained and advised in the light of the guidelines of the ECC. The researcher found that mobility techniques could help the learners with visual impairment under the instructions of O&M teacher. In the context of the study, the use of mobility techniques provides the means through which the learners with visual impairment develop free and safe mobility from one place to another. The learners with visual impairment seemed to learn O&M practices through the teaching instructions of their O&M teachers. They seemed to benefit from any mistake they made and with immediate teaching instructions of their teacher. The learners were observed practicing the O&M skills independently. However, the learners still needed more help in enriching their O&M practices under the guidance of the provision of the ECC. In the institutes, the O&M skills were used as practices required for addressing the disability of VILs, only not under the provision of the components of the ECC. Therefore, it was found that learners with visual impairment need to align their O&M practices with the instructions as mentioned in the ECC and their effective parental involvement can enhance their independent movement in their environments.

Recommendations

Based on the emerged findings, the present study developed some recommendations that facilitate in developing successful parental involvement in O&M and suggesting strategies to solve the parent-teacher communication barriers particularly for VIL in Pakistan. Such recommendations are described below as follows:

1. The proposed curriculum focuses on O&M skills that is needed to employ in the context of the study for VIL at secondary level. The proposed curriculum of O&M sure to represent all relevant skills, practical practices and provision of appropriate learning environment and facilities/materials that make provision for more opportunities for practical skills with independent movement in the surrounding.
2. Enabling parental involvement in terms of institutional structures with applying some institutional methods like daily diaries, conducting parent teacher meetings. Provision of training programs for the teachers of VIL about parent-teacher meetings.
3. The study recommends expanded collaboration between parents and teachers of VIL as well as improved coordination between parental involvement in O&M practices.

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