

A Multicase Study on Teachers' Supervision of Hearing Impaired Children

Nena M. Visto¹, Teresita H. Borres, PhD²

¹Doctor of Philosophy in Educational Administration, Central Mindanao University
Workplace: Philippine College Foundation

²Adviser

Abstract: *The general objective of this study was to assess teachers' supervision of the hearing impaired (HI) children in their speech production and how they progress in their session for speech intervention. Participants were selected from the three government schools with SpEd Center for hearing impaired children. One teacher and two HI children of the same age were recruited from each school. Informed consent was secured before data collection through in-depth interview, key informant interview and observation including five weeks of researcher-conducted daily interventions. To preserve confidentiality, the informants were coded in consecutively numbered ID. The data were analyzed through triangulation by member check. The participants' responses indicated that beyond teaching, they view their role as therapist to HI children with hearing devices and counselor to parents, as educator, and as always a teacher. The HI children showed progress in their speech production after the intervention. The teacher participants have varied adequacy of training and instructional competencies in teaching speech to the HI children. Misbehavior, comprehension, handling multi-grade classes, less parental support, insufficient time to cope with the ancillary work on top of teaching responsibility, teaching multiple learning areas a day, and curriculum -related problems, like the MTB-MLE were the common challenges met by the teachers in teaching. Thus, teachers are the key persons to help the HI to develop speech after they have been fitted with good hearing devices. Speech production is possible for the HI children who will undergo proper intervention. Teachers handling HI children vary in their adequacy of trainings and encountered different challenges as they teach them in relation to their speech production.*

Keywords: equipped teachers, hearing impaired, intervention, Auditory oral approach, speech production, mainstream

1. Introduction

"Nobody can predict the future of the child." Edwards

Background of the Study

Teaching is regarded as a profession that has a great purpose. Ask a teacher why he became one, the answer would still be... commitment. A teacher is committed to becoming a positive influence on the younger generation. This is the greatest impact that strengthens teachers despite the tedious work. Even more when the 'Education For All' (Singer & Butler, 1987) policy has been implemented by the government in the Philippines that all children notwithstanding their disabilities to access quality education.

In the realm of special education, teachers are those persons, who, out of deep concern and sheer dedication to their profession had developed skills and talents to teach in a more profound way and to the utmost those with special needs such as the hearing impaired (HI) children. Yet in the real scene, these teachers face a lot of challenges that appear to be wearisome to others since they deal with children who are detached from the world due to hearing loss. It is the aim of education of the hearing impaired children that they should be able to integrate with mainstream society and lifelong productivity with self-confidence; become happy HI individuals and not just a mere follower of a hearing person (Mwenda, 2010) nor live under the shadow of an interpreter. This calls for a greater commitment on teachers handling children with hearing loss. In this regard, teachers of the hearing impaired have greater responsibility of providing quality services to the HI children who are hearing aid users or cochlear implantees.

Hearing loss, also known as hearing impairment, is a partial or total inability to hear (Encyclopedia Britannica, 2011). The Individuals with Disabilities Education Act (IDEA 2004) defines two terms related to hearing acuity: Deafness and Hearing Impairment. According to IDEA 2004, deafness means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification that affects a child's educational performance (Shemesh, 2010). Hearing impairment means impairment in hearing, whether permanent or fluctuating, that affects a child's educational performance (Hopstetter, 2017). The Department of Education in the United States in its posting, IDEA 2004 used the term 'hearing impairment' as a generic description of a wide range of hearing losses, including deafness.

Hearing loss keeps the child detached from the real world. It creates difficulty in communication that leads to problem in social, communication and educational (Hall, Oyer, & Haas, 2001). The American Speech-Language Hearing Association (ASHA, 2014) strongly recommended that once the child is detected with hearing loss, parents must necessitate for professional help and choose educational method applicable to the child and to the family.

The study of primary communication methods for the educational approaches of the HI children is found essential for them to develop communicative skills. These methods are the American Sign Language (ASL), the Total Communication, and the oral method known as the listening and spoken language method (Educational Approaches, 2009).

In listening and spoken language, auditory-oral is the traditional approach of education for the hearing impaired children to develop spoken language. With the proper use of his device, the child learns to comprehend and use spoken language. Auditory-oral education is very beneficial, but its success requires an uphill battle from the teachers, parents and the HI children. Teachers, therefore need to seriously consider the short and long term effects of how hearing loss impairs a child's ability to understand the language in developing years.

Here in the Philippines, for more than two decades, government schools adopted the American Sign Language (ASL) or the Total Communication for the curriculum of children with hearing impairment. Once the child is detected with hearing impairment, it is customary that he lands to sign language schools for education. However, with the present advancing technology in mainstreaming, an increasing number of private sectors adopted the auditory oral method of education to support those families who choose listening and spoken language method for their HI child. Yet, in the government schools, there are also a few number of HI children with hearing residue that have acquired hearing devices through the help mostly of foundations. These children need teachers to cater to them in their needs on how to use their hearing residue and develop spoken language, and later may be placed in the mainstream.

In this study, the researcher endeavored in exploring how teachers supervise the HI children in their speech development. It is the purpose of this study to help special education (SpEd) teachers to be aware of their role once their HI children have acquired hearing devices. Finally, with the help of knowledgeable teachers, HI children may have the chance to develop speech production and be encouraged to work hard to gain confidence that would contribute to their whole being to become self-sufficient and successfully integrate in the mainstream in the future.

2. Conceptual Framework

Aside from the literature and studies presented, the following concept provided the framework of the study.

This research work on teachers' supervision of HI children on their speech production rest on the theory Social Development Emphasis by Lev Vygotsky (1930 in Oswalt 2005) which focuses on the Zone of Proximal Development. This term describes the difference between what children can do alone and what they can do with assistance.

According to Vygotsky, in an ideal environment most likely to foster healthy cognitive development children's caregivers, teachers and more mature peers will provide them with a range of experiences and tasks that fall within their zone of proximal development. He insisted that human learns best in cooperation with others. A person gains knowledge as he develops by way of social interactions with peers and adults. The immediate and closest social interaction for a fast development of speech and language skills is between the child and family. Parents are encouraged to create an environment which stimulates

communication and interaction with their child (Turan 2010). Children who hear more talks will talk more themselves. In the same manner, HI children like the hearing ones, need to hear and listen language before they are able to speak.

In the works of Hood (2010), was revealed that majority in the Non-Deaf World formed auditory and oral methods of education to help deaf individuals assimilate themselves into the hearing world. Frasu (2013), Moog (2000), Harison and Hutsell (2011), AG Bell, & Hood (2010) have been advocating auditory-oral methods of teaching because it has touched many lives into better ones. In choosing auditory-oral approach, speech pathologists and educators strongly argued that HI children need motivation and practice as they journey in this oral route. For the most effective speech and language acquisition, NICHCY (2013) strongly suggested that HI children must be immersed in a nurturing environment that includes educational and parental support. In adopting auditory-oral approach, parents must be committed to overcome the critical factors to make the difference a success.

The philosophy of AO approach is based on the regulations of the Education for All Handicapped Children Act (1975), American with Disability Act (ADA), (1990) the Individuals with Disabilities Education Act (IDEA) (1997) and the No Child Left Behind Act (2001) that "include and seek to improve the education of the Hearing Impaired Students (HIS)" and to be able to communicate directly with a wide variety of individuals (Freiberg, 2008) and have equal pacing with the normal hearing individuals in terms of education, vocation and social life in the future (Stone 2000).

The second theory where this study is anchored is the MKO or More Knowledgeable Others by Vygotsky.

The MKO refers to anyone who has a better understanding or a higher ability level than the learner. It is normally thought of as being a teacher, coach, speech therapists, audiologist or older adult that have the capacity to teach a child learn something. According to Vygotsky, adults are an important avenues of cognitive development (McLeod, 2014).

Figure 1 below shows that an HI children hears nothing, thus he speaks nothing. In a world full of sounds, he is helpless when it comes to articulation. Even with hearing devices, yet, without intervention and professional help the child will not be able to develop speech. Parents will not be guided and will become discouraged.

Teachers in special education program must be conscious of the fact that every student especially the hearing impaired has different zone of proximal development. Appropriate lesson planning and instructional materials are necessary to be used in class discussion as they teach skills, as well. Everyone is capable of learning, regardless of strengths and weaknesses. Deaf children are as important as with their hearing peers. They too, have their unique potentials in which parents and teachers need to identify in order to provide them with appropriate educational reinforcement.



Figure 1: Model of a Hearing Impaired Child before Intervention

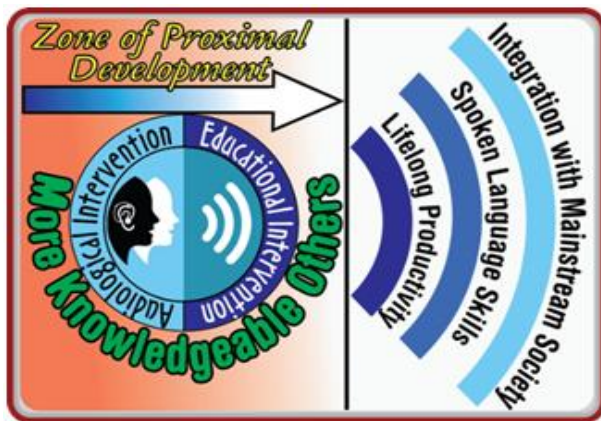


Figure 2: Model of a Hearing impaired child after intervention

3. Methodology

This chapter presents the various aspects of research methodology that were used in the study. The components of the study include research design, settings of the study, target participants, sampling procedure, research instruments, data collection, analysis, ethical considerations and validity.

Research Design

This research work is qualitative in nature employing the multi-case study method. Qualitative research design is a research method used extensively in studying human behavior, opinions, themes and motivations (Shuttleworth & Wilson, 2008). It is the most appropriate method in order to explore the role and supervision of the teachers of the hearing impaired children in their speech production and how HI children progress in the intervention. Specifically, in this study, a multi-case exploration was employed as the practices of the SpEd teachers, experiences of the parents and the hearing impaired learners are introspected in-depth.

The worldview of this study is Constructivism which is anchored upon the premise of a social construction of reality (Baxter & Jack, 2008). In this particular research, the information taken depends much on the participants' views of the phenomenon. Thus, a close collaboration between researcher and participants is needed (Creswell, 2017).

Overview of Qualitative Research

Several writers defined qualitative research as: a process of interpretive naturalistic inquiry (Denzin & Lincoln, 2005) that seeks deeper understanding of a certain phenomenon in

a situation (Hillgoss, 2014). In addition, Prado et al. (2011, p.185) explained that it is an investigation done in a natural setting to understand the quality of people's lives and their situation through firsthand experience and actual interaction. Inquiry and deeper understanding of the situation is between the researcher and the participants. In other words, the researcher interprets the phenomenon in terms of what information do participants bring to her.

Qualitative research focuses usually on human behavior. To supplement this method, Hillgoss (2014) cited from the works of Creswell and Plano Clark (2011) who explained that the aim of a qualitative researcher is to explore a problem, honor the voices of participants, map complexity of the situation, and convey multiple perspectives of the participants (p.27). One of the forms of qualitative research, is the case study design (Prado, 2011 & Creswell, 2017). Case study as explained by Baxter and Jack (2008) that it is an approach to research that facilitates exploration of a phenomenon within its context using different sources of data. This guarantees that the subject is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (p. 545). Similarly, Yazan (2015) described case study as an approach which allows the researcher to investigate an individual, a group or a particular event. Yazan magnified Merriam's definition on qualitative case study as an intensive holistic description and analysis of a bounded phenomenon such as a ... program or a person (p.148). In qualitative case study, interviews are often perceived as the research method of choice (Fox, Edwards, and Wilkins, 2010). In this approach, observation and understanding of the phenomenon depends on what the participants give to the researcher.

One of the types of case study is the multiple case study or collective case study (Stake, 1995). Stake explained that this type uses information from different studies to formulate the case for a new study. One of the characteristics of case study is particularistic (Yazan, 2015 from Merriam, 1998) which signifies that the study focuses on a specific situation or event.

Setting of the Study

This study was conducted in three (3) different elementary schools with Special Education Centers, particularly the hearing impaired class. The study was first conducted in Davao City Special School, then in Valencia City Elementary-SpEd Center, and the last school was in Malaybalay City Central Elementary-School-Sped Center. In their self-assessed adequacy level, some felt highly proficient through audiology education and training.

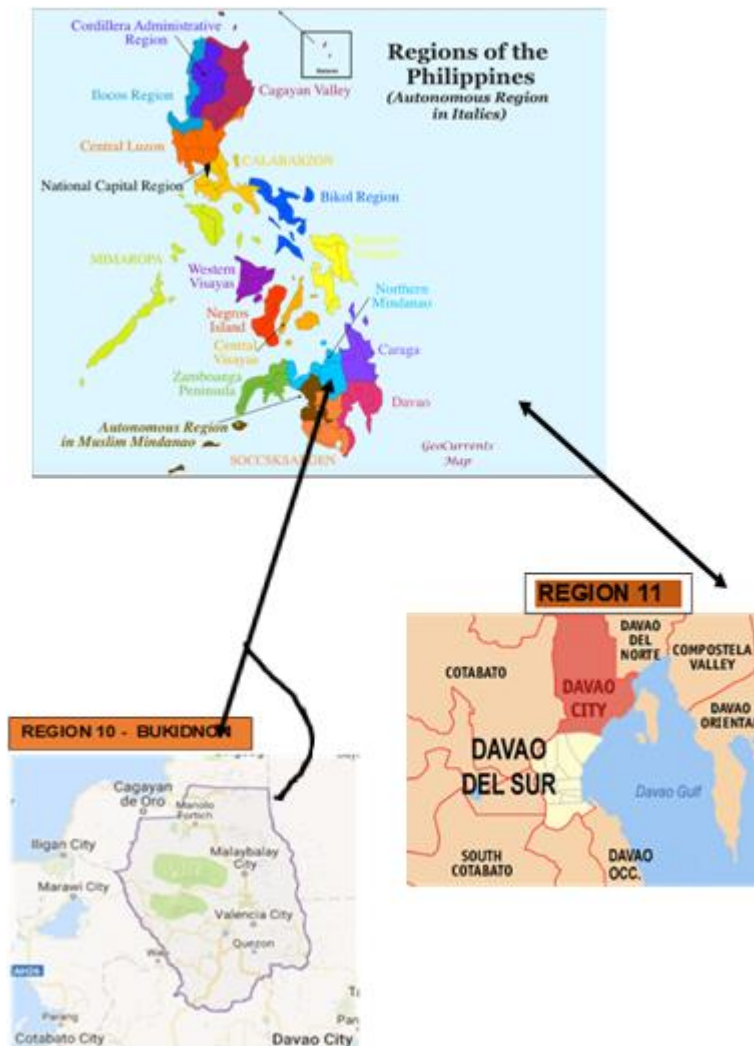


Figure 2: The Location map of Davao City, Malaybalay city and Valencia City

Participants of the Study

The participants of this investigation were the three (3) teachers teaching hearing impaired children in a self-contained classroom; and the six (6) H.I children whose age ranges from 10 to 14, possess hearing devices and enrolled in the S.Y. 2018-19. One teacher and two H.I. children participated from each school. The teachers chosen were those recommended by the principal and considered as the senior teacher among the teachers teaching the hearing impaired in their respective schools. The six (6) H.I children, aging 10 to 14 years old who were participants also of the study were recommended by their teacher. These chosen HI children have either cochlear implants or digital hearing aids. They were approved by their parents through an informed consent letter. For each participant, a pseudo name was provided to ensure strict confidentiality and to protect their identity. They would be presented based on the order of participation in the study.

Teacher 1 (T-1):

Teacher 1 finished her Bachelor in Elementary Education in Davao. With the help of the priest, she was granted a scholarship and attended Sapporo School for the Deaf in Japan. She studied Deaf Education major in Early Intervention for one year and Educational Audiology for another year. She is married to a SpEd teacher who is

working in the high school in the same school. They have two children.

Teacher 1 has been teaching children with hearing loss since at the start of her teaching profession in 1994. She taught for seventeen years in the private school and seven years in the government school. Presently, she is a SpEd Teacher 1, at the same time a finance officer of the school and the elected president of ASET or Association of Special Education Teachers in the whole division of Davao City.

Due to her ancillary task, Teacher 1 asked for an assistant or errand boy and a teacher aide to help her as she handles the non-graded children in a self-contained classroom. In the morning, from 8 o'clock to 10:30, she teaches spirited children with different special needs. In the morning she teaches 12 children: five of them are with cochlear implants, two children with hearing aids, four children who are language deficit and one boy with profound hearing loss who is a non-user of digital hearing device. At 10.30 to 2 o'clock would be reinforcement for the four advance children who would be in the mainstream next school year. At 2 to 3 o'clock would be the one hour time for the two children with ID or intellectual disability. At 3:30 to 4:30, four HI children and five language deficit children from the mainstream classes would come to her classroom for tutorial

or reinforcement lesson. The last minute would be spent for cleaning and arranging the classroom and planning for the activity for the next day.

The second story of the HI classroom is an audiological room intended for assessing HI clients and small meetings. The classroom is filled with instructional materials and reading books. Small tables are painted and seats have shapes which contribute to learning development. Most of the materials are laminated to avoid damage from flood, since the school compound is a flooded area.

In the morning, at 7:30 to 8:30 would be children's arrival. Each one would be greeted by Teacher 1 and the teacher aide would lead them or motion them to their respective seats. Children were encouraged to relate experiences at home. They would exchange stories or boast themselves to each other. Some children would show their bag contents. They were not allowed to bring toys from home because during class time, the child would not listen but instead kept on playing. Then at 9 o'clock, the children would watch educational video while eating snacks. Then at 9:30, they would start cleaning each place and prepare for the class or lesson. Then followed by developmental activities. Each child would work and finish his or her work independently. According to Teacher 1, HI children are visual learners, so she provides her own laminator, wifi connection, laptop and printer in the classroom for easy and fast production of her instructional materials for lesson activities each day. She further explained that if the school would provide materials, meaning you are liable to any damage or loss because those things were government property. Thus, she would not wait or ask from the school in order for her to avoid conflicts in the later years.

While imparting the lesson, it was noted that Teacher 1 promotes oral communication. She talked with command and louder voice, called the children by their names and used sign language, only when needed. It was observed also that the children were individually asked to pronounce certain words or names of objects found in the lesson.

Every day, after the lesson, she has activities for the learners to do and finish them diligently. The teacher aide helped the students especially the slow learners and the very young ones who could not cope with the instruction. It was noted also that when HI children mumbled some sounds, Teacher Audi would call the attention of the child and correct him. Naturally, the child would obediently try to follow pronounce the dictated word. Even the teacher aide would always emphasize the articulation of important words. Emphasis on speech is integrated in their daily interaction. During dismissal, parents or house helps would come and fetch each learner. Usually teacher Audi would talk to them or the teacher aide would show them the child's clear book for follow ups at home. During the observation time, the attendance was usually complete unless there would be two or three absentees.

As finance officer, Teacher 1 usually would work on her papers inside her classroom after giving the lesson. There were times that she would go out for a few minutes for important matters yet the teacher aide would take turn in

assisting the learners. Though busy to other responsibilities, she still managed to supervise or keep an eye to the learners especially in dealing with their behavior. It was as well, observed that the materials for the activities on the next day were prepared in the afternoon. Before going home, the teacher aide was instructed what to do or how to perform the task for the next day.

Teacher 2 (T-2):

Teacher 2 was married and has one child. She finished her Bachelor of Science in Elementary Education at Bukidnon State University in 1997. She plans to finish her Master thesis soon and wishes to teach speech to the kindergarten. She has 21 years of teaching experience. She spent the first year of teaching in the regular class and the rest with the HI class. Among the three teachers, Teacher 2 has the longest number of years (20 years) of experience in teaching the children with hearing loss in the said school.

Presently, Teacher 2 handles all learning areas of the 5 and 6 multi-grade in a self-contained classroom. There are four grade 5 and five grade 6 HI children whose ages were appropriate to their grade levels. One grade six student aging 17, is a recipient of one hearing aid but does not use it. Two grade 5 HI students inconsistently wear their hearing aids. Some of these students commute from other municipalities.

The classroom of Teacher 2 was substandard and situated under the gym for more than 15 years already. Good enough the HI students would not complain with the noise in the gym. It was observed that the classroom was quite dark with one bulb to light it. The chairs were old, yet, the walls were painted blue with few instructional materials. She was hoping to transfer to a new classroom once the new building would be finished.

Since Teacher 2 was in the higher grade level, she teaches 7 subjects a day just like in the regular curriculum. The teacher used TC or total communication which is a combination of talking while signing. In the morning, the class tackles English, Filipino and Science. In English class, she integrated speech, the only time that she could focus on their speech production. Most of the HI students would not try articulating because they complained. The activity would cause pain in their vocal chords or throat. However, the teacher believed that with the use of Total communication method, speech is promoted among the hard of hearing children, while the signing among the profound deaf.

At present, they followed the multi-grade set up which means they tackled certain subjects each day. According to Teacher 2, Math subject which was intentionally scheduled at 1:30 p.m. was the easiest subject to teach among the HI children. Thus, the class usually spend time in problem-solving anytime. Lessons or topics are usually discussed for one week depending. In addition, she wishes to handle lower grades so that she can have time finishing her thesis. She wishes also to teach younger children and may try to focus on their speech. She believes that the auditory-oral method is best for children who are hard of hearing at their younger

stage and have not engaged with sign language and whose parents have higher economic status.

Teacher 3 (T-3):

Teacher 3 is married and has seven children. She has been teaching the HI for 14 years already. She is the first teacher of the HI in the school, thus she is the senior among the three teachers.

Currently, Teacher 3 is sharing her classroom with the other 2 teachers who are in charge of the other HI children in the kindergarten and the grades' one and two. Due to the initiative of the teacher, the classroom is fully furnished with materials needed in the class. There is computer and wifi connection in the room which is sometimes shared by the teachers. According to the other teachers, they have lots of sponsors whom they call stockholders. Additional building as a new project will be constructed in the near future which will be sponsored by the Local Government Unit.

Teacher 3 has 6 HI children enrolled for the school year 2018-2019, one grade 3 girl; two grade 4 boys, one grade 5 boy and two grade 6 girl and a gentleman. Before starting the class, Teacher 3 allows the HI children to clean the classroom, in and out, like, watering the plants and

scrubbing the floor. During observation time, the class starts usually at 9 o'clock in the morning. The teacher leads the prayer by signing and talking (same with the TC method). Usually, the male HI students would come earlier and help watering the plants.

During observation time, Teacher 3 discussed one subject in the morning and another one subject in the afternoon. It was observed that the teacher choose certain subject that she wanted to discuss. It was noted that the attendance of the students was irregular. Usually three of the boys come to school earlier. The oldest student seldom comes to school due to his age. Then the girls came at nine and ten in the morning. These two girls were chosen to be the participants in the intervention. Teacher 3 explained that the other grade 6 HI male student is already 25 years old and seldom attends school. She gave considerations to each HI children due to their respective situation.

Teacher 3 emphasized that teachers need to make initiative to improve physical structure of the rooms. She always hopes that the government can help her HI students by giving them work that can sustain them and live with a happy family in the society someday.

Table 1: Summary of Teachers' profile

Participants	School	SpEd Teaching experience	Position	Grade level handled	Method use
Teacher 1	DCSS	24 years	SpEd Teacher 1 *ASET Pres. Sch. Finance officer	Non graded Children	Auditory - Oral
Teacher 2	MCCS	20 years	SpEd Teacher-1	Grades 5 & 6	Total Com.
Teacher 3	VCCS	14 years	SpEd Teacher 1	Grades 3,4,5,6	Total Com.

*Association of Special Education Teachers

The next group of participants were the six HI children recommended by their respective teachers to participate in the intervention program. Their ages were from 10 to 14 years old and users of hearing devices like hearing aid or cochlear implants. Consent from parents were secured before the intervention started.

Pupil 1 (P-1):

Pupil 1 was a 10 year old grade 3 boy. He was a bilateral cochlear implantee. He was the middle of the three children of his parents. His mother was a medical representative while the father was a food caterer. He was diagnosed with a profound hearing loss at six month. At 10 months, he was fitted with powerful hearing aids, nevertheless, at 13 months was the youngest to be operated with cochlear implants through the help of Teacher 1.

Pupil 1 was able to undergo speech therapy as part of the program until preschool which was under Teacher 1. Starting grade 1, he was mainstreamed. Every afternoon, after class, he would drop in the classroom of Teacher 1 for follow up of lessons and assignments.

Due to young age, Pupil 1 and his brother were escorted to school by either of his parents. Once in a while, his mom would visit him at lunch time to check some needs. It was observed that Pupil 1 cannot read yet. He would depend on what the teacher aide would coach him. He has a very short

span for listening and usually roamed around. At break time or especially at noon time, he kept on running around, playing with his classmates.

On the first day of session, he usually shouted to gain attention from the researcher and classmate participant. The researcher integrated playing and stimulation of speech cues due to his short span for listening. It was noted that after a few stimulation of speech cues and motivation, he could follow mouth formation and produce some vowel sounds. Little by little, he could articulate intelligible words coached by the researcher. His favorite words were 'Lolo' and 'ice cream'.

Pupil 2 (P-2):

Pupil 2 was a cheerful 10 year old grade 3 girl. Her parents were both working in the City Engineer Office of Davao City. She was born with underdevelopment of the left ear and diagnosed with mild hearing loss in the right which cause her language deficit. Pupil 2 underwent occupational therapy when she was more than 1 year old. At the age of two or three, she underwent once a week speech therapy for almost three years. She stopped the therapy when she starts school because she showed fast improvement in speech due to every day's interaction with her classmates.

Regarding the communication at home, the mother admitted that they use mix method, talk and pointing or doing action to help the child understand. She revealed that she tried

learning the sign language before, yet, it did not work out. Thus, the parents did not pursue to sign language until they met Teacher 1, who encouraged them to use oral communication instead of sign.

The parents decided to send Pupil 2 in her preschool to Davao City Special School where Teacher 1 gave close supervision on her learning and speech development. She has been mainstreamed since grade 1. Together with other special children after class dismissal, Pupil 2 was accustomed to drop by the room of Teacher 1 for follow up of lessons tackled that day. It was observed that she has a good comprehension because she could follow instruction and answer correctly the assigned task. When talking to P-2, one should call her attention and face her.

The mother observed that Pupil 2's speech improved when she started school and was surrounded with talking playmates. She noticed also that her child's assignments were done before coming home. The mother wished that someday, Pupil 2 and her batch - those who were helped by Teacher 1 for cochlear implants could communicate verbally. She complimented that verbal communication is better than sign language, that in the future, it is advantageous to find work if they could communicate verbally.

Pupil 2 was a timid girl but very responsible even at home according to the neighbor who was fetching her. She kept her things intact in her bag and finished all given task. She could read and comprehend. She worked on her assignments with slight supervision. She could converse little especially to her one friend who usually explain things from her (P-2) to the others, or vice versa.

Pupil 3:

Pupil 3 was fourteen years old and in grade 6. She was the only child in the family. Her parents were both SpEd teachers of the hearing impaired. The father was in the high school while the mother was in the elementary. At more than 1 year old, she was diagnosed with profound hearing loss. Somewhere in 2007, she was fitted with one hearing aid but did not undergo therapy. Eventually, the hearing aid was not used according to its purpose.

Sign language is the means of communication at home since her parents know also sign language. Pupil 3 was a skilled signer. Her mother became her resource teacher for around three years. However, in July 2018, she was operated with cochlear implant, one month before the researcher conducted the study. During intervention, she was still in the adjustment stage. Though she could hear only the slightest sound, she tried her best to follow what the researcher was coaching through stimulation and lip reading.

Since the beginning, Pupil 3 spent her education in a self-contained classroom. She spent more time on surfing on the internet and tried to communicate with relatives and friends in the Facebook using her personal tablet. At school, she was active and an achiever. She represented her school in competition-SpEd level most of the time. She showed positive attitude toward speech production. It was reported that before she slept at night and before going to school in

the morning, she spent time reviewing the lessons given to her in the intervention session.

Pupil 4:

Pupil 4 was a cheerful and chubby 14 year old grade three girl. She was the youngest among the three children in their family. She was diagnosed with moderately hearing loss in the right ear and profound in the left ear.

Pupil 4 has been attending this school since preschool. She reached already grade five but was retained to grade three because of her inability to read and comprehend maybe due to her frequent absence in the class. She showed explicit joy when allowed to wear hearing aids during the intervention.

She often volunteered to put on the hearing aids before the session would start and kept on talking after the session. One would notice that she loved to hear her voice because she keep on mumbling or articulating anything. She was very happy showing that she could hear and pretending that she could talk by articulating the words in the worksheets.

Pupil 4 was a good signer. Yet, during the intervention session, she could follow the intonation and speech of the researcher which surprised everyone so much. She could repeat phrases after the researcher. Mother revealed that they do not do signs at home. She talked slowly to her HI child in Bisaya dialect and also admitted that she did home signs or gestures to help Pupil 4 grasp and understand what is being talked about.

Pupil 5:

Pupil 5 was a thirteen year old grade 5 boy and was expecting to have a sibling in a few months later. He was diagnosed with moderately severe hearing loss but has not undergone any therapy due to its unavailability. His parents tried to search for speech therapist or any center offering speech therapy in the nearby municipalities or even in the city but did not find any. They even asked their friends to help them inquire but to no avail. Thus, parents of Pupil 5 were forced to send him to learn sign language starting preschool in a foundation. Nevertheless, they bought another pair of hearing aids hoping that he would learn to communicate orally.

Pupil 5 has been enrolled at his present school since grade 1. Currently, he has to commute by bus every morning and afternoon for school. In the classroom, according to the teacher, Pupil 5 was slow in doing and understanding sign language. Based on the interview with the mother, the communication they used at home was basically oral because they do not know how to do sign language. The mother admitted that they do also home sign to help Pupil 5 understand them. When the researcher visited the mother lately, she reported that Pupil 5 refused to use his pair of hearing aid lately.

Pupil 6:

Pupil 6 was a thirteen year old grade 5 girl and the eldest among the three children in the family. She was diagnosed with moderately severe hearing loss. Last year, through her parents' solicitation, she received one hearing aid sponsored

by the Local Government Unit in their place. She wore it very seldom, the mother confessed.

Pupil 6 could mumble a lot of unintelligible words but she usually call Teacher 2 “Ma’am” and made some signs. She was competitive in school and loved to accept responsibility from the teacher. She showed excellence in the classroom and usually led the class. Usually, she volunteered writing the lesson on the board. Often times, in

classroom, the teacher would orally call her by name and she would turn around.

Mother admitted that they verbally communicate with Pupil 6 at home most of the time. Home sign or action or pointing were used only to help Pupil 6 understand what they mean. The parents still wished to have another hearing aid for her. At home, she could study her lesson independently.

Table 2: Summary of HI Children’s Profile

Participants	Age	Grade level	Diagnosis	Technology used	Classroom
Pupil 1	10	3	Profound HL	Bilateral	Mainstream
Pupil 2	10	3	Undeveloped left ear Mild HL right ear	Waiting for operation	Mainstream
Pupil 3	14	6	Profound HL	Cochlear Implant	Self-contained
Pupil 4	14	3	Moderate HL (right) Profound HL (left)	Digital Hearing Aids (provided)	Self-contained
Pupil 5	13	5	Moderately severe HL	2 Digital Hearing Aid	Self-contained
Pupil 6	13	5	Moderately severe HL	1 Digital Hearing Aid	Self-contained

Sampling Procedure

According to Creswell (2017) and Prado et al, (2011), purposive sampling is the most appropriate sampling technique for case study since the researcher has the targeted participants: the three teachers with the longest experience in handling H.I. children in a self-contained classroom and six HI children, one teacher and two H.I children from each school. The six H.I. children have hearing residue, four of them used hearing aids and two of them were bilateral cochlear implantees who underwent intervention for five times in five weeks. Interviews with the parents were done on one to one interview either personal or by phone.

Research Instruments

According to Merriam (1998) the major research instrument in qualitative case study method, is the researcher herself. Other tools used to gather data are enumerated below.

Open ended questions were constructed for oral interview with the teachers as participants and parents as key informants.

Participant’s journal response was made for the teachers to express additional thoughts and feelings in relation to teaching the hearing impaired children.

A modified Teachers’ Observation Guide for Instructional Competence, a tool used by Department of Education in evaluating teachers was adopted and served as a checklist on how teacher supervised the HI children with hearing devices in their speech production during classroom observation. The observation was done through immersion for 5 weeks. In the second school, observation was done through 3 days only. In the third school, observation was done through 3 days also.

Articulation Screener is a modified form from Mommy Speech Therapy and Little Bee Speech (2011) asking the needed details of the HI participants’ background and a guide on the scoring mechanics on worksheets.

Instead of a therapy log, a notebook was used to record the target sounds of words from the HI children and observation in the classrooms.

Modified worksheets, patterned from the Little Bee Speech (2011) from the Mommy Speech Therapy which consisted of visual representations and checklist were used as exercises in motivating the HI children produce correct speech sounds. These worksheets were instruments also in assessing the effectiveness of auditory oral method toward the speech development of the HI child participants.

The “Pam’s Place Cues – Vowels” by Marshalla (2009) as introduced by the Mommy Speech Therapy was utilized as a tool in stimulating the speech cues of the HI child in order to produce the five basic vowel sounds.

Behind the ear hearing aid was used also to enhance the hearing residue of one child participant.

A large mirror was an important tool in helping stimulate the child with hearing loss and his speech reading cues.

Lastly, the video recorder in the cellphone was used to record the actual conversation with teachers and parents and the actual performances of the HI children during the intervention.

Data Collection

In qualitative case study research, data collection method is time consuming thus, it is advisable to have a small participants. The researcher is the main instrument in data gathering and depends on the information given by the participants. Thus, it is important that a good rapport between the researcher and participants must be built in order to gain the real essence of the phenomenon (Hillgoss, 2014). In the approaches of Stake (1995) and Merriam (1998 as cited by Yazan, 2015) the research on qualitative case study utilizes three data collection techniques such as in-depth interview, key informant interview, observation/immersion in the classroom.

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. In-depth interviews are useful when you want detailed information about a person's thoughts and behaviors or want to explore new issues. In-depth interviews should be used in place of focus groups (Boyce & Neale, 2006, p.3).

Key informant interview (KII) refers to the second method used in this study. It is used in qualitative in-depth interviews with people who know the phenomenon. The purpose of key informant interviews is to collect information from a wide range of people (UCLA).

In this endeavor, the administration of interviews and gathering of data took place with-in the school year 2018-2019. Teacher participants were initially contacted personally or by phone or through social media to determine their interest in the study. Permissions from the three Division Superintendents were secured and then to the principals of each schools. The teachers were the ones who recommended the HI children that would be participating in the intervention.

The H.I. children underwent intervention for five consecutive weeks which was conducted by the researcher. Interviews with the parents were done personally on one to one basis except for one parent which was done by phone.

The data on this study were collected through in depth interview (IDI) with the teachers, key informant interview (KII) with the six parents as facilitated by the teacher and researcher immersion in the class and a modified checklist taken the works of Vegafria (2014). All parents responded positively, five were interviewed personally and one mother was interviewed by phone due to her occupied schedule. Modified Mommy Speech therapy materials were used for the intervention. A pair of hearing aids, audiotape recorder and mirror were very important tools used in conducting the intervention with the HI children in a separate quiet room.

Grand Tour Question and Sub-questions

Brenner (2006) defined grand tour question as opening question of an interview journey that asks the participants to give details about a phenomenon. Similarly, Randolph, (2009) described it as an overall general question. It can be answered by answering mini-questions (Brenner, 2006). Spradley (2003) further explained that the researcher has to restructure questions that may lay out an in-depth descriptive sequence explaining a series of events, describing a group of people, telling how to engage in an activity, use an object, or run through the events of a time period (p.49). The grand tour question that guided this study was: How do teachers supervise the HI children in their speech production?

Ethical Considerations

Ethics is part of research work that concerns proper ways of acting towards people, and suggests moral principles and guidelines for the right ethical choices (Gall, 2007, p. 68 cited by Tsuladze, 2015).The researcher would protect the participants by keeping information confidential. The

participants were assigned with numbers to uphold their privacy.

4. Data Analysis

The goal of qualitative analysis is to reduce a large amount of textual data to meaningful concepts while identifying the emerging themes. Qualitative research has a unique way of analyzing data called triangulation, a useful method of combining data collection (Altrichter, Posch, & Somekh, 2005). Cohen, Manion and Morrison (2016) have defined in their book that triangulation "is an attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint" (p. 141). According to Carter et al. (2014) that this is to develop a deeper understanding of the phenomenon.

Furthermore, triangulation is commonly used in studies to minimize biases (Kennedy, 2009). Moreover, Altrichter, (2016) regarded it as a means to achieve more detailed and balance picture of the situation. Triangulation facilitates validation of data through cross verification from more than two sources. It tests the consistency of findings obtained through different instruments and increases the chance to control, or at least assess, some of the threats or multiple causes influencing the results (Cohen and Manion, 2016).

This is why, this study fits into multi-case study research (Stake, 2013) for it would explain the complexity of the problem in three different settings by employing in-depth interview, key informant interview with the parents, and using the teacher's observation guide. To strengthen it, this study would navigate the cases - in-depth and detailed pieces on how teachers supervise the hearing impaired children in their speech development, by exploring their unique roles and challenges they met, and on how HI children progress in their speech development after intervention by using the lessons from Mommy Speech Therapy.

Validation

Since this is a qualitative study, the researcher brings in personal experiences of the participants through interview and observation. To ensure credibility and improve the accuracy of the study, the researcher has to employ a technique called triangulation, or respondent validation which is known as member check (Yanow & Shea, 2015). Thomas, Nelson and Silverman (2005) confirmed that member checking occurs when the researcher goes back to the participants and shows the interpreted data whether they are authentic or not. Furthermore, it is important to the researcher to build rapport with the participants to achieve honest responses during the interview.

5. Summary, Conclusions and Recommendations

5.1 Summary

This study was generally conducted to explore teachers' supervision of the hearing impaired children in their speech production that is to elucidate the case in three different environments. Specifically, the study sought to: 1) describe

how teachers view their role in supervising the H.I. learners in their speech production; 2.) evaluate the progress of the learners in their auditory –oral ability after intervention session; 3.) assess the adequacy of teachers’ training in teaching speech production to the hearing impaired children; and 4.) identify the challenges met by the teachers in teaching speech production.

The participants of this investigation were the three teachers and six HI children. As recommended by their principals, the participant teachers were considered as senior and have the longest number of years in teaching experience among teachers of hearing impaired children in their respective schools. Meanwhile, the six H.I children enrolled in S.Y. 2018-2019 whose age ranged from 10 to 14, and possessed hearing devices were chosen. One teacher and two H.I. children with the same age represented each school, namely: Davao City Special School, Valencia City Central School, and Malaybalay City Central School. This study employed multi-case study to explore the supervision of the teachers of the Hearing impaired children in their speech production and to assess the progress of the learners after the intervention session.

In qualitative research, the researcher was the main instrument in data gathering. Three data collection techniques such as in-depth interview, key informant interview, and observation/immersion using a modified checklist were utilized. To make data analysis easier, triangulation was used.

For ethical reasons, prospective participants were given sufficient information about the study in order for them to make informed decisions. They were told that confidentiality would be maintained at all times and anonymity be preserved. To achieve this, the participants were given pseudo names. They were also made aware that participation is voluntary and so they could just stop at any time without penalty. Consent was also obtained in writing the participants and asked them to affix their signature upon. The validation of data was done through member check and peer review.

In supervising the speech development of the hearing impaired children with hearing devices, Teacher 1 viewed her role as therapist and counselor to the parents, then Teacher 2 considered herself as educator of the hearing impaired children using holistic approach, while Teacher 3 regarded herself as merely as their teacher, still.

After the intervention sessions which were done individually every day for five weeks, the six hearing impaired students showed huge increase of their correct utterances of the objects from four to six times higher or more than the pretest.

Regarding the adequacy of teachers’ training in teaching speech production, the three teachers have different description. Teacher 1 was highly proficient in her instructional competencies. She finished her educational audiology and early intervention in Japan and that she supports auditory oral program by coordinating cochlear implants in her school. Teacher 2 was proficient in her

instructional competencies. She got her training from the Welcome Home in Bacolod, joined along the way some trainings and seminar which tackled partly on speech, and used Total Communication in class. Teacher 3 was basic in her instructional competencies. She has only one training which was done before handling the SpEd class for the hearing impaired. She used also talking while signing during class discussion. She did teaching modification in most learning areas.

Teachers encountered different challenges in teaching the HI learners in their speech production. Teacher 1 pointed out that the major problem among younger HI children was misbehavior. She also cited her time is not enough due to the ancillary work added on top of her responsibility as a teacher and the MTB-MLE curriculum which hinders the comprehension of the hearing impaired children. Teacher 2 revealed that due to the environmental culture, they cannot get away from sign language. Handling multi-grade class, teaching eight learning areas a day, and parents support are one of the challenges she met in teaching speech development among her HI children. Similarly, Teacher 3 cited that comprehension of the HI learners, handling multi-grade class and parents’ support contribute to the challenges in teaching the HI children.

5.2 Conclusions

Teachers are the key persons to help the children with hearing impairment to develop speech after they have acquired or been fitted with good hearing devices.

Speech production is possible to be developed to the hearing impaired children who have acquired hearing devices especially when fitted at early age.

Aside from seminars and training, surfing in the internet and research can be contributing to high adequacy of teachers’ training in teaching speech production to the hearing impaired children.

Misbehavior, handling multi-grade classes, lack of cooperation by parents, inadequate time for school requirement compliance, and deficient comprehension of the hearing impaired children are the challenges met by the teachers as they teach the hearing impaired children in relation to their speech development.

5.3 Recommendations

After the major findings and conclusions, several recommendations were drawn that may help teachers in supervising the hearing impaired children who have acquired hearing devices develop speech production.

Teachers of hearing impaired children are encouraged to be equipped of auditory oral approach in order for them to become knowledgeable of their role in teaching the speech development of hearing impaired children who are able to acquire hearing devices. Moreover, teachers are recommended to build good rapport with parents of the HI child. Teachers may find ways to work hard with parents that they may know how to carry on the program at home in

order for hearing impaired children to have a continuous learning. Parents are encouraged to visit the school often to show support and be guided on how to promote an environment rich in words.

Hearing impaired children who have acquired hearing devices need to undergo intervention to stimulate their hearing residue, speech reading skills and visual cues. Teachers are encouraged to motivate each child that he or she can do it and to appreciate each attempt of word utterances. With the guidance of parents at home, the child may continue reading the materials given to him. This is a way of increasing the vocabulary and enhancing the memory retention of the child.

With the rising technology, it would be a good practice for teachers to do research to empower themselves as they teach HI children in their oral communication and may have the eagerness in motivating each child to give attempts to talk. Hence, teachers are encouraged to have faith in the HI child that they have the chance to develop speech. Teachers are encouraged to have a collaborative effort with the parents, people in the position-like, principals, officials in the Department of Education and local government in giving deaf awareness and the current trend of intervention. This may pave the way to the establishment of auditory oral method of education in government schools.

The Department of Education may provide programs for auditory oral method of education to meet the basic need of the hearing impaired children with hearing devices. Auditory oral approach is an option for parents who acquired hearing devices for their hearing impaired children to learn and develop oral communication.

It is hereby recommended that teachers assigned to SpEd programs for the HI children be adequately trained, innovate their teaching methods through research and attendance in seminars and training programs to equip themselves with the advancing technology; that intervention be conducted for HI who have acquired hearing devices to stimulate their hearing residue, and develop their speech; that teachers and parents cooperate in enforcing oral communication for the hearing impaired in school and at home; that policy makers and school administrators develop programs for installing the AO program as an option to parents for their HI children. By adopting auditory oral approach of education, the challenges met by the teachers will be minimized.

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