



“Resistance to Learning among Cochlear Implanted Children: The Merits of Speech Therapy”

Mohamed Hajjej
University of Gabes, Tunisia.

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ABSTRACT

It has been widely reported that cochlear implantation has had a dramatic effect on language competence among young profoundly deaf children. Thanks to this revolutionary device, language competence, speech intelligibility and conversational fluency among this category of children are now attainable by many of those who previously depended on sign language to communicate. However, due to the considerable variability and large individual differences in the performance outcomes of many other children, it has become commonly believed that motivating cochlear-implanted children who have learning spectrum disorders is a basic but hard challenge. It is a fundamental challenge because these children experience hearing and perceive speech for the first time after the rehabilitation of their hearing skills. Such skills are undeniably necessary for community living and coping. It is a hard challenge because children with cochlear implants by and large are vulnerable to diverse factors internal and external which impact their learning unless positive and successful experiences are planned. The following questionnaire-based paper is an attempt to address one of the challenges associated with motivating cochlear implanted children, namely, resistance to learning. It also aims to explore different behaviors that manifest this phenomenon, explain its possible reasons and highlight its major implications.

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1. Introduction

It has been widely believed that the absence of hearing in the early years of deaf children compromises their linguistic and cognitive development and generates important impact for the rest of their lives. In this sense, diagnosing deafness and initiating auditory rehabilitation as early as possible is essential in helping these children develop cognitively and emotionally as well.

In recent years, there have been plenty of opportunities to restore the auditory abilities for children who happen to lose their hearing skills thanks to new and advanced hearing aids. These aids, to put it simply, replace a function lost by the cochlea as they provide these children with direct electrical stimulation of the auditory nerve.

The past decades of human history have been impressively marked with efficient technological advances that considerably contributed to transforming the lives of children affected by severe and profound hearing loss as they enabled them to have access to the world of speech and communication.

In this context, the cochlear implant is seriously considered a major capable device designed to restore auditory capacity and improve communication skills and social life of deaf children. For Marschark (1993), the most dramatic change in functioning for recipients of cochlear implants is the opportunity to access and participate in oral communication with others. This outcome is particularly important for young children, for whom communication is vital to normal cognitive, language, social, and emotional development.

While the cochlear implant has been appreciated for allowing hearing as its fundamental goal, establishing access to the sound world, developing oral language for deaf children, a set of factors can influence the efficacy of this treatment such as duration of sensory deprivation, the age of the patient when receiving the implant, physiological factors, and family involvement...

2. Literature Review

2.1. The Concept of resistance to learning

Following Knight Abowitz (2000); (Lindquist, 1994); Olafson & Field, (2003), the concept of resistance to learning is slippery and can be problematic. Thus, resistance theories have been developed in different educational fields and brought about diverse perspectives.

According to Alpert, (1991); Lindquist, (1994), the concept of resistance is used in education research to refer to the existence of tensions and conflicts between school, learners and the wider society to which learners belong. Such conflicts and tensions are likely to mark different learners' behaviors occurring in schools.

In the view of Langhout (2005), it is vital to clearly conceptualize the idea of resistance to learning in order to explain and understand the complexity of the individual's experience of educational reality and the production of meaning.

In the words of Tolman and Kremling (2017), resistance is an, “outcome, a motivational state in which students reject learning opportunities due to systemic factors” (p. 3). Therefore, it is not a trait that is part of a student's personality enduring over time, but is a fluid motivational state that can be influenced.

Resistance to learning as suggested by Tolman and Kremling (2017) can be influenced by external factors and internal factors as well. While external factors relate to environmental forces such as family history, social class, and cultural identity, cognitive development in the sense that how learners perceive education and knowledge in addition to meta-cognition which is learners' self-awareness of how they learn, represent the internal factors that can influence resistance to learning.

As Brookfield (2015) wrote, "Most learners participate in learning processes by starting off enthusiastic and engaged if they chose to do the course. There are incidents where learners do not choose to take the course, and are resistant to learning. As well, the learners who are engaged may also become resistant to learning during the course for various reasons". Consequently, resistance is nothing but a multilayered and complex phenomenon in which several factors intersect.

Moreover, Brookfield (2015) not only suggests that teachers are unable to respond successfully to learners' resistance unless they are knowledgeable about the drivers of resistance to learning, but also points out that teachers should not expect to be able to "overcome," or completely dissipate, resistance. They should work to contain or mitigate its effects.

Seidel and Tanner (2013) conceive of resistance to learning as a set of "behaviors and actions students take in a classroom situation when they become frustrated, upset, or disengaged from what is taking place" (pp. 586-587). Following Seidel and Tanner (2013), resistance to learning can take one of two forms, namely, active resistance and passive resistance.

For Seidel and Tanner (2013), while active resistance is more obvious and can be manifested through challenging the instructor's authority, causing disruptions in class, attempting to get other students to engage in resistant behaviors such as not doing what the instructor asks, and threatening to complain to the instructor's supervisor, passive resistance is less obvious and usually manifested through avoiding the engaged learning environment by dropping the class, not attending class, or not participating while in class; sitting in the back of the room, not paying attention in class, and making the class a low priority.

2.1.1 Factors leading to resistance to learning

Following Brookfield (2015), as resistance is commonly believed to be one of the major sources of frustration and burn-out for those who teach, it is necessary to address and understand its major origins in order to find the best ways to handle different situations of resistance to learning.

Silverthorn (2006); Prince and Felder (2007) and Smith (2008) contend that since resistance is undoubtedly a key concern for many instructors, preventing learners' resistance would seem to be the ultimate goal.

According to Felder (2011), resistance to learning can be the result of a variety of reasons, including:

- Frustration with group members who don't contribute. Students have had experiences where students loaf and don't participate and they must carry the project for these non-participative students.

- Preconceptions about what it means to be a student. Many students have come to expect to learn passively—to sit back, listen, and take notes while the instructor lectures and delivers information. Engaged learning settings can be a real

adjustment for students and may go against their expectations for their roles in the learning process.

- Little practice with required skills (e.g., collaboration).

- There is a lack of incentive to focus on the learning process rather than grades.

Additionally, Brookfield (2015) suggests a list of possible sources of resistance to learning. For Brookfield, the possible origins of resistance include the following:

A - Poor self-image as learners: If students don't think they can learn, they often resist efforts that seek to make them learn. Any negative feedback just confirms what they already believe: "Developing a strong self-image as a learner—regarding oneself as someone able to acquire new skills, knowledge, behaviors, and insights—is a crucial psychological underpinning to learning." (p. 217)

B - Fear of the unknown: Some students resist learning because they are afraid. Students like doing what they already know. For many students, the comfort and security of where they are causes them to resist going to new places, especially places where beliefs might be held more tentatively.

C - Apparent irrelevance of the learning activity: Students resist learning when they don't see how or what an activity contributes to their efforts to learn. If it looks like busywork or a waste of time, students resist. Brookfield points out that this is particularly true when learners are paying for their education themselves.

D - Students' dislike of teachers: It's not a particularly pleasant thought, but sometimes students resist because they just plain don't like the teacher. Maybe objections to the teacher are justified or maybe they aren't, but sometimes teachers themselves cause resistance.

E - Inappropriate level of required learning: Students get frustrated and angry when they can't understand the content. They object to unfamiliar language and the fast-paced delivery of complicated material. The frustration quickly becomes resistance. Brookfield also uses the example of teachers who transfer too much of the responsibility for learning to students too quickly. Students resist. The teacher is asking them to do what he or she is being paid to do.

F - Disjunction between learning and teaching styles: Sometimes students resist when their preferred approach to learning is at odds with how the information is organized or is being presented.

2.1.2 The Integrated Model of Student Resistance (IMSR)

In their attempt to better understand the possible origins of resistance to learning, Tolman and Kremling (2017) propose a practical model made up of five interdependent elements, namely, Social and Environmental Forces; Negative Prior Experiences; Cognitive Development; Metacognition; and institutional culture. In the view of Tolman and Kremling (2017), these forces would interact as well as shape both passive and active forms of student resistance in class. Thus, a change in one element has an impact on the rest of the system.

On the one hand, social and environmental forces include many different aspects of familial and social forces that shape student expectations about education influence their thinking about the amount of effort that is "reasonable" to use in learning, and that contribute to student stress and sense of alienation in our classrooms.

Negative Prior Experiences, on the other hand, include learners' own histories of previous educational encounters with institutions and teachers that they bring with them to classes. There are also stories of how instructor misbehaviors

and lack of interpersonal attention and warmth towards students also has significant negative impact on student expectations and motivation to learn. Even though you may believe you are supportive and careful in your teaching, your students may bring with them the wounds of these prior experiences.

As for Cognitive Development, it concerns the developmental paths in adult cognition that shape how students see the world around themselves and their view of the purpose and goals of education. Students can make progress and develop, but it can take time as well as scaffolded and supportive experiences for this to happen.

Meta cognition relates to the fact that come to our classes with little awareness of study strategies or what produces better learning. Thus, if they struggle in classes that are more demanding or that require them use critical thinking skills; they frequently see the problem not as their own fault, but as lack of competence by the instructor.

Lastly, Institutional Culture which is the fifth component of the IMSR is conceived by Tolman and Kremling (2017) as the element which shapes and influences both environmental forces and educational experiences.

2.2 Cochlear Implanted Children

2.2.1 Distinctive features of cochlear implanted children

Cochlear implanted children are these children affected by auditory deprivation caused by mild or profound hearing loss. This profound hearing loss, as Ronkainen (2017), suggests, can be due to genetic factors or prenatal teratogenic factors, which lead to the malformation or malfunction of many parts of the outer, middle, or inner ear in addition to other causes in early childhood including disease, ototoxicity, and trauma.

As a matter of fact, these deaf children, claims Schorr (2005), seem to be deprived of sensory processing that plays a vital role in facilitating their social and emotional development. Consequently, these children lack the information typically provided by the auditory modality that facilitates the development of basic social and emotional skills.

As a result of their auditory deprivation, deaf children who have not yet benefited from cochlear implants, often experience limited interactions with significant others during infancy and then continue to have difficulty forming and maintaining positive relationships with parents and peers during early childhood due to the inability to communicate effectively.

Moreover, Corrales and. Oghalai (2013) argue that with reduced and absent communication feedback, deaf children are not able to express their necessities and ultimately externalize their emotions and thoughts through altered behaviors. Therefore, they suggest that early identification of their deafness and initiation of early intervention services will result in better language development which, in turn, leads to better parental communication.

Smith and Thelen (2003), highlight that deaf children generally demonstrate a lack of access to the spectral and temporal cues of the acoustic-phonologic components of speech. That is, to learn to understand the speech of others and to speak themselves.

Such lack of access will in turn bring about a delay in learning to understand the speech of others and to produce intelligible speech. Due to the lack of such access, children with mild or profound hearing loss face challenges in their cognitive and psychosocial development and academic

performance. Yet, when equipped with such access through hearing technologies (cochlear implantation) and, through the influences of a highly dynamic system, these children, as Smith and Thelen (2003) argue, can begin to take command of the basic structures of their native, spoken language.

3. The Study

3.1 Aim of the study

This study aims to search the different factors that lead to resistance to learning among cochlear implanted children despite the dramatic change that implantation causes to their lives especially in terms of hearing and oral language performance.

3.2 Participants

16 speech therapists are the main participants in this study. They are currently working with cochlear implanted children in different areas of Tunisia. The aim was to enlarge the number of participants and involve as many as possible in this investigation, but it was clear that not all speech therapists are familiar with training cochlear implanted children to perform linguistically. This is why; the number was limited to 16 which is thought to be sufficiently enough.

3.3 Method

A questionnaire was delivered to a number of speech therapists who are used to working with cochlear implanted children. It is hypothesized that speech therapists are the best who can evaluate the skills of this specific category of learners, highlight their needs, detect the odds they may go through in performing their communication abilities and more importantly diagnose why they tend to show some resistance to learning. Both qualitative and quantitative analyses will be applied to scrutinize the data collected from the participants.

3.4 Results and discussions

3.4.1 Speech therapists' experience

The data gathered from the participants indicate clear differences in terms of their professional experience related to speech therapy in general, and to working with cochlear implanted children in particular. Indeed, 21, 4% of the participants have already spent more than 20 years in this specialty which can be of a paramount significance for their performance with a particular category of learners with specific needs and abilities. Meanwhile, 14, 3% of speech therapists have been involved in this field for a period extending between 15 and 20 years which will undoubtedly impact their achievement with their patients.

A considerable proportion estimated at 28, 6% of participants are reported to have a career in speech therapy ranging between 10 and 15 years which can be considered at a theoretical level at least a source of success and good performance targeting learners with limited abilities.

The last two categories of participants include speech therapists whose professional experience respectively ranges between 1 and 5 years with a proportion estimated at 21,4% and between 5 and 10 years counting for 14,3% of the total number of participants. The following figure illustrates the differences related to career in speech therapy.

Table 1. Differences in speech therapists' career

1 to 5	21.4%
5 to 10	14.3%
10 to 15	28.6%
15 to 20	14.3%
More than 20	21.4%

3.4.2 Experience in working with cochlear implanted children

As the participants in the study display a multiplicity of professional experience degrees in the field of speech therapy

in general, the data collected on their experience regarding working with cochlear implanted children equally indicate huge differences.

While such differences possibly impact their performance in both directions either positively or negatively. These differences not only give more insightful approaches and explanations to the question that this study examines, namely, why and how cochlear implanted children tend to resist learning, but also enrich our understanding of the general phenomenon of resistance to learning and opens up wider horizons to successfully and effectively cope with it.

Statistically speaking, a big majority of the study participants (42, 9%) are speech therapists whose experience in working with cochlear implanted children extends between 1 and 5 years. Meanwhile, 35, 7% of them have an experience ranging between 5 and 10 years. Speech therapists who have an experience between 10 and 15 years in working with cochlear implanted children count for 14,3% of the total number of participants. A small minority of the participants 7, 1% is represented by speech therapists having an experience extending between 15 and 20 years instructing this category of learners under scrutiny. The figure below illustrates those differences.

Table 2. Experiences in dealing with cochlear-implanted children

1 to 5	42.9%
5 to 10	35.7%
10 to 15	14.3%
15 to 20	7.1%
More than 20	0%

3.4.3. Why do cochlear implanted children resist learning?

3.4.3.1 Long periods of deprivation

It is hypothesized that cochlear implanted children tend to resist learning at the time they are restoring their auditory capacities following a medical intervention that is meant to provide these children with the information typically necessary to facilitate the development of their basic social and emotional skills.

The participants in the study were given a multiplicity of choices regarding the possible factors that can lead to resistance to learning among this category of needy people. Such factors can be of social, educational, academic, personal, interpersonal or cultural nature...

What is striking about the participants' responses is their emphasis on the factor of age as a significant motivator for their resistance to learning. Indeed, 71, 4% of them consider that restoring the capacity to hear and speak after a long period of auditory and sensory deprivation is a major factor why cochlear implanted children tend to show some reluctance to learn.

It is clear that long periods of sensory and auditory deprivation are likely to rob these children of necessary and vital opportunities to have access, acquire and master the basic skills to interact with significant others and therefore have difficulty to communicate effectively with peers and parents. More importantly, during long periods of deprivation, these children are said to lack the skill to understand others' speech and therefore to speak themselves.

As a matter of fact, the earlier the better is suggested by speech therapists. In other words, the earlier parents identify the deafness of their kids and move forward to medical intervention, the better these children will enjoy opportunities to develop and command their communication potentials.

3.4.3.2 Lack of confidence and fear of others' reactions

Looking closely at the different reasons given by the participants regarding why cochlear implanted children resist learning, a large number of them 50% opt for a lack of confidence marking these children as a leading cause of their resistance. It is no surprise again to link this lack of confidence or self-esteem to the other leading reason, namely, long periods of auditory deprivation during their infancy.

Being deprived of sensory and auditory skills and lacking access to speech cues are the principal reasons why deaf children are generally thought to suffer from limited interactions with their surrounding environment and therefore reduced communication feedback and poorly developed language skills.

Such linguistic deprivation together with a difficulty to integrate socially and emotionally followed by a delay in intervening technically and medically will have a negative impact on children's self-esteem and confidence which, in turn, will impact their learning once they have benefited from implantation.

Hand in hand with the poor self-image many cochlear implanted children demonstrate as a result of linguistic deprivation for long periods of time and the delay in receiving implantation, 14, 3% of participants attribute resistance to learning to their fear of others' reactions. Fear of being mocked or laughed at by their instructors or by their peers due to the fact that these children are going through a totally new experience as stated by 7,1% of the participants, can be a leading cause of cochlear implanted children's objection to learning. Therefore, any negative feedback will be a source of frustration for these children.

3.4.3.3 Unclear instructions and underestimation of basic skills

The data collected on the leading causes behind cochlear implanted children's resistance to learning reveal other factors which can be said to be of an external nature not related to children themselves but closely tied to speech therapists themselves. Indeed, 50% of the participants reported that resistance to learning can be due either to unclear instructions given by the instructor, or to a tendency on the part of the instructor to ignore or underestimate the basic skills that such category of learners really need.

In other words, while cochlear implanted children urgently need to have access to cues of the acoustic-phonologic components of speech. That is, to learn to understand the speech of others and to speak themselves, instructors may de-emphasize this basic need and thus divert the attention of children to other irrelevant or inappropriate skills. Hence, apparent irrelevance of the skills presented to children or the activities carried out during speech therapy sessions will result in children's frustration and consequently objection to learning as reported by 35.7% of the participants.

3.4.3.4 Redundancy and overcorrection

Closely related to the absence of clear instruction and the irrelevance of activities assigned, 28.6% of the participants consider overcorrection of children's mistakes to be a major factor behind their resistance to learning. They report that such a behavior is very likely to negatively impact children's self-image and result in an impression that they cannot learn or acquire new skills and knowledge on their own. As a matter of fact, overcorrection may be followed by some sort of negative feedback which, in turn, robs these children of the comfort and security they need as a crucial psychological underpinning to learning.

Again, 14.3% of the participants account for children's tendency to demonstrate discontent with learning in terms of redundancy that is to say repetition of the same activities and exercises during speech therapy sessions. Consequently, since these children urgently need to develop their basic social and emotional skills, widen the scope of their interaction with others, express their necessities and ultimately externalize their emotions and thoughts, and catch up with their inability to communicate effectively (due to auditory deprivation), it becomes crucial to think over a rich diet of activities to attain all these targets and more importantly to secure these children against dislike of learning.

3.4.3.5 Other diseases than deafness

Examining the participants' comments on why cochlear implanted children may express discontent with learning reveals that this behavior can be the result of other diseases children are thought to suffer from. 28, 6% of the participants confirm this link and consider autism and hyperactivity to be among the principal factors that aggravate cochlear implanted children's discontent with learning. These purely cognitive and mental diseases need to be coped with primarily and treated effectively if these children are meant to enjoy learning that would ultimately lead them to develop and command their communication potentials. The following figure summarizes different reasons of children's resistance:

Table 3. Major reasons for resistance

Long period of deprivation	71.4%
Lack of confidence	21.4%
Fear of other's reactions	14.3%
Under instruction	50%
Red undancy	14.3%
Over correction	28.6%

3.5. Major forms of resistance

Having a close look at the data gathered on the different manifestations of resistance to learning, it is obvious that cochlear implanted children show remarkably different forms of objection.

3.5.1 Silence or reticence

What is worth noting about the participants' answers to the question on the major forms resistance to learning among cochlear implanted children takes, is their agreement (75%) on silence or reticence as a noticeably apparent form these children tend to have in common when engaging in learning or responding to instructions given by therapists.

Whether it is silence or reticence and beyond the debate over the major distinctions between both terms that the literature encompasses, both reactions entail some sort of strategy to cope with a certain situation in the view of Kurzon (1997). Such situation simply relates to the learning process cochlear implanted children are meant to go through in order to build up language proficiency and conversational skills to express a variety of meanings.

Making recourse to reticence is highly problematic with this category of learners as it represents a potential handicap in activating the communicative skills that have to be learned and acquired by these children so as to develop and improve their linguistic facility.

When asked to comment on the reasons behind children's recourse to reticence or silence, the participants in the study attribute this reaction to two major factors, namely, timidity and communication fear. This account echoes Evans' (1996) identification of reticence as a major form of challenge learners may demonstrate in some particular situations.

In Evans' terms, reticence indicates some level of reserve in speech that might fall in line with undesirable affective features such as shyness and communication apprehension.

3.5.2 Being busy with peripheral activities

Instead of engaging in the learning process and actively participating in communicative tasks proposed by speech therapists, children of cochlear implants may show a kind of discontent that takes the form of occupying themselves with other activities than learning. Principal among these peripheral activism is playing as 58.3% of participants report.

In their comments on why children tend to focus on peripheral activities during speech therapy sessions, the study participants propose a number of possible motives. Anxiety is one major factor that results in diverting children's attention to other activities than learning. In its turn, anxiety results either from the irrelevance and the ambiguity of the proposed tasks and activities, or from unclear instructions.

Other participants report lack of necessary skills and required qualifications on the part of some speech therapists to deal with cochlear implanted children as leading causes of anxiety these children demonstrate as a form of challenge and objection marking their learning process.

Lack of necessary competences according to the study participants is due to the absence of training that speech therapists need to acquire in order to effectively and successfully interact with a particular category of learners who display particular disabilities and particular needs as well. It is also due to lack of coordination between different parts in charge of rehabilitation of these children (parents, speech therapists, medical staff...).

3.5.3 Crying and shouting

16.7% of participants highlight crying and shouting as an apparent form of resistance to learning that children with cochlear implants tend to show. In other words, instead of being reticent or engaging in peripheral activities, these children opt for crying and shouting as soon as they join speech therapy sessions.

According to speech therapists, this reaction is mostly noticeable during the very first sessions of speech therapy and it may persist as it may be brought to an end depending on a set of factors relating to both children and instructors.

Yet, when asked to explain why children with cochlear implants challenge learning through crying and shouting, the participants attribute it to two main reasons: first, the inability to get easily and quickly familiar with a totally new and strange electronic device introduced to the children's body resulting in entirely new and unprecedented sounds and vibrations they never had the opportunity to come across before.

Second, it is due to a feeling of being an outsider in an educational setting especially in the presence of other peers who do not hold a cochlear implant but they are there for one reason or another. In the absence of necessary expertise of speech therapists, these children become unmanageable. As a result, many of them challenge their parents and their instructors in one remarkable way, namely, joining cabinets but refusing to attend their sessions as 16, 7% of participants equally report. The following figure illustrates major forms of resistance:

Table 4. Major forms of resistance

Refusing to joim doss	16.7%
Crying and shouting	16.7%
Silence	75,00%
Being busy with other things	58.3%

3.6. Major possible solutions: Merits of speech therapy

3.6.1. Collaboration between different parts

With reference to the last two questions about how resistance to learning can be overcome and what role speech therapists play in this respect, the participants' responses were noticeably different reflecting a variety of positions toward the phenomenon and suggesting the possible solutions to minimize its impact on children's communication skills.

Following an in-depth analysis of the participants' answers, it becomes obvious that early medical intervention is a key solution to minimize the period of linguistic deprivation children are meant to go through as a result of deafness. The earlier the better is commonly and widely assumed by the participants. In other words, the earlier the parents discover and identify their children's deafness and proceed to medical intervention, the better the results will be in terms of rehabilitation and restoration of their auditory capacities and their speech facility.

Exposing cochlear implanted children intensively to speech therapy sessions at an early age and enhancing collaboration between parents and speech therapists which can be of a paramount significance in developing children's abilities to perceive sounds, enriching their linguistic repertoire and activating their cognitive competences in order to facilitate communication and integration with other peers in society.

Parents and speech therapists are complementary of each other. As such, it is crucial to actively involve parents in the learning process of their children and raise their awareness to the role they play at home with regard to guiding their children to discover new things around them, label them using concrete terms rather than sign language.

In the context of highlighting parents' role in facilitating learning, participants advocate training parents themselves on how to deal with their children at more than one level: maintaining the implant itself to avoid any possible breakdown and thus ensure a high quality of sounds reception by the children, following up with children in case they suffer from any kind of trouble and contact specialists to look for solutions, and providing all parts involved in children's rehabilitation with necessary data in order to guarantee success and good results.

Another possible solution suggested by the study participants is facilitating and accelerating the procedures leading to the quick integration of children with implants in educational settings in order to help them consolidate their auditory and sensory abilities, acquire the necessary cues for communication and if possible adapting school curricula to be in conformity with their particular needs and capacities and training instructors on effective techniques of dealing with and instructing such category of learners.

Whether cochlear implanted children receive learning from their parents or from their speech therapists, the participants in the study insist that such learning should be marked with a set of basic features principal among these is its playful and appealing nature so that children never lose focus and interest. Parents and speech therapists should always give positive feedback and stimulate learners to pay more attention to the learning process.

All words and items children with implants are exposed to should be related to their environment and to the context of their life. In other words, parents and speech therapists are called to contextualize their instruction to facilitate children's language learning and development. Using pictures and

visuals and avoiding language of signs is of great importance in this regard.

3.6.2. The role of speech therapists

A great amount of responsibility for reducing the negative impact of resistance to learning on children's language acquisition and development is held by speech therapists as the study participants contend.

A quick look at their responses to the last question of the questionnaire reveals an emphasis on their role in helping deaf children restore their auditory and sensory competences, take command of the basic structures of their native spoken language, learn how to use language to externalize emotions and necessities, and consequently integrate with peers and family.

In their view, it is speech therapists who actively involve these deprived children in an educational setting previously inaccessible and totally unfamiliar to them due to deafness. Their contribution to this transition equally includes children's parents as speech therapists have the skill to guide these parents to the most suitable and effective techniques of dealing with a particular category of learners in a stage of radical transition.

Technically, speech therapists are the primary source of language that deaf children receive once they benefit from implantation. Thanks to the diverse techniques they deploy they are able to present the input in easiest ways which will impact positively not only their linguistic repertoire but also the children's self-confidence and image.

Thanks to the close relationships they have with these children, speech therapists are the best who diagnose, discover their needs and evaluate their skills and competences. Thus, they have the capacity to provide the necessary input in simple ways, propose suitable techniques to cope with learning difficulties and more importantly suggest ways to restore the children's self-confidence and build a very positive image of their own capacities.

A number of participants who responded to the questionnaire highlight the role of speech therapists in facilitating learning especially during the first stages thanks to the use of efficient techniques and methods such as Gelbert Method which targets children with learning disabilities in general and cochlear implanted children in particular. This method consists in breaking words into small parts and using rhythms to motivate children to learn easily and comfortably.

Conclusion

Exploring the leading causes behind children's objection to learning will be of great significance once it complies with an investigation of the outstanding forms it takes and basically the possible solutions and recommendations to reduce its effects. It is clearly evident that personal and interpersonal, social, educational and psychological factors overlap in different ways to bring about this phenomenon which threatens not only ordinary children regarding language learning and development, but also children with cochlear implants in particular due to the specific disabilities they display as a result of their state of deafness and muteness.

It is also very obvious on the light of the participants' responses that coping with the learning difficulties that cochlear implanted children may demonstrate is not an easy task to all parts closely interacting with these children like parents, speech therapists and teachers at school. Much collaborative work is to be done to minimize the impact of

such difficulties and the effects of periods of linguistic, moral and emotional deprivation.

References

Alpert, B. 1991. Students' resistance in the classroom. *Anthropology and Education Quarterly*, 22(4): 350-366

Brookfield, S. D. *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom, Second Edition*. San Francisco: Jossey-Bass, 2006

Felder, R. M. (2011). Hang in there! Dealing with student resistance to learner-centered teaching. *Chemical Engineering Education*, 45, 131-132.

Knight Abowitz, K. 2000. A pragmatist revisioning of resistance theory. *American Educational Research Journal*, 37(4): 877-907.

Langhout, R. D. 2005. Acts of resistance: Student (in) visibility. *Culture & Psychology*, 11(2): 123-158.

Lather, P. 1991. Getting smart: Feminist research and pedagogy with/in the postmodern. New York: Routledge.

Lindquist, B. 1994. Beyond student resistance: a pedagogy of possibility. *Teaching Education*, 6(2): 1-8

Marschark, M. 1993. Psychological development of deaf children. Oxford University Press, New York.

Olafson, L., & Field, J. 2003. A moral revisioning of resistance. *The Educational Forum*. 67(2): 140-147.

Oghalai JS, Caudle SE, Bentley B, et al. Cognitive outcomes and familial stress after cochlear implantation in deaf children with and without developmental delays. *Otology Neurotol.*: official publication of the American Otological Society,

American Neurotology Society [and] European Academy of Otology and Neurotology. 2012; 33(6):947-956. Uses the MSEL and VABS tests to compare cognitive outcomes in implanted children with additional disabilities.

Prince, M & Felder R, M (2007). The many faces of inductive teaching and learning. *Journal of College Teaching Science*, (36), 5

Schorr EA, Fox NA, van Wassenhove V, Knudsen EI. Auditory–visual fusion in speech perception in children with cochlear implants. *Proc Natl Acad Sci U S A*. 2005; 102:18748–50.

Seidel, S.B., & Tanner, K.D. (2013). "What if students revolt?"- Considering student resistance: Origins, options, and opportunities for investigation. *CBE - Life Sciences Education*, 12, 586-595.

Smith LB, Thelen E. Development as a dynamic system. *Trends Cogn Sci*. 2003; 7:343– Spencer PE. Language development of children with cochlear implants. In: Christiansen JB, Leigh IW. *Cochlear Implants in Children: Ethics and Choices*. 2002: 222-249.

Tolman, A. O., J. Kremling (Eds). 2017. *Why Students resist learning: A practical model for understanding and helping students*. Sterling, Virginia: Stylus Publishing, LLC.