

**The language acquisition .
The case of children unilateral hearing loss.
A psycholinguistics approach**



**Prof: HAMIDANI AISSA
Laboratoire: le discours argumentative
UNIVERSITY OF TIARET-ALGERIA**

ABSTRACT:

The present article aims at discussing the process of verbal communication for children with partial or total deafness; and to define the importance of language acquisition based on the results provided by psycholinguistics in its study of language and stages of acquisition, and on what the modern linguistic theories offer in its interpretation of the linguistic phenomena, and the findings of field research and scientific laboratories, The presence of some organic diseases, especially at the level of the auditory apparatus, and psychological problems that hinder this sample of children from dealing in spoken language, and the fate of their ability to communicate with others. This research attempts, also to sensitize all groups of society to the necessity of helping this class, in order to integrate into the linguistic community.

keywords:

Language; Partial total; Partial deafness; language acquisition; psycholinguistics; Auditory apparatus.

ملخص

إنّ الهدف من هذه الورقة البحثية، هو تحقيق عملية التواصل اللفظي للأطفال الذين يعانون من الصمم الجزئي أو الكلي؛ وتحديد أهمية الاكتساب اللغوي على أساس النتائج التي يوفرها علم النفس

اللغوي في دراسته للغة ومراحل اكتسابها، وعلى ما قدّمه النظريات اللغوية الحديثة في تفسيرها للظاهرة اللغوية، ونتائج البحوث الميدانية والمختبرات العلمية من وجود بعض الأمراض العضوية، وخاصة على مستوى الجهاز السمعي، والمشاكل النفسية التي تمنع هذه العينة من الأطفال من معالجة اللغة المنطوقة، ومدى قدرتهم على التواصل مع الآخرين. يحاول هذا البحث أيضًا توعية جميع الفئات الاجتماعية على ضرورة مساعدة هذه الفئة من أجل الاندماج في المجتمع اللغوي.

كلمات مفتاحية:

اللغة؛ الصّمم الكلي؛ الصّمم الجزئي؛ الاكتساب اللغوي؛ علم النفس اللغوي؛ الجهاز السمعي.

Résume:

Le présent article vise à réaliser le processus de communication verbale pour les enfants atteints de surdit  partielle ou totale; et de d finir l'importance de l'acquisition du langage sur la base des r sultats fournis par la psycholinguistique dans son  tude du langage et des  tapes de l'acquisition, et sur ce que les th ories linguistiques modernes offrent dans son interpr tation des ph nom nes linguistiques, et les r sultats de la recherche de terrain et des laboratoires scientifiques, La pr sence de certaines maladies organiques, notamment au niveau de l'appareil auditif, et les probl mes psychologiques qui emp chent cet  chantillon d'enfants de traiter en langage parl , et le sort de leur capacit    communiquer avec les autres. Cette recherche tente  galement de sensibiliser tous les groupes de la soci t    la n cessit  d'aider cette classe afin de s'int grer dans la communaut  linguistique.

MOTS-CLES:

langue; Surdit  totale; Surdit  partielle; acquisition du langage; psycholinguistique; Appareil auditif.

Introduction:

It is generally known That human language is a gift from God to man, he can interacts with others, and expresses his feelings and requirements, so the linguistic, sociological, and psychological try to propose many definitions, analyzes and interpretations, each one of their disciplines try establish the linguistic theory from its angle.

What will be the future of that group that was deprived of an important and necessary sense, in order to communicate with others, and express its

ambitions and aspirations, which is the category of deafness - partial or total deafness?

Can we say that; the linguistics with its various branches, especially psycholinguistics, carry about the obstacles of language communication of deaf child? If the answer which we propose is “yes.” What are the most important alternatives that I have proposed in order for this class of society to lead a normal life, like the rest of the same linguistic community .

About language:

Across the planet; each linguistic community use its own signs and speech in order to communicate with each other, we use this human rules to ask for our needs, complain and to explain other things. Saussure ‘s justification for this approach is proposing his idea about the biological measures of language; which exist in the form of a sum of impressions deposited in the brain of each member of a community, almost like a dictionary of which identical copies have been distributed to each individual Language exists in each individual, yet is common to all.¹

Thinking to find a community without language is similar to see a smoke without fire. It’s unbelievable .Absolutely, Language is the communicative process by excellence in any society, it is also the most important means of communication between humans rather than a lot of kinds of modern information technologies, generally the language is a precious gift by the God to this humanity, for this raison several disciplines are concerned by this phenomenon of language as psycholinguistics, bio linguistics; and sociolinguistics; it means that it is so difficult to have a clear and definite vision of “*the exact place that language currently occupies in all the domains in which it has become an object of study or model of investigation*”².

So; according to (Julia) the language is characterized by the rapid uses as the model of expression; that becomes indispensable in all fields of life, In addition, as mentioned before, Individuals use language to express their sentiments, feeling and, enthusiasm. For instance, they may recollect when they were glad, they gather their emotions and encounters in a book called journal. At the time of using language as an instrument to communicate, they require not consider or mind who the audience or perusers. They use language just for private purposes. As a way to communicate articulation, it tells everything that is covered up in people hearts and psyche ³ .I think that a several contemporary linguists use

1 -course in general linguistics » F-de Saussure; philosophical library; New-york 1959; P19

2 -see « le langage cet inconnu »Julia Kriesteva; Editions du seuil; 1981 ,P214

3 - Justice, L. M., Meier, J., and Walpole, S. (2005). “Learning New Words From Storybooks: An Efficacy Study With At-Risk Kindergartners.” Language, speech, and hearing services in schools, 36.p20

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the term “communication” without talking about the others functions of language, except some names of them .Although this function is the most widespread form of touching on the language subject through the articles, results in conferences, and scientific publications...etc

Thus, The role of language in communication is essential in this procedure of connections .Language shapes reality, and it cut off points or which thoughts and ideas are accessible in a specific circumstance. In all parts of individuals’ life, engage with, resist, reframe with, the meanings available through language, , to offer significance to each part of life. Thoughts and understandings accessible through language shape their training in an assortment of routes in ordinary collaborations⁴.

Consequently, the ability of to communicate is the most essential, and indispensable element of the language faculty, everywhere we are obliged to use it in different contexts in order to express the human affiliation need, build and establish our relationships.

Practically, the function of language is communication or usually called by speech function; people use language to give and receive messages among themselves. It is difficult to see adequately the functions of language, because it is so deeply rooted in the whole of human behaviour that it may be suspected that there is little in the functional side of our conscious behaviour in which language does not play its part⁵.

I have mentioned below that That nobody is able to limit the language functions, insisting only on the “expression” role. The linguistics must take into consideration that the Language must be investigated in all the variety of its functions⁶.

For **Halliday**, language is always a resource for making meaning, and even the infant who cannot talk is developing language, and thereby, learning how to mean. Just as the infant cannot walk, but is learning how to use his body, he cannot talk either at least not in the language of his mother tongue. Nonetheless, the child uses protolanguage (alternately referred to as proto conversation) in order to express meaning, even before he has words in his communicative repertoire. His protolanguage, or child tongue, is created through interactions with native speakers of the mother tongue (i.e., caregivers, siblings, etc.). The child is learning through such occasions, and even though his protolanguage consists of basic content/expression pairs (not yet words, let alone higher order

4 -- Justice, L -Ibid ,P18

5 -Newmeyer ,Frederick J.(2000). Language Form and Language Function. London:The MIT Press.p89

6 -see more about this Argumentation(six functions of language) “Jakobson, R. (1960). Concluding Statement: Linguistics and Poetics, in Style in Language, T. Sebeok, Ed. Cambridge: MIT Press,P57

systems), his language nonetheless expresses meaning and performs concrete functions in the world.⁷

Now; it's clear that the language exists for a lot of reasons according to its capacity, utilize complex communication and transmission of knowledge, express of identity and feelings, and sentiments .This is probably the function that most people would select first as the principle purpose of language. Obviously, it is an extremely important function. But as one has just seen, the relationship between language and meaning can be problematic. Communication is a two-way process. On the one hand people need to be able to use language to express ourselves to others, and, conversely, they need it in order to understand what they are communicating to them . There are of course a variety of reasons which may prompt the act of communication .People use language for requesting, informing, ordering, promising, and reprimanding, to mention just a few. In all these cases they could say that language is being used to perform certain speech acts, or, more specifically, 'direct' speech acts⁸

Linguistic sign: The “Course of General Linguistics “apparition is an announcement of rupture which is the most mentioned since the 19th century, particularly from historical and comparative linguistics.

This scientific work explains that, from a synchronic perspective, language must be seen as a system of differences in which each linguistic unit does not exist by itself, but in the relationships it maintains with other units.

For Saussure, ideas do not precede words, just as language does not represent thought. Thought is not first. It actually tells us that thought is inseparable from language” Psychologically our thought-apart from its expression in words- is only a shapeless and indistinct mass. Philosophers and linguists have always agreed in recognizing that without the help of signs we would be unable to make a clear-cut and consistent distinction

between two ideas. Without language, thought is a vague, uncharted nebula. There are no pre-existing ideas, and nothing is distinct before the appearance of language”⁹

For Ferdinand de Saussure, the linguistic sign is almost double and consists of a conceptual element (signified) and an "expressive" element or expression (signifier). The link between the two parts of the sign is arbitrary or unmotivated . These views give a better understanding of what will be said after, the signified

7 -Halliday, M.A.K. (2002). Linguistic studies of text and discourse. London: Continuum International Publishing,p:141

8 -Finegan, E. (1994) Language: Its Structure and Use, 2nd ed .New York: Harcourt Brace Jovanovich.p89

9 - course in general linguistics » F-de Saussure; philosophical library; New-york 1959; P112

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and the signifier are the two complementary faces of the concept of linguistic sign developed by Saussure and, following him, by the Structuralist School. The linguistic sign unites, not a thing and a name, but a concept and a sound-image. The latter is not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression that it makes on our senses. The sound-image is sensory, and if I happen to call it "material, " it is only in that sense, and by way of opposing it to the other term of the association, the concept, which is generally more abstract.¹⁰

To get rid of illusions, we must first be convinced that the definition of the linguistic sign proposed by Saussure poses an important question of terminology. He said " I call the combination of a concept and a sound image a sign, but in current usage the term generally designates only a sound-image, a word, for example {arbor, etc.}. One tends to forget that arbor is called a sign only because it carries the concept "tree, " with the result that the idea of the sensory part implies the idea of the whole."¹¹

There is a real problem in order to understand the relationship between the terms used by Saussure according to the definition of linguistic sign .The Ambiguity would disappear if the three notions involved here were designated by three names, each suggesting and opposing the others. I propose to retain the word sign [signe] to designate the "whole and to replace concept and sound-image respectively by signified [signifié] and signifier [signifiant]; The bond between the signifier and the signified is arbitrary.Since I mean by sign the whole that results from the associating ofthe signifier with the signified, I can simply say: the linguistic sign is arbitrary.¹²

Let's take this example, The idea of "sister" is not linked by any inner relationship to the succession of sounds s- ö -r *which serves as its signifier in French that it could be represented equally by just any other sequence is proved by differences among languages and by the very existence of different languages: the signified "ox" has as its signifier b.ö.f* on one side of the border and o-k-s (Ochs) on the other¹³.

The Deaf Class, Psycholinguistics Vision:

Human language is the best means of communication system that reflects humanity behaviour in each linguistic community . logically nobody can live in

10 IBID .P66

11 IBID”C.G.L .P67

12 - course in general linguistics » F-de Saussure; philosophical library; New-york 1959; P67

* sœur (in French language)

* Bœuf (in French language)

13 -IBID,P67-68

isolation from the society, and language cannot be isolated from its social framework too.

The use is the ultimate guarantee of the survive to any language in the world.so how many languages have become extinct, because the people did not care about it. Many researchers agree that language maintenance depends heavily on language use. "The phrase "language death " sounds as stark and final as any other in which that word makes its unwelcome appearance. And it has similar implications and resonances.to say that a language is dead is like saying that a person is dead .it could be no other way for languages have no existence without people language dies when nobody speaks it any more."¹⁴

The phonetic, and linguistic studies have confirmed that a normal child can acquire his mother tongue without any efforts or difficulties considering the genetic, psychological and social factors surrounding this complex process. So, not only does the child who is born severely or profoundly deaf need a great help by teaching him/her how to develop his/her communication skill, but the children whose deafness is less severe as well.In fact this; The integrity of the physiological organs (speech and hearing) is one of the basic and important investigations that must be taken into account in the matter of our approach to the phenomenon of linguistic acquisition and development, so those who are interested in this aspect recommend the need to note the language development of the child and ensure the integrity of his hearing system, because it is the dominant sense in learning to understand spoken language. Consequently, the child Imitates the sounds by hearing. Infants everywhere seem to make the same variety of sounds, even children who are born deaf¹⁵.At this moment; a hearing impaired child feels that he is different from the rest of the children, and therefore his isolation is strengthened, so he tends to introvert, and the situation may worsen until this child has serious mental illnesses that threaten his entire life.

The process of communication is a mutual effect between the two parties of the message (the sender and the addressee) in a specific social context, directly or indirectly, and this depends on the auditory apparatus (receipt sound waves), but this vital process is exposed to many Of the disturbances, especially at the level of hearing, because it is - in our opinion - the axis of communication between members of the same linguistic group, and without hearing, nobody will be able to acquire linguistic sounds.

We should also bear in mind that a Linguistic sound depends on three basic levels, each stage corresponds to a type of phonological study, which is called

14 -Language Death »; David Crystal; Cambridge university press; first published 2000; P01
 15 -see- Lenneberg, E. H., Rebersky, F. G. and Nichols, I. A. (1965) The vocalization of infants born to deaf and hearing parents. Human Development,; P8

The language acquisition .the case of children, unilateral hearing loss. A psycholinguistics approach——Faslo el-khitab (phonetic branches)¹⁶ . 1-Articulatory phonetics is the study of the way speech sounds are made ('articulated') by the vocal organs, i.e. it studies the way in which the air is set in motion, the movements of the speech organs and the coordination of these movements in the production of single sounds and trains of sounds;

2. Acoustic phonetics studies the physical properties of speech sound, as transmitted between the speaker's mouth and the listener's ear;

3. Auditory phonetics studies the perceptual response to speech sounds, as mediated by ear, auditory nerve and brain, i.e., its interests lie more in the sensation of hearing, which is brain activity, than in the psychological working of the ear or the nervous activity between the ear and the brain. The means by which we discriminate sounds – quality, sensations of pitch, loudness, length.

The nature of this article obliges me to focus more on the third type of species mentioned previously, which is auditory phonetics, because many phonologists limit themselves almost exclusively to the phonational act, i.e. the production of sound by the vocal organs (larynx, mouth, etc.) and neglect the auditory side. Their method is wrong. Not only does the auditory impression come to us just as directly as the image of the moving vocal organs, but it is also the basis of any theory. Auditory impressions exist unconsciously before phonological units are studied; our ear tells us what b, t, etc, are Even if all the movements made by the mouth and larynx in pronouncing a chain of sounds could be photographed, the observer would still be unable to single out the subdivisions in the series of articulatory movements. He would not know where one sound began and the next one ended. Without the auditory impression, how can we say that in fal, for instance, there are three units rather than two or four? But when we hear a sound in a spoken chain, we can identify it immediately.¹⁷

The Stage of Reception:

Previously, we have mentioned that the third type which is necessary for this research may be called physical or acoustic, compared to two other stages(psychological. physiological)¹⁸Further, any communication requires a listener, as well as a speaker. So the last stages are the reception of the sound waves by the listener's hearing.

Really, in this topic, I find myself in front of certain terms, unable to use them correctly, like : to hear /to listen. In this step, I decided to consult many specialized dictionaries . Let's read this comparison, to hear: to receive a sound by

16 - A Dictionary of Linguistics and Phonetics- David Chrystal. – Cambridge University Press, 1997. – P. 291-292.

17 -see-F de Saussure –CGL,P38

18 - Stevick, Earl W. Toward a Practical Philosophy of Pronunciation: June 1978. – P.145

chance or in a passive way with your ears. To listen : to make conscious or active effort to hear something¹⁹

An other reference, it's rather clearer than the first one .To hear: catch sounds with your ears; get news or information, e.g :can you hear that noise? To listen: to pay attention to what you hear, e.g : listen carefully to what I am saying.²⁰ At this moment; I made sure that listen term is efficacy, and more reliable. Certainly, The same terms problem, that you will meet in the Arabic research about the Auditory apparatus; How?

there are three terms in use: samaa (السَّمَاع); ISGHAA (الإصغاء), INSAT (الإنصات), and each term has its own explanation according to the context.

قال الله تعالى: "وَإِذَا قُرِئَ الْقُرْآنُ فَاسْتَمِعُوا لَهُ وَأَنْصِتُوا لَعَلَّكُمْ تُرْحَمُونَ"

"so when the Qur'an is recited, then listen to it and pay attention that you may receive mercy"²¹

In my opinion, translation should be revisited, and linguist professionals Linguistics professionals should be participle in such scientific work .In fact; I propose this translation : "so when the Qur'an is recited, then hear to it and listen that you may receive mercy" according to the lexically references cited below, and I noticed that two synonyms are employed in the same context.

Depending on scientific and anatomical research, the function of the ear is to receive acoustic vibrations (sounds) –as it is aforementioned-and to convert them into signals transmissible by the auditory nerve to specific areas of the brain where they will be analysed, and the sense of balance (equilibrium) maintained. So, we cannot deny that our perceptual world of sound is the result of the complex processing that our brain applies to these signals.

The anatomy and physiology of the ear: anatomically The human ear, can divided into three parts:

outer ear includes the pinna (visible part) and the external ear canal(auditory canal). It plays a relatively minor role in the hearing process. The auditory canal is a 25 mm long transverse canal; open and closed at its internal end by the eardrum. Sound waves arriving at the external ear are transmitted through the ear canal, and put the tympanic membrane (eardrum) in vibration. This canal serves as an acoustic resonator, or a sound amplifier .generally, the pinna helps the brain identify the sounds originated²².

Middle Ear

19 -Oxford Dictionary –oxford university press; 3 rd edition2011; P373/467

20 -see Basic English Dictionary (IPN) Algeria; P104/129

21 -The Qur'an .verset 7 :204

22 -Edward Matthei,Thomas Roeper" introduction à la psycholinguistique"BORDAS.PARIS 1988,P13

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Contains three lever-teletype bones called; the ossicles(the hammer (malleus), anvil (incus), and stirrup (stapes).; which are the mechanical link between the eardrum and the inner ear. These ossicles, suspended in a cavity of the skull, transmit the vibrations of the eardrum to a membrane.

The main function of the middle ear is to amplify the vibrating energy which will be transmitted to the inner ear. It is estimated that the presence of the eardrum and the ossicles multiplies by 35 the force of the vibrations which enter the oval window²³.

Inner Ear:

It is in the inner ear that the vibrations produced by the sound waves are finally converted into nerve impulses by help the cochlea. This main structure is a membrane filled with liquid. When the bones hit the oval window; the liquid is repelled and starts to vibrate. The cochlear duct contains the organ of CORTI. This last is comprised of inner hair cells that turn the vibrations into electric neural signals, these cells are located near the endings of the auditory nerve. When they are tilted, they stimulate the fibers of the auditory nerve which transmit this information to the brain²⁴.

Deaf child. What about the alternative?

The knowledge presented in this phase is intended to bring the reader to the highest level of understanding of the normal child Who does not have any problems related to the safety of his audio system. But what can we offer to children who have been deprived of this basic sense in order to live a normal life?

I am sure, and one can deny that a Many disciplines and specialities did not hesitate to lend a hand to this class of society, foremost in this list : linguistics, sociolinguistics, and psycholinguistics ... etc. They take this category as a Primary goals, in order to integrate them into their linguistic community .

Psycholinguistics :The term psycholinguistics appears to have first been used to refer psychology of language in 1920.however; the birth of psycholinguistics as a discipline is often linked to a seminar at Cornell University in 1951 ²⁵.

Psycholinguistics is an interdisciplinary field of study in which the goals are to understand how people acquire language, how people use language to speak and understand one another, and how language is represented and processed in the brain. Psycholinguistics is primarily a sub-discipline of psychology and linguistics, but it is also related to developmental and cognitive psychology,

23 -Denes P.B,et Pinson E.M” the speech chain. The physics and biology of spoken language “Garden City ,New Work.ANCHOR,1973,P89

24 -IBID- Denes P.B,et Pinson E.M” ; 89-90

25 -Introducing Psycholinguistics ‘PAUL WARREN; Cambridge university press; 1ST PUBLISHED-2013,p06

neurolinguistics, and speech science. The purpose of this book is to introduce the reader to some of the central ideas, problems, and discoveries in contemporary psycholinguistics²⁶. It is made up of the following areas:

Language acquisition: Phonology, Lexicon, Syntax, Metalinguistic development: language as an object for reflection.

Language processing mechanisms: understanding and production; recognition / production of speech sounds, recognition / production of spoken words, analysis / construction of sentences, comprehension of texts / planning and organization of speech.

Language disorders: Disorders related to brain damage, Developmental disorders, Aging disorders

Brain and language: The neuro-anatomical and neurophysiological bases of functioning, the genetic determinants of language.

Language and thought: Is there a (mental) life without language? Does language determine our vision of the world?

Language in its different forms: reading and written production, visual languages of deaf communities.

Language acquisition is one of the most fascinating facets of human development. Children acquire knowledge of the language or languages around them in a relatively brief time, and with little apparent effort. This could not be possible without one crucial condition, which is listening/Hearing ability²⁷.

The hearing impairment imposed the isolation of the child at the start of speech processing, so that at that time he does not communicate with his community. He cannot understand the world around him. It is difficult for him to express his feelings, his emotions and his emotional, cognitive development, and biological needs, because hearing impairment or partial hearing loss²⁸ affects "the child's language in all aspects of language development, A hearing impaired child will become dumb if he does not have effective training opportunities, due to its lack of adequate linguistic reinforcement by others.

Scientifically, the ear can perceive the sound between (20 / 20, 000 cycles per second), but when its frequency is less than 16 Hz (Hertz), this sound is under hearing, so; the human ear cannot receipt the frequency which is less than 16 or 20 cycles / s) because these sounds are down the hearing circle, on contrary if the sounds exceeds (20.000 C / s) they are not perceived by the normal ear because

26 -Fundamentals of psycholinguistics; EVA-M-FERNANDEZ; and HELEN SMITH CAIRNS- first edition 2011; P/1-2

27 -IBID, Fundamentals of psycholinguistics; P97

28 - (The loss can occur in one or both ears, and may be mild, moderate, severe, or profound.).IBID,P157

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they are above the hearing circle, but this type of sounds may damage the hearing system partly or completely²⁹.

We should not confuse deafness and hearing impairment, all depending on the audiometer unit, which is the decibel (db).The Deaf, who loss about 92 decibels he will be unable to use the sense of hearing to meet its essential needs for life. Yet, the child who suffers from auditory deficiency is between 26-92 decibels; he must use hearing aids . So the hearing impaired child is not the deaf as some people call him, but he is the person who lost part of his auditory ability even though his sense of hearing do its function, but with less efficiency.

Audiometric Classification of Hearing Impairment³⁰

The average tone loss is calculated from the loss in dB at frequencies 500 Hz, 1, 000 Hz, 2, 000 Hz and 4, 000 Hz. Any frequency not perceived is noted at 120 DB* loss

In case of asymmetric deafness, the loss level in dB is multiplied by 7 for the best ear and by 3 for the worst ear. The sum is divided by 10.

Normal or subnormal hearing: the average loss does not exceed 20 DB. It may be a slight tonal impairment without social impact.

Mild hearing loss: hearing loss is between 21 dB and 40 db. Speech is heard in normal voice. It is hardly perceived in a low or distant voice. Most familiar noises are heard.

Average hearing loss: speech is perceived if the voice is raised. The subject understands better by watching talk. Some familiar noises are still heard.

First degree: The average tone loss is between 41 dB and 55 DB.

Second degree: The average tone loss is between 56 dB and 70 DB.

- Severe hearing impairment: speech is heard loudly near the ear. Loud noises are heard.

First degree: the average tone loss is between 71 dB and 80 DB.

Second degree: the average tone loss is between 81 dB and 90 DB.

Profound hearing impairment: no perception of speech. Only very loud noises are perceived.

First degree: the average tone loss is between 91 dB and 100 DB.

Second degree: the average tone loss is between 101 dB and 110 DB.

29 - IBID, Fundamentals of psycholinguistics; P156-159

30 - Rondal (j) et Seron(x) « Troubles du langage bases théoriques -diagnostic et rééducation » MARDAGA,P554-555

* DECIBEL (symbol: db) : a unit used to measure the intensity of a sound or the power level of an electrical signal by comparing it with a given level on a logarithmic scale- From Wikipedia, the free encyclopedia.

Third degree: the average tone loss is between 111 dB and 119 DB.

Total hearing impairment - Cophosis: the average loss is 120 DB. Nothing is perceived.

Alternative Treatment Methods: Medically, the cochlear implantation is necessary for this class, but there are many alternatives:

Auditory Training: It is one of the recent tendencies in the education of hearing impaired children. so, the first hearing aids were called "auditory trainers «in order to assure an everyday communication. Hearing aids are no longer used only for training so that it is no longer appropriate for the measurement of hearing and the fitting of hearing aids to be considered a part of auditory training, In a moderm model of audiological rehabilitation³¹.

It is imperative that the teacher treating this type of disability has a great skill in listening to children with problems without appearing to be difficult to accept these individuals, While encouraging this category to speak, and guiding them to the correct use of sounds.

Lip- reading: For deaf child, lip-reading is an essential addition of hearing aids in order to optimise their speech understanding. Recent studies have shown an existing link between lip-reading skills and cognitive functions, and a lot of results show that these patients improved their lip-reading skills far better when conventional learning was combined with visual attention and working memory training³².

The aim of this method is to develop the skill of the hearing impaired person to read and understand lips, by following the movement of the mouth and lips of the trainer through these physical cues during speech. I am sure that the efficacy of this method depends clearly on the deaf ability to understand these movements, also, the signals accompanying the speech process.

Sign language: Research on sign languages seriously began for the most part in the 1960s when linguists and psycholinguists addressed themselves to this newly discovered area. But really, are we convinced that this method is a language ? Saussure said" Language is a system of signs that express ideas, and is therefore comparable to a system of writing, the alphabet of deaf-mutes, symbolic rites, polite formulas, military signals, etc. But it is the most important of all these systems."³³

Before considering the essentials of sign language, it will be useful to examine a related means of communication that is used by hearing persons: gestures. Once the role of such gestures is understood, they will not be confused

31 - Alpiner. J.G., & McCarthy, P.A" Rehabilitative audiology: Children and adults." 1987.p10

32 -IBID- Alpiner. J.G., & McCarthy; P12-13

33 -F-de Saussure-CGL; p16

The language acquisition .the case of children, unilateral hearing loss. A psycholinguistics approach——Faslo el-khitab with the signs of a sign language. It is necessary for the reader to make this distinction. For, although gestures may be complex, they are only collections of signs that are limited in scope and do not form a true language.

The trainer use gestures to communicate a variety of types of messages, by moving the hands and arms; by moving the hands; the sticking out of the tongue by children, the raising of the middle finger, by making a circle with the thumb and index finger ...etc.³⁴

I believe that the teachers make colossal efforts, in using these alternative methods, because they assume their responsibilities; and they consider this class of our linguistic community; a normal individual.

Finally, the institutions should rely on an intensive program to teach this kind of children, accompanied by specialists in this field, and we cannot rely solely on alternative methods and medical examinations. Rather, we should involve linguists with all its branches in this process. During training and practice exercises to pronounce the sounds correctly and promote conversation with motivation, encouragement and psychological interest of the family side and specialized centers, like the new one, which is installed in Tiaret.Tissemsilt, and other regions all over my country.

The family of a deaf child must accompany and sensitize him/her, and link a best contact frequently with him/her, take advantage of facial expressions and gesticulation performed by others; So as not to feel that it is a heavy burden for this family .

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