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Title

Possible Reasons and Preemptive Diagnosis of Speech and Language Delay and Disorders among Preschool Children

(Case Study: Six Children (aged from three to five) at Public Center of Mental Diseases in Mostaganem)

Dissertation submitted in fulfillment of the requirements of Master's Degree in *Psycholinguistics*.

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Dedication

I dedicate this humble and honorable work for my dearest parents

You have given me an endless love, care and precious senses of supplication. I

Love you sincerely...I know you are proud of me. For all my family members...

For all my brothers and sisters and cousins ...My sweet, lovely friends I will

miss you so. Thanks for appreciating friendship perfectly... To my darling

brother 'Abed nour' for whom I'm writing my issue dissertation. For all who

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Abstract

Speech and language delay and disorders are the common development problems in which child's cognitive, social and linguistic milestones are imperiled and exhibit with an abnormal deviation. However, the main reasons behind such problem are unknown. The current study has to major goals. First, to investigate the obvious reasons behind child's speech language adversity. Second, to demonstrate whether the signs of speech and language impairment are reliable for parents to make a preemptive diagnosis for such problem. The sample was selected from the public center of mental diseases in Mostaganem interviews were conducted by the target groups namely the speech therapist's and parents' interviews. The findings illustrate that the major reasons of speech and language impairments among preschool children in the specific area of the research are inborn, namely, genetic and neurological. Whereas, some of them are underlying by some of psychosocial risk factors. Moreover, an overall improvement invited by research results indicates that most parents in the current research can't be aware about the necessity of the early intervention and diagnosis for the speech therapy treatment. All in all, the results suggest recommendations for early speech treatment of children at highest risk of speech and language impairment, to identify who most in need of intervention and effective speech therapy sources.

Key words: Speech, Language, Speech and Language Delay and Disorders.

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General Introduction

Background of the study

Speech and language act as the main elements that construct communication processes between human beings to exchange attitudes, provide an input (instructions) and output (activities). Communication is the core concept in which meanings can be decoded and transmitted. A lot of sophisticated processes contribute in functioning the speech and language reception and production in the brain. Normal children systematically follow the cognitive, social and linguistic milestones. According to Chomecky's theory of the universality of grammar, all ordinary children acquire a limited number of utterances and they progress through the same developmental language stages and absolutely language acquisition accomplished through the biological inner capacity. The cognitive maturity of conceptualizing the language signs as well as the interaction under the guide and the assisted performance of parents and environmental surroundings. Whereas, children with speech language delay and disorders, can exhibit an obvious deviations and abnormalities in milestones development and language acquisition.

In this regard, speech language delay and disorders refer to the common developmental difficulty in childhood in which child obstacles to receive and produce speech sounds in the right sequence and misunderstood abnormal language. Interestingly, unusual cognitive, social, signs can be emerged the child is likely to be more frustrated and anxious when others unable to answer most of their needs and requests because they can't grasp clearly what he is trying to say. Hence, may allow parents to search for that issue for speech therapy intervention. Importantly, the reasons behind speech language delay and disorders are till under debate but the famous ones can be inborn namely: genetic (family history of speech language impairments), neurological (brain's trauma and injury) or it can be acquired by environmental risk factors (emotional deprivation, parents' neglect and absenteeism, divorce, less linguistic communicative environment). A side from, the awareness and the early intervention of parents toward speech language delay an disorders is initial to serve the child as well as provide those who design and pose speech therapy programs by a better upholding.

Motivation

Actually, such a case has been personally experienced the fact that urged this investigation to be neatly accomplished whereby the possible reasons behind speech and language deficiency among preschool children are going to be revealed.

Aims of the study

The study seems significant for the aims it strives to attain motivation. First to, examine speech therapist practices in a public center, their approaches in speech treatment and screening, and the obstacles that impede those practices. The second aim is to find out the existent problems of speech language delay and disorders and the reasons or the risk factors underlying it. The third aim is to suggest an appropriate ways that may contribute to raising parents' awareness and early speech therapy diagnosis and treatment.

Research Questions

- What are the famous reasons and risk factors underlying speech language impairment among preschool children?
- To what extent the signs of speech language delay and disorders are reliable for parents to make a preemptive diagnosis?
- What is the importance of speech therapy screening and parent's early intervention?

Hypotheses

In light of what has been mentioned before, the corresponding hypotheses may be put for word:

- Reasons can sowing from family history of speech language impairment or neurological risk factors such as brain's damage or may be because of the emotional and social deprivation such as divorce or parents' neglect.
- The signs of speech language deviation can appear obviously. So, it will be clear for parents to uncover that the child's speech and language are in the wrong direction.

 Early intervention and the awareness about child's delay and disorders in speech and language are initial to overcome the most of child's points of weaknesses.

Methodology

To encounter the research aforementioned aims, two research instruments are selected notably: the speech therapist's and parent's interviews. The interview which is meant for the speech therapist enquires about her devices implemented in speech therapy, the value of this currier it's challenging and requirements, also, cases study description and how parents intervenes and prevention for speech therapy's effective outcomes. However, the second interview is meant for parents consists of background information about child's conditions during and following birth, social and personal functioning, child's receptive and expressive language and parents' possibility of intervention.

Structure of the study

The dissertation is composed is composed basically of three chapters. The first chapter entitled literature review (descriptive one), as far as is made up of different key concepts to the review of related literature. Is concerned to provide definition (s) of speech, language, also consists of reception and production processes, also a list of cognitive, social, cognitive milestones normal children are followed, additionally, provide some known theories concerning child language acquisition. Also, provide definition(s), types of speech language delay and disorders, providing the most famous characteristics that can summarize children with speech language impairment. As well as, the main known reasons and risk factors underlying speech and language delay and disorders.

The second chapter entitled research methodology and data analysis (empirical one), it is also composed of two instruments devoted to the description of the sample and research tools used and the analysis of the findings from the target groups (speech therapist's and parents' interviews). Is designed to include a detailed description and analysis of questions and responses of the aforementioned target groups, why and how data are chosen, also followed by data analysis to see whether the obtained findings confirm or reject the aforementioned hypotheses.

General introduction

The last third chapter entitled discussions and recommendations therefore, aim to provide discussion to the findings, a set of recommendations and tips for parents concerning speech language delay and disorders' therapy and intervention. The chapter ends by limitations of the study.

CHAPTER ONE LITERATURE REVIEW

Introduction

This part provides a theoretical frame work can allow as looking at the nature of a crucial concepts. It highlights the notions that build the whole research and the problematic matter explored throughout this dissertation. A brief account of definitions, theories, types of speech and language. In addition, full description of child language acquisition, milestones development. Importantly, we will define the term speech language delay and disorders with its types, signs and characteristics of children who pass through such adversity. A long the way we will take into consideration the possible common causes children passing through such adversity. The scope of this dissertation is to explore a literature review by different composition authors and scholars attempting to report the major causes in which children speech and language impairment can be diagnosis.

1. Definition of Speech

- "A verbal utterance defined in terms of its content, the intention of the speaker, and the effort on the listener".(oxford dictionary of psychology)
- "Speech functions as a verbal medium of exchange and use decodable vocal sounds. Also speech acts as the manifestation of the language through verbal way".
- "Speech highlights the verbal output of language, in which a numerous muscles and parts of human body serve together to produce sounds, namely: speech articulation, which involves the vocal box contains a set of muscles namely: the tongue, vocal folds, teeth, lips and the lungs". sited in an article notably: "speech and language developmental milestones" (2013, p.2)

1.1 Speech Perception

"This ability supports the idea that children perceptual apparatus is some way "programmed" to discriminate speech sounds that they born with special feature detectors that respond to the acoustic properties of speech" (crystal, 2006, p.80)

According to crystal (2006), children are born with the ability to distinguish between consonants, and they are programmed to interpret the environmental features of the audio stimuli as well as children subconsciously have the capacity

to bring out the discrimination between a familiar and stranger voice. "How babies turn their heads towards the source of a sound within the first few days of life, and prefer human voices to non human sounds as curly as two weeks" (Crystal, 2006, p.80). By and large, children shape speech sounds as a mental categories of perception. Thus, environmental experiences, human and non human voices can be interpreted and represented as speech language input in their minds.

1.2 Speech Production

Producing speech sounds or utterances deserve a sophisticated mechanism in which speech motor planning, voice and articulation movement have been operated. Children grow up step by step and retrieving speech sounds need time through the development stages and the interaction with surroundings through imitation.

"For speech production, the basic structure of the utterance is through to be generated in wernicke's area and sent to broca's area for encoding. The motor program is than passed on two the adjacent motor area which governs the articulators organs "(Crystal, 2006, p.177). In this regard and according to Crystal (2006) there was two areas are interrelated to the operation of speech production in the brain are contributing in the cognitive and motor sub skills enable children to coordinating breathing and vocalization in addition to that the vocal sound can be considered as the mirror of our needs in the reflection of the physical state such as breathing, swallowing, coughing...etc. Moreover, brain acts as the controller of the early speech and till the time, children become eager intellectually aware of using sounds in a social contextual structure.

2. Definition of Language

- Oxford psychology definition: "a conventional system of communicative sounds and sometimes (though not necessarily) written symbols" (Oxford psychology dictionary)
- Language is a core means of communication whereby human beings share thoughts, feelings, desires, attitudes, believes...etc, also language is a symbolic

medium, it's can be based on signs (gestures) or printed symbols 'written words), spoken (vocal utterances).

- "Language is the expression of human communication through which ideas, information, emotions, and believes can be shared" (Feldman, 2005, p. 131). A side from language maintains representation of an input (receptive skill means the comprehension of what other say), and an intake retrieve or express (a productive skill to create an individuality of showing one's own messages.
- "People use language, not just to signal emotional states or territorial claims, but to shape each other's minds" (Corballis, 2002, p.3). subsequently, language is the systematic material based on a unit of components (sounds, morphemes, sentences...etc) and an exploration of the connection between how human beings recognize the right from of the speech within a right, effective use of a structure in a social context. In so doing, communication acts as the practice of individualism thoughts, and cultural attitudes in a certain social, contextual situations.

"Social context is a major factor that drives our language" (Corballis, 2002, p.3). Furthermore, language includes two processes of exchange ideas: receptive language (understanding others' utterances) and expressive language (the functional creation of one's own messages).

2.1 Language comprehension

Since, psycholinguistics field considered as the umbrella term in which language processes involved there. The comprehension of language may be challenging, hard process and the system in which huge and vast range of information have to be presented as an input or knowledge store. This system embodies the lexical contextual, and grammatical expect, besides that serial, speed process contribute in the interpretation of sentence meaning that hurriedly occur. It is the matter of how to resolve grammatical structures that may be temporarily implicit and ambiguous.

However, the lexical representation accomplished in the way of listeners map the acoustic signal among the variation of information that have to be recognize in order to identify the quality of the songs. The later, affects language perception and interpretation. Interestingly, comprehension influences by meaning and context and our construction knowledge about language that based on the stimulus which received from our linguistic environment.

The cognitive capacity of language perception and comprehension is controlled by the wernicke's area (the condition of language meaning and comprehension) one part of the brain cerebral hemisphere.

2. Language Production

Above all, as it is mentioned about language comprehension therefore the listener seeks to figure out the proper interpretation of the acoustic stimuli and signals. So, the mental operation can draw the path of understanding the language. Importantly the conceptualization or the internal map of the several levels of structure meaning, acts as a mental parameter to retrieve or produce the language. Clearly, thinking about language to shape those ideas in spoken or printed words. All in all, the comprehension of language seems to be the raw material in which the production of language manifests there. "The selection of the appropriate word structure at the level of conceptualization is the awareness of producing and retrieving of lexical syntactic information by brain's processes. Moreover, the production of language is operated by a cognitive capacity in the left hemisphere part of the brain Notably, Broca's area".

3. Language Acquisition Theories

Traditionally, human beings overstep through a range of linguistic stages manifested by the acquisition of innovative linguistic skills. Those skills advance over time from birth, childhood, into adolescence.

"Language is an evolved capacity. this evidence includes the universality of some characteristics of language, the linguistics of language, the linguistic stages that all babies progress through, and the existence of specialized brain areas devoted processing" (silverman, frieenberg, 2006, p.256)

A plenty of theories have materialized and posted to look into the language acquisition devise. The substantial and the main schools have been emerged to support the course of that sophisticated process namely nativisit, interactionist, and cognitivisit theory.

3.1The Nativisit Theory

"A hypothetical mechanism, based on generative grammar" (oxford dictionary of psychology)

Nativisit theory posted on the purpose how children conceptualize the language and how language is innate and programmed biologically born with us. According to Chomsky language is a group number of number of words, and children enable to

produce unlimited wordsmith inborn, innate capacity." Language as a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements" (Chomsky, 1981, p.7). Also, Chomsky noticed that all children in the world acquire language in the same way and request. Thus, the universality of grammar it means all children are homogenous or generative

"All children share the same innateness, all children share the same internal constraints which characterize narrowly the grammar are going to construct" (Chomsky, 1977, p.8)

Additionally, pincker (1994) supports Chomsky's idea in which the biological function of language taken into account whereby cultural and social perspectives have been established. "the universality of complex language is a discovery that fills linguistics with awe, and is the reason the first to suspect that language is not just and cultural invention but the product of a special human instinct" (pinker,1994,p26)

Clearly, the faculty of language progresses through the acquisition of rules and the imitation of family members' words as well as all children pass subconsciously and informally through the same steps. "All babies progress through the same developmental language stages, in the same order; children also require the rules of language faster than they could possibly acquire them through formal learning" (Silverman and friedenberg, 2006, p.256)

3.2 Interactionist Theory

In the other hand, and against what have been mentioned previously about nativist theory, another theory emerged to prove that children can't acquire the language independently without the interaction of children with family members and other environmental surroundings Whereby, children language advanced by the language supporting system.

"There are facts about language acquisition. First, it's universal (within the human species) and second; there is considerable latitude in the kind of environmental inputs that permits children to develop language" (Grain and Marten, 1997, p.7). The interactionist theory maintains the children interaction with parents and peers. Creating for them a supporting environment and buttress, contribute to enhance their language development; "we live in a social environment in which we interact with family

members, friends, coworkers, and others on a regular basis. A social environment from a cognitive point of view is one were individual minds exchange information" (Silverman and Friedenberg, 2006, p.446).

All in all, the interactionist theory blends a tie between the notion "nurture" (the social constructivist approach of an assisted performance of more knowledgeable guides and caregivers of input and conversation skills. And "nature" (the biological predisposition or the innate capacity) that both functional notions contribute in a crucial way of children language development also speech, vocabulary are understandable bound by cultural context.

3.3 Cognitivist Theory

Since the language considered as the mirror of the mind and it influences thought, whereby children understand the objects exist. To illustrate more, thought determines language the relation here is building through the connection between the cognitive development and language acquisition "what do children say by time they start talking at age one? They have already twelve months of perceptual and conceptual development" (Clarck, 2009, p.7)

According to Clarck (2009) children need to improve the mental, perceptual and the conceptual capacity before they shape them or use in a linguistic structure. Therefore, the cognitive view seeks to establish the idea that children' representation of the concrete situation as an input or receptive skill will push them to be more advanced linguistically and cognitively in language acquisition stage; (the capacity of guess the world). Importantly, the socio-psychological and cognitive maturity may help children to undertake language tasks.

To sum up, we have to explore in greater depth deferent aspects in which children acquire the language. That approach could be taken from nature or nurture or mental maturity that as yet to the aforementioned theories to entirely recognize the interrelated relationship between them. As a result, there is no language without the biological inborn capacity the intellectual development and maturity and the contribution of sociocultural collaboration.

4. Milestones Development (3 to 5 age)

The major children milestones concerned with how children progressively reveal a substantial stage in their linguistic, social, and cognitive development. Normally, all children pass through the same stage of development in this regard a brief glimpse of the most social, language, speech, and cognitive events children pass through from three to five ages; as it is mentioned by Shelov and Hamermam (1998)

3 years old

First, Social Milestones

- Children imitate familiar adults and play mates.
- Parents, caregivers understand child conversation.
- Children interact and express an open range of affection and emotion spontaneously.

Second, Cognitive Milestones

- Children build a stronger relationship with physical object such as: complete puzzles with four pieces.
- Believe with animals.
- The capacity of imagination and perception is activated for example: draw pictures by the various colors and shapes that exist in the environment.

Third, language Speech Milestones

- Kids enable to produce sounds p-b-m-w in words.
- Children recognize and bring out the common objects and pictures.
- Use four to five words.
- Identify pronouns (I, you, me, we, and they). (Shelov and Hamermam, 1998,p.19)

• By 4 years

First, Social Milestones

- Children acquire the merger's energy into the new experiences.
- Involve and cooperate with peers.

- Can play the role of "Mom" and "dad".
- Children are likely to behave in an intransigence may because they want to be independent to solve conflicts.

Second, Social Milestones

- Shape a process of thinking.
- The wide imagination helps them distinguish between fantasy and reality.
- Show independent, personal point of view to tackle with a problem.
- Investigate few members by counting.
- Recall parts of songs or stories.
 - Third, language speech milestones:
- Produce sounds (t-d-k-g-f) in words.
- Kids can utter a sentence formed of five or six words.
- Tell more about daily experiences.
- Can put and combine some part of speech in a correct some part of speech in a correct structure. (Shelov and Hamermam, (1998), p.21)

• By 5 years

First, Social Milestones

- Children want to be as his friends look like.
- Participate in art activities entertaining at home singing, dancing, and acting role play.
- Want to select directions independently for example: visit a next door neighbor by themselves.

Second, Cognitive Milestones

- Understand time concept.
- Counting more than ten objects,
- Knowing about quality and quantity for example: children are likely to participate for preparing a cake with their mothers.

Second, Speech and Language Milestones

- Children speech language conversation is clear to understand by familiar or stranger listeners. (Shelov and Hamermam, 1998,p.23)

- Most speech sounds in words are produced correctly.

5. Speech Language Delay and Disorders

Delay is a slow development of basis speech language skills which expected to develop in an abnormal sequence. The most common development problem is when the previous milestones of children cognitive, social, and language speech development exhibit with an abnormal deviation in that process. Therefore, speech sound production seems to be inaccurate and when it is ambiguous to understand by others there is a problem.

5.1 Speech Disorders

It refers to the problems and difficulties of producing and uttering speech sound. It is a combination of a plenty and several problems most of them are unknown. Such articulation or phonological problems and troubles of using sounds, may allow the listener to be unable to grasp what a child with speech disorder is trying to say.

In addition to that, children introduce a poor manner of an intelligible, immature speech as it is noticed by Feldman (2009) "speech disorders are presented delay and deficits in the development of speech skills and voice quality. Speech disorders include problems in the production of speech sounds disruptions in the flow of speech sounds with voice, pitch, volume, or quality and poor intelligibility" (Feldman,2005,p.132). Moreover, the abnormal occurrence children speech interrupted by the diffluent events such as childhood apraxia of speech and stuttering that will be introduced them briefly later on.

5.1.1 Types of Speech Disorders

5.1.1.1 Articulation Disorders

"A common speech-sound disorders in childhood, in which the child is significantly less skilled than peers in articulating, sequencing, or organizing the sounds of the language" (Feldman, 2005, p.132).

According to Feldman (2005) this disability appears when children face obstacles and disturbances in producing speech sounds in the right sequence. Thus the problem of

mispronunciation led children up to the misunderstanding by others. Besides that, articulation disorders divides into four types are shaped in the word "SODA" namely substitution, omission, distortion and addition. The types examples listed above are mentioned the article of key stone pediatric therapy "what is an articulation disorder" (1990) and "types of articulation errors" by Juli and Dymt (2009):

5.1.1.1.1 Substitution:

"An articulation type sound occurs when children replace sounds in a word. The most change is the replacement of the first consonant". For example:

- "wed" for "red"
- "thun" for "sun"

5.1.1.1.2 **Omission:**

"In this case children delete a sound in word in which the form of word takes and change into a new word". For example:

- "green-nake" for "green snake"
- "p-ay" for "play"

5.1.1.1.3 **Distortion**

"The problem here is when children produce sound in unfamiliar manner in which children change the form of a word totally". For example:

- ❖ "coa" for "car"
- "flish" for "fish"

5.1.1.1.4 Addition

"Children add an extra sound within the word usually at the end of the word". For example:

* "buhlue" for "blue"

❖ "Comb" for "Coe"

5.1.1.2 Stuttering

"stuttering is a marked impairment in speech fluency that reflects an underlying problem with speech fluency and rhythm of speech, involving repetitions of sounds or syllables prolongations, interjections, broken words, filled or unfilled pauses, word substitutions to avoid problem" (oxford dictionary of psychology)

Stuttering is a kind of fluency disturbance in speech and acts as a neurodevelopment and physical disorders cause children to stutter and produce large movement's muscles. Children with stuttering show deficits in expressing needs and ideas properly. Thus, communication broken dawn as it is noticed in Weis (2013):

"Stuttering is a marked impairment in speech fluency that reflects an underlying problem with speech production rather than a language problem" (Weis, 2013, p.150).

Interestingly, listener can't grasp or figure out what a stutter children is trying to say clearly. "Children who stutter knows what they want to say, but they have a problem saying it" (Weis, 2005, p.150). A side from, stuttering is a result of over stimulate breathing, articulation muscles (lips, tongue, jaw) and vocal folds. So, the over activity of the brain area manage or direct those muscles cause stuttering." Left hemisphere areas active during speak become less active and areas in right hemisphere not normally active during speech become active" (Braun and Ingham, 1977, p.13). Moreover, stuttering characterizes as it is mentioned in Bristein's review from the university of Pitts Burgh (2015) p.4 according to Weis (2013) stuttering can be described as the following features:

1. Sound and Syllables Repetition

2. "Ba-ba-baby".

2. Sound prolongation:

"s <<<< sometimes"

3. Brocken words

"ta-table"

4. Audible or silent blocking

"I like to- go home"

5. Monosyllabic whole- word Repetitions

"I-I-I- see him" (Weis, 2013, p.151)

5.1.1.3 Childhood Apraxia of Speech

Oxford definition of psychology: "a loss of diminution in ability, caused by neurological impairment usually in the left hemisphere of the brain". Childhood apraxia of speech refers to a speech sound disorder and difficulty in moving the speech articulators (lips, tongue, jaw...etc) needed to produce it can be considered as a neurological disorder. According to Feldman (2005) "this disorder is associated with difficulty in planning, programming and producing speech sounds" (Feldman, 2005, p.13). It is hard for children with apraxia of speech to have a direct speech muscles and movements needed for speech, sounds, imitations, or for swallowing and eating.

As it's known, the problems of speech sounds can have a relation with articulation, difficulties as well as the oral motor skills, to illustrate more, children in that case are often repeating syllabus "water become wawa" or deleting the final sounds words "cats" becomes "ca". They also have trouble on how to put sounds in the right sequence, a problem in retrieving speech motor plans. Thus, a limited vocabulary, a difficulty in words findings, limited responses to questions. Besides, a child with apraxia of speech may produce a word or sounds at the time of playing or when he looks angry. However, he can't say it again when parents want him to do. This may put both child and parents into troubles and the feel of frustration.

In general, under anxiety and lack of communication, children with apraxia of speech can't surpass his adversity. All in all, parents have to intervene more quickly to create a supportive environment in which speaking skills sources take place, also

attempts to establish an enjoyable communication by upholding children self-esteem and reduce their anxiety when speaking.

5.2 Language Disorders

Language disorders refer to children deficiency and impairment to use, understand and express the structures properly. The disorder may involve the language in structure (syntax, morphology) language in meaning and content (semantics) also language in expressing thoughts in social context (function of language). As it is noticed by Feldman (2005):

"characteristics of language disorders include limited understanding or production of vocabulary, misense of words and their meaning, difficulty expressing or following ideas, immature grammatical patterns" (Feldman, 2005, p. 132).

5.2.1 Types of Language Disorders

5.2.1.1 Expressive language disorders

"A communication disorder characterized by measured level of expressive language development substantially below the person's non-verbal" (oxford dictionary of psychology). In this condition, children suffer from the deficiency to use and express themselves by language to communicate transmit desires and attitudes......est. The deficit occurs due to brain dysfunction in which language production takes place. Hence, a child may have the idea in his mind but unable to shape it in a word structure.

Interestingly, children with expressive language disorder are likely to face the risk of language based learning at school later on. So, active parent's intervention is important to cope with that matter. The most causes of expressive language disorder are unknown. However, the possible and the major cause is neurological, it can be caused by brain injury or damage in the responsible part of functioning language production in the brain (Boca's area). The damage can be a result of traumatic head injury or other medical conditions and diseases such as; brain tumor. Eventually, children with expressive language disorder often produce a poor vocabulary comparing with other peers at the same age. Also, they are not aware to mind their mistakes used in conversations. That's why a lot of obstacles face them in retelling their stories needs.

5.2.1.2 Receptive Language Disorders

"A specific development disorder characterizes by language comprehension substantially below that of expressive language ability and nonverbal intelligence" (Oxford dictionary of psychology).

It is often seem to parents of children with receptive language disorders, that the child suffers from hearing impairment or problem in listening. Nevertheless, kids in that condition introduce a reaction to nonverbal auditory stimuli. Similarly, the difficulty in listening may be at word level knowledge or in the level of morphology and syntax. The following properties may indicate children impairment in the level of language reception:

- -Poor attention and listening skills
- Problems of selecting directions
- -Children have a poor memory to restore and memorize verbal information.
- Multiple meanings of words allow children to misunderstanding.
- Problems of figuring out concepts such as; time, quantity.....

6. Characteristics of Children with Speech and Language Delay and Disorders

Usually parents or family members attempt to expect their child speech language development from the deeper milestones. Whereas, if it's not advance as they predicted, parents fall in the frustration and confusion trip that their child's speech language is on truck and risk. The following symptoms will tell parents that something is wrong or abnormal. The most of characteristics are translated from Arabic to English as it is mentioned in El Hawerna (2010)

6.1 Social and Emotional Characteristics

- Children with that case prefer to still alone or isolated and poor social interaction with peers. "Children with delayed language development may have peer interaction problem. First some children with language delays also have problem in social

perception. They have difficulty perceiving and interpreting the non-verbal cues of social communication" (Kleeck and Richardson, 1988, p.678)

- -Participating in conversations seems to be complicated and hard for them.
- The feeling of stress, insecurity, anxiety, depression, fear, low self-confidence, and jalousie.
- Usually, kids show aggressive attitudes towards stranger peers.
- Most of them are likely to handle or manipulate with physical objects rather than peers.

6.2 Physical Characteristics

- Most of them are late in walking
- Problems of cleft palate and tongue thrust.
- Allergies, high fever, ear infection and chronic diseases.
- Hearing impairment.
- Problems of nutrition and sleeping.
- Drooling, swallowing and speech's oral motor skills difficulties

6.3 Cognitive Characteristics

- Difficulty to think, pay attention, notice and express things.
- Children need a long time to answer or select a right instruction.
- Poor memory in recalling and problems in retelling daily experiences.
- Problems of dealing with mathematic concepts and counting such as: quality, quantity, time.

6.4 Problems of Receptive, Expressive Speech Language

- Children fail to grasp other's requests.

- A limited number of utterances and poor words to express themselves effectively and lack of communication's skills.

- Kids refuse to participate in discussion or conversation answering questions. El Hawerna (2010)
- Children speech language exhibit with an ambiguity, immaturity to understand. "Characteristics of language disorders include limited understanding or production of vocabulary, misuse of words and their meaning, difficulty expressing or following ideas, immature grammatical patterns." (Feldman, 2005,p.132)
- Children are mindless to perceive and guess what others say.

7. The possible Causes of Speech Language Delay and Disorders

Usually, it is hard for parents to indentify whether their child has problem or an abnormal sequence of speech-language. The recognition will be known through a group causes most of them are unknown. Both parents and speech language pathologist attempt to discover the main reason in which a child suffers from speech language impairment rather than other children at the same age, That allow them to select appropriate techniques of diagnosis and active intervention.

7.1 Genetic Causes

Recently, the studies of speech language delay and disorders issue is further explored in parents or families of children diagnosed with that impairments. To illustrate, a lot of findings justify and take into account the impact of genetic factors, chromosome disturbances such as: Down syndrome. In addition researcher's findings noticed that genetic, cellular and environmental circumstances. Thereat, speech language delay and disorder caused by.

Furthermore, and throughout a biological tests, and a plenty of experiences implement for family members with speech language delay and disorder with a risk factors of the social biological emotional effects and the environment. "environmental effects include the shard family environment as well as the environment that is unique to an individual family member studies of environmental factors are needed to identify

important influences on speech language disorder, and to understand the interaction of genes" (Lewis, et.all, 2006, p. 305).

Interestingly, researcher findings reveal that a lot of genes cause language and speech disorder alone. However, other genes contribute to both speech language disorders and language writing, reading disabilities. In short, an obvious evidence that speech language delay and disorders is inherited, in which the link between family history with that deficit and the function of genes.

7.2 Neurological Causes

The nervous system revolves around the controller and the responsible for functioning a various muscles that serve speech language perception and production. However, speech language input and output influences negatively by any deficit in the nervous system or other motor skills impairment. A side from, brain injuries classifies into several kinds. The famous namely disease (for example brain tumor), physical trauma (traumatic brain or head injuries. For example: accident), Cerebral hemispheres damages (left or right area), impairments caused by the damage of the frontal lobe and parlays or cerebral palsy.

As far as, the severity of brain injury is more the chance of language recovery is unaccomplished most behavioral, cognitive, and speech language functions. Importantly, mothers using drugs, alcohol during, an unusual illness and the psychological harsh conditions during pregnancy may run the risk of child's neurological health as well as his speech language functions later on. "Alcohol and other drugs play a significant role in the onset course of neurological disorders. As toxic agents, these substances directly affect nerve cells and muscles, and therefore have an impact on the structure and functioning of both the central and peripheral nervous systems" (world health organization, 2006,p.120)

7.3.1 **Hearing Loss**

Hearing among all the senses sheds the light on encouraging social activities constructing relationships, and sharing experiences as well as to be aware to danger. Hearing also functions as the key to receive the spoken language and achieve an intellectual performance. The impairment of hearing can be mild, severe, or total. Also

hearing impairment may come from a particular place in the ear, middle ear, inner ear or both. So, the impact of hearing loss is harsh in term of speech and language development. In addition, children at that level face huge range troubles to understand soft and regular speech from a distance. The following signs indicate that the child is passing through hearing difficulty:

- Inappropriate volume during speech
- The problem of hearing loss may be from heritage (family history of hearing loss).
- The child often seems to be distractive, mindless.
- -"Children with hearing loss may only hear a very noisy speech sounds in the environment and may recognize load vibrations".
- The most noticeable effect of child hearing loss is on language acquisition. "Language impairment can also be exhibited by children with moderate hearing loss, because they are trying to learn oral language with insufficient auditory input" (Paradis,et al,2010,p.8). Moreover, hearing loss my cause children learning disabilities at school later on. "Children who are hearing impaired are very slow at learning lipreading and speech" (Feldman, 2005, p.131)

7.4 Psychosocial Causes

Are all the environmental, psychological, physical and emotional perspectives in which child speech language development can be influenced "examples of psychosocial factors are beliefs and value systems, attitudes, socialization goals and practices for modeling behaviors, communication styles, language use at home interpersonal relations, experiences, problem-solving and stress coping strategies" (El Sayed,et al.,2010,p.25)

First of all, as it is well known, parents play a central role to exert a firmer supporting environment of knowledge skills and speech language development. Clearly, those skills provide children with a good start.

Subsequently, parents seek to foster active responses of speech language development an improvement. Hence, parental involvement, sharing with children experiences and tasks will enrich more speech language development.

To illustrate more, the emotional relationship during child's first year of life contributes to uphold children-parents secure attachment. That's why most of children exhibit a deep emotional attachment relation to those who look after them. So, secure,

sensitive attachment is likely to build a safe and trust feelings among children in so saying, children will be able to explore the world by their cognitive abilities.

As a result, preschoolers are capable to express their emotions, full open discussions if they live in a language-rich environment where opportunities of listening and speaking have been promoted.

Interestingly, parents have to look after their infants constantly in order to safeguarding them from the diversity of speech language delay and disorders. It was achieved by providing them by full conditions of full nutrition in order to save their neurological cognitive abilities whereby speech language can be received and retrieved properly.

In addition to that, parents have also have to furnish enfant with a calm, safety, create love home environment as well as supply a balance between control and independence. Importantly, parents have to take children away from parents 'conflicts of life such as: divorce, poverty....

In contrast, the main causes of speech language adversity are parents who often maltreat and using physical punishment are likely to exhibit psychological problems namely: depression, anxiety, and insecurity. Hence, numerous negative effects on child. Such as poor attention leads to a worst language performance. Because anxiety acts as a negative factor manifests in higher degrees of speech fluency and lack of coherence as well as main consequences of linguistic disabilities. Besides, insecure attachment such as parents' divorce may put children in troubles and risk of social, emotional and cognitive delays in so doing a passive speech language production.

Furthermore, physical deprivation includes the stress of poverty, malnutrition influence home structure with a lot of problems. So, parents may become abusive and children are passing through an emotional stress due to the bad conditions of living. Therefore, children may suffer with neurological disorders due to the mal nutrition and the greatest degrees of anxiety as well as, poor attention, passive social interaction and more importantly speech language impairment. "Malnourished children lack energy, so they become less curious and play full, communicate less with people around them which impairs their physical, mental and cognitive development" (World health organization, 2006, p.113)

Parental neglect, absenteeism and inadequate verbal communication and child emotional ignorance refer to less parents' involvement because of work and financial issues. Thus, luck of communication skills because in this condition parents are usually

busy to discuss issues or playing with them in order to encourage their linguistic and cognitive capacities as well as enhance their speech language development. So, this leads up to child's isolation, frustration and may effected by speech language delay adversity.

All in all, psychosocial deprivation may have a negative adverse on child speech language development and performance. In this regard, parents have to fill the emotional social empty space of child toward them in order to save their mental, linguistic capacities for receptive and expressive language outcomes.

Conclusion

From this literature review, a plenty of findings can be drawn and reaped in glimpse. So, children receive and retrieve speech language in a systematic sophisticated process. It was identified how children naturally acquire and develop speech language and how children's developmental milestones occur among children at three to five years old. Interestingly, it has been investigated how children obviously pass through speech language abnormalities or delay. The possible causes and symptoms of speech language delay and disorders that have been noticed will provide parents to indentify whether their infant's speech language is on track or not and in what extent are reliable for parents to make a preemptive diagnosis. Thus, the next chapter aspired for spotting what behind speech language delay and disorders by parents' and speech language therapist's interviews.

CHAPTER TWO RESEARCH METHODOLOGY AND DATA ANALYSIS

Introduction

The present chapter sheds the light on the practical framework implemented in this research paper. It is a descriptive qualitative research design was used to provide answers to questions underling and associated with a specific particular research problem. It is also, highlight the appropriate path to collect vital in formations concerning the current area of the problem which was the reliability of speech language delay and disorders signs and causes to make parents got a preemptive diagnosis and seek for early intervention from the speech therapy screening.

1. The description of the sample

The sample consisted of preschool children from a public center of mental diseases in Mostaganem. It was on February 2017 in Sunday and Tuesday at 13:00 to 16:00. Preschool children (from three to five years old) who were indentified with primary diagnosis of speech language impairment enter speech therapy sessions to receive care and speech language testing and screening. Furthermore; the sample of research design is divided into three parts:

- 1.1 **The target groups** the target group of our practical framework consists of a speech therapist from a public center of mental diseases in Mostaganem. Another crucial target groups are parents in order to reap further information serve in deeper degrees the research questions.
- 1.2 **Methods of data collection** In order to use the most successful and appropriate gathering data methods, we selected a semi-structured interview as a suitable verbal conversation with speech therapist and parents as supplementary target groups. Also the research questions were asked in Algerian dialect for the reason of constructing an explicit and better communication between the interviewer and the interviewees.
- 1.3 **The research questions** the humble research aimed to answer the following questions, but the first one is the main questions that map all the objectives' paths are the first one. While, the others questions facilitate the aim of the research and gather more information these are:

- What is the famous risk factors underlying speech language impairment among preschool children?
- To what extent the signs of speech language delay and disorders can be reliable for parents to make a preemptive diagnosis?
- What is the important of speech therapy screening and parents' early intervention
 - 2. Speech therapist interview
- ✓ Background information
 - **1- Official job**: speech language therapist.
 - **2- Place of employment**: Center of mental diseases Tijdit, Mostaghnem.
 - **3-Date of interview**: on February 2017, Tuesday and Sunday from 13:00 to 16:00.
 - 4-Gender: female.
 - **5-Work experience**: five years.
 - 6-Age: 35 years old.

Question 1

What are the main important skills or personal abilities for being successful in speech language therapy field?

Answer 1

First of all, working with patient as well as their families requires faithful clinical skills. Also, it is important for a speech language therapist to be creative, open minded. Clearly, to emphasize on the value of working in such setting.

Question 2

To what extent do you find your path's treatment pleasing and challenging?

It is a crucial question. Noticing the advance of my patients is my highest degree of satisfactory even it was a big deal or difficult to tackle with. So, I attempt to build a bridge of hope and give the best of my emotional support.

Question 3

How much time do you spend each week?

Answer 3

Six hours per week. But it depends on the patient's case sometimes the hours are flexible one case can consume a long time in screening and assessing.

Question 4

A speech language therapist is a very beneficial job nowadays. What behind your decision in such currier?

Answer 4

Because I like to make others feel appreciated, hopeful and healthy. Hence, I love helping others. In addition I am strongly agreed that communication is the core concept in which different attitudes can be shared. In one sense, communication is what makes us human. Clearly, I want help kids because they are less self conscious about others requests and how they express their desires in a social setting. Moreover, speech language therapy is interesting when it gives me the opportunity to reach a supportive emotional potential. Thus, this job combines all the elevated goals in which children are a tender category in the society. Importantly, the problems of speech and language among children have to be tackled and I will do all my best like most of time to be the best speech therapist.

Question 5

Talk to me please about the most effective devices do you implement the most?

I prepare a big amount of lessons plan corresponding to the various cases that I face each session while I find it so challenging due to the poor materials most of them can' be proper or available to serve screening process most of them namely:

- 1- Articulation Evaluation: in order to activate oral muscles and enhance the reinforcement of the speech articulation intelligibility.
- ✓ Moving the tongue back and forth.
- ✓ Puffing the cheek.
- ✓ Exercising the lips.
- ✓ Provide the repetition's task of speech sounds.
 - 2- Hearing and listening testing:
- ✓ Dropping (rhythm)
- ✓ Knock the table or other objects with sounds
 - 3- Screening voice competence:
- ✓ Shaky Voice.
- ✓ Monotone Voice.
 - 4- Articulation inventory: to recognize the exact error in a word speech sound (at the beginning, middle or at the end of the word)
 - 5- Physical objects (toys, puzzles, colors and shapes): the importance of this device is to uphold the perceptual and the cognitive capacities such as attention, memory and activate the sense of vision and touching.

Question 6

For The achievement of good outcomes in speech language therapy needs an assisted performance. What do you think?

Yes, I think so because I like collaborative working with psychologists and with my friends who work in the same field of currier for asking them about any suggestions or new devices concerning speech therapy. All in all, working in team toward one common purpose is so effective to serve the child from speech language adversity that may allow him to be a disable learner later on.

Question 7

What are the best session's moments make you feel enjoyable and advocate?

Answer 7

The best session's moments is when I select the appropriate lesson plan for each case and notice how kids and their caregivers share with me the same feeling of satisfactory. Interestingly, to win the opportunity in learning constantly something new. Hence, to support kids over a period of time to maintain an advanced steps to nicer speech.

Question 8

It is true that there is a distinction between boys and girls in speech language development?

Answer 8

Yes it is true, but I don't know why exactly may be because of differences in hormones or brain functions. Furthermore, girls are rather faster in cognitive development and maturity than boys.

Question 9

Regarding to the previous question, who suffer the most with speech language delay and disorders among the cases you have under speech therapy?

Every session I receive different cases with different kinds of speech and language impairment or disorders but I think that most of them are boys.

Question 10

What are the most challenging, harsh perspectives did you coincide with in the speech therapy career?

Answer10

In one hand, working in a public center of speech therapy requires a plenty of help because most of therapy materials are deficient and are not developed in addition to that the majority of parents are affiliated with a public therapy center because private one cost a lot of money. In the other hand, the late intervention of child's parents and their expectations put me in big troubles. In this regard, the speech therapy will be a time consuming matter as well as, the chance of entering school may be a big deal

> Description of the cases

Question1

Please, would you tell me about the major signs that may help parents to indentify if their child's speech is at the risk of a delay or disorders?

Answer1

Of course, at the beginning seems to be hard for parents to indentify whether the child's speech is abnormal. However, from the end of two years old parents can uncover if their expectations are reliable or not. So,

- First most children with speech language delay and disorders prefer to stay alone or with just their parents, caregivers and siblings.
- Second, they find problems in receiving and expressing requests as well as retelling their daily experiences.

- Third, children in those conditions face the deficiency of tongue and lips movement that is led up to sounds' disturbances and destructions. To illustrate, most of them disable to produce such sounds: /k/, /R/, /S/, /Z/, /T/.
- Fourth, parents have to mind how the child speech is illegible, understood by all the surroundings. Clearly children in that case are not aware about their utterances' illegibility.
- Fifth, kids with speech language impairment seem to be mindless when we speak about their passive social interaction with strangers and playmates and they exhibit the apprehension of answering questions and interact in open conversations.
- Sixth, they usually express their needs by pointing, or with gestures, uncompleted or broken or single words may be they have their own and special form of a word some of them are blatant or crying.
- Seventh, there are physical problems parents have to take into consideration most of them namely: hearing impairment, dentition structure problems, swallowing and mouth drooling, tongue thrust... ets. So, parents have to mind those physical problems and ask for the early intervention from doctors and specialists to supply the child with a proper testing in order to indentify whether child's speech language impairment is due to one of the aforementioned physical problems.

Question 2

According to your working experience and the various cases that you have treat before and in that period of time how do you indentify with a full description the main signs behind speech language delay and disorders for the cases that I have selected for my practical framework (Abed Nour, Khawla, Yacer, Safia, Ayoub, Mohamed)?

Answer 2

Personally speaking, I have to look into this question because I can't give you an exact answer due to the various kinds of disorders that I see constantly in each session the best examples are the cases you listed previously and due to the deeper ambiguity of speech language deficiency, it was complicated at the beginning of the therapy to indentify for parents what make the child at that level of speech language impairment.

Abednour case description (four years old): is a case of specific language impairment notably: expressive aphasia it means he can understand what other say whereas, it is hard for him to reply their requests or questions with an accurate right and clear structure also he is disable to produce /Zغ/, / Kظ/, / Sw/, /Ry/, / T-/. Additionally, I

noticed that he has a poor attention as well as he can't concentrate or pay attention toward something or someone in a long time and because of his behaviors 'disturbances he react aggressively during testing sessions. Beside that, their parents told me that he spend a long hours in front of television.

- ➤ Khawla case description (three years old): the main problem of Khawla is in hearing at the first time their parents told me that they feel so frustrated about the abnormal situation of their daughter because they discovered that she didn't react to any voice stimuli as well as an obvious delay in speech language. So, after my hearing testing device I deduce that she surpasses through hearing loss and I asked them to visit a specialist in hearing to intervenes. I worked with her for three months ago of a consecutive curing and screening. And in spite of her hearing impairment, she adapts properly with my therapy devises she knows how to manipulate with physical objects and combine letters in a puzzle.
- Yasser's case description (five years old): I work with Yasser's case from one month of testing when I asked their parent about his problem they told me that he can't speak provide that we asked him to do but even he attempts to speak he is likely to produce poor, broken and misunderstood single words. In the present situation I investigate that he is a stutter child also he often seems so anxious to produce a systematic word structure in on sense he adapts with physical objects rather than others screening devices. He is disable to produce /K/, / S/ sounds and their parents told me that he prefers to stay a long hours in front of television that's why he seems inattentive and passive in term of speech request.
- ➤ Sofia's case description (five years old): she suffers from a cerebral palsy. So, the problem is that there is no harmonic movement between utterances during speech and face muscles functions. Her mother told me that she has feeding problems swallowing and drooling and during all my sessions, I noticed the disturbances of articulation and the disability to control words' form. Subsequently, she surpasses from a lower degrees of respiration that's why she may find troubles in the articulation inventory test.
- Ayoub's case description (Three years old): Ayoub has a physical problem notably: tongue thrust. Clearly, the tongue moves toward the upper teeth. Hence, led up to the distortion of the words and due to the Luke of communication with his parents, he can's achieve better in articulation inventory tasks an speech sounds repetition because without parents' support, speech therapy devises can't be effective.

Mohamed's case description (four years old): Mohamed suffered before from a kind of brain trauma notably: tumor. After the tumor's extirpation operation, unusual, harmful consequences emerged namely: behaviors disorders (he is blatant), poor attention and he produce just a misunderstood few words.

Question 3

What are the most challenging, harsh perspectives did you coincide with in the speech therapy currier?

Answer 3

In one hand, working in a public center of speech therapy requires a plenty of help because most of therapy materials are deficient and are not developed in addition to that the majority of parents are affiliated with a public therapy center because private one cost a lot of money. In the other hand, the late intervention of child's parents and their expectations to win a faster outcome put me in big troubles. In this regard, the speech therapy will be a time consuming matter as well as, the chance of entering school may be a big deal and parents have to be patient.

Question 4

In what extant speech language delay and disorders can be prevented?

Answer 4

Speech language delay and disorders is time consuming matter need parents' patience and early intervention. Also, parents or care givers have to appreciate the value in which children's speech clarity and intelligibility can't be advance without their highest degrees of the emotional support. To illustrate more, parents have to provide supporting environmental factors to foster child's speech language outcomes. Generally, most of speech language problems are depending on child environment in early period of life or may be during the period of the mother pregnancy.

So, parents have to take into account child health during and after birth as well as furnishing the child with a proper, adequate care because it is so harmful for him to feel the emotional depravation and parents' neglect. Thus, a denotation of poor communication and problems in producing speech clarity.

Further more, parents have to pay. attention to child facial expression, body language, eye contact and try to allow the child point things an use gestures and ask him specific and general questions if it is hard to answer provide him by chances of answers.

2.1 Speech therapist's interview analysis

The speech therapist was a female she is thirty five years old she reported that she had from five years of work experience she took this job because she wanted to help others. Hence, she feels enjoyable throughout therapy sessions and she appreciated the value that infants are the sensitive category in the society. Also, she demonstrated that this currier needs flexibility and more creativity. It means that effective and pleasing outcomes depends on speech therapist's alternative style. The question about the reason behind choosing this currier, she pointing out that because of the core importance of communication that makes us human as well as, to serve children from their speech language problems. So, the question further investigates the advantage of the speech therapy screening to cope with speech language impairment.

Additionally, the question of the differences between girls and boys in speech language development was designed to encounter the purpose that that boys mostly suffer from speech language deficiency rather than girls. Subsequently, the answer of selecting a collaborative working under the guide of an assisted performance, is clearly indicates that speech therapy is a difficult and highly demanding task. Hence, the question of the most devices used by the speech therapist was to meet the aim of her practices to fulfill children's needs to enhance their speech mechanisms and their cognitive capacities.

Moreover, her response of the challenging, poor working materials and parent's late intervention, illustrated in one hand the way that children can't have the right to receive satisfactory conditions of treatment in the public centers. In the other hand, to show the importance of the early intervention in order to facilitate the treatment outcomes. Furthermore, the question of providing a list of the most symptoms indentifying the problems of speech language impairment aims to elicit information for comparing them with the cases.

Interestingly and according to her description of the cases that we have seen, we will clearly facilitate the findings of the main question underling our research paper (what are the reasons behind speech language delay and disorders?). Finally, the last question was about how parents prevent their children from speech language diversity. Thus, speech therapist's answer will further rich our recommendations for parents in the next chapter.

2- Parents' Interview

➤ Birth History and conditions following birth:

Question 1

Can you describe please any troubles, unusual conditions, and illness coincides with during the period of pregnancy?

Answer 1

- ✓ Abed nour's mother: during that period I was suffered from a high fever till the time of labor.
- ✓ Khawla's and Ayoub's mother: it was normal without any unusual conditions.
- ✓ Safia's mother: during my first months of pregnancy, I subjected to a harsh psychological crisis the death of my father and my sister. So, I have ignored looking after my health and safia was born in offensive conditions most of them is the Luke of the oxygen she didn't cry for seven days and safia was a blue infant.
- ✓ Yasser's mother: it was plenty of unusual conditions and illness namely: high fever and problems of blood pressure as far as to be close to abortion.
- ✓ Mohamed's mother: due to my bad circumstances I decided to abort the baby I used a lot of medicines to get the rid of the baby.

Question 2

Did your child have problems in breathing, allergies, fever, ear infection and bronchitis? If yes, describe please

Answer 2

- ✓ Abed nour's parents: in the first months of his birth, he suffered from a highest degrees of fever that caused the loss of his hair in addition to that the problems of allergies.
- ✓ Khawla's parents: from first months of birth till now, she passes through ear infection.
- ✓ Yasser's parents: he has problems of bronchitis and fever.
- ✓ Ayoub's , Mohamed's and Safia's parents: their children face the problem of breathing and bronchitis they appear to breath through the mouth.

Question 3:

Please give me the approximate age of child walking?

- ✓ Khawla, Mohamed, Yasser and Ayoub: twelve months.
- ✓ Abed nour: two years and five months.
- ✓ Safia: three years.

➤ Hearing History

Question 1

Do you think that your child hearing is normal? If no, did you ever test your child hearing?

Answer 1

All parents: yes.

Khawla's parents: no because our daughter is often suffering from ear infection that 'why we constantly ask for hearing testing.

✓ Social and personal functioning:

Question 1

Does your child play is shared (cooperative) or parallel? Describe please how they interact with others.

Answer 1

All the parents: our kids feel confused and frustrated if they involve and interact with their playmates because they think that they can't perform better like other do they are low self confident because even they understand the plan of play, they may find obstacles to express their own choices to play. Whereas, they accept us or their siblings to share play:

Question 2

Please, tell me if there are any instances of speech language disorders or hearing loss (grandparents, uncles, siblings....)?

Answer 2

Khawla's parents: yes, her grand father was suffering from hearing loss. Also, we have another daughter has the same impairment.

Safia's parents: our daughter has eight dumb uncles.

Question 3

Can you list the most activities your child prefers to do at home?

Answer 3

- ✓ Abed nour, Ayoub and Mohamed: prefer to wash television for a long time.
- ✓ Safia: prefers her mother's telling stories.

✓ Yasser and Khawla: like to play with toys.

Question 4

How do your describe the relation ship with your child?

Answer 4

- ✓ Khawla's and Yasser's parents: At early childhood was so stronger attachment.

 Whereas, we are more busy to look after their little siblings who have the same case of impairment.
- ✓ Abed nour's parents: we often attempt to promote him with higher degrees of emotional and secure attachment but the problem is that he prefers spending along hours in front of television rather than interacting with us and their siblings.
- ✓ Safia' parents: we show her a precious care and we never ever neglect her her because we have just one daughter.
- ✓ Ayoub's parents: because we both working hardly, we can't find the suitable time to open discussions to communicate with him properly.
- ✓ Mohamed's mothers: I am a single mother I live with just my mother I was divorced before my baby was born and due to my offensive circumstances I am working regularly to serve my children. But, the problem is that my child considered me as a stranger because my mother is the one who look after him.
- ➤ Receptive and Expressive language

Question 1

What the most things do you think that can be easy for your child to understand?

Answer 1

- ✓ Khawla: before hearing test and treatment, it was so harsh to receive any speech voice. However after the treatment she can pay attention when we call her name.
- ✓ Ayoub, Abed nour and the other children: can understand some objects' names, simple clear questions. Whereas, it is hard of them to grasp or pay attention to complex speech conversation and requests.

Question 2

Which method can tell you what your child want or need?

Chapter Two:

Answer 2

- ✓ Khawla: Sometimes she is pointing or with gestures but most of time we cant' figure out what she want.
- ✓ Ayoub and Yasser : usually produce misunderstood, single words and the most of words' letters are omitted or distorted or broken.
- ✓ Safia: she can't control her facial movements and articulation during speech and she expresses her needs with uncompleted speech structure.
- ✓ Abed nour : sometimes with pointing or producing single words most of them are distorted and misunderstood.
- ✓ Mohamed: with crying, pointing and implicit single words.
- > Parent's intervention:

Question 1

When it was your primary concern about the problem of speech language impairment?

Answer 1

Khawla: two years and three months.

Yasser: four years

Abed nour: three years and six months.

Ayoub: three years.

Safia: four years and six months.

Mohamed: four years.

Data analysis

- Firstly, parents' interview was designed for elicit more information about what behind speech language impairment. The first question was about the unusual conditions and illness mothers are subjected with during pregnancy. The majority of mothers passed through the problems of high fever, death or losses of family members psychological crisis the risk of abortion. So, the reason behind asking this question to investigate whether the problem of speech language influenced by those conditions.
- Secondly, the question of whether the child suffered from seizures, ear infection problems in breathing, allergies, ear infection and high fever to clarify and demonstrate a clear responses the signs following problems of speech and language impairment as well as the deficiency of articulation movements and the oral motor skills. For example the case of Safia she was a infant blue that's why she got problems in breathing when she attempts to produce speech sounds.

- Thirdly, in order to indicate how hearing impact speech and language a question for parents about their children competence to hear sounds surrounding them all of them demonstrate that their children are well hearing except Khawla's parents who found out that their daughter constantly suffers from ear infection. Thus, hearing loss can be a risk factor behind speech language impairment.
- Fourthly, the questions underlying social and personal functioning to elicit various information about parents-child relation ship, child relation ship with others and physical objects. So, the majority of parents pointing out that their children prefer a parallel play, stay isolated away from strangers and they are often occupied with a long hours with toys and watching television. It's also indicated that some parents occupied in working and they have not enough time to open discussions with their children. The later answer clearly investigates that parent absenteeism have to be a risk factor under speech language problems.
- Fifthly, the question of how children express their needs insure that the majority of children find difficulties in grasping questions as well as expressing their answers because most of them use single and implicit words or gestures. So, the question was designed for whether children have specific language disorders.

Conclusion

This practical framework has presented the findings constructed by the tow research instruments (speech therapist's interview and parents' interview). Throughout the current study, light has been shed on speech therapist practices, her implementation of certain devices to improve children speech mechanisms and cognitive capacities, Also, challenging she faces in speech therapy currier. There has also been an examination of parent's responses about the famous unusual circumstances passed through before the diagnosis of the problem of speech language impairment. The results proved a strong connection between what mention previously in the literature review chapter (speech language delay and disorders signs and risk factors) and with speech therapist's and parent's interviews. Therefore, the reliability of those responses for parents to make a preemptive as well as early intervention.

CHAPTER THREE DISCUSSIONS AND RECOMMENDATIONS

Introduction

The current study investigates the reasons behind speech language delay and disorders among preschool children. This chapter presents a summary and short discussion of the findings that we have elicited from the sample speech therapist and parents' interviews which have answered by the data collection. It also attempts to explain and interpret the results in the light of the reviewed literature. The study ended with some suggested solutions followed by a number of recommendations for further research.

1. Discussions related to the Findings

- The study found evidences that boys are the most primary subjected to speech language problems than girls. Clearly, we have seen a numerous boys rather than girls enter the public center of speech therapy in Mostaganem. This was the main reason to choose four cases are boys and two are girls. Curiously, girls are rather advanced than boys in cognitive capacities and maturity as well as speech language development
- The results demonstrate that, speech therapy career requires an assisted performance and working in team with psychologists, hearing and neurological impairment specialists. Thus, seek to achieve satisfactory outcomes and serve preschool children from the later risks of speech language abnormalities adversity.
- However, the results noticed that the public center of speech therapy in Mostaganem consists also of a poor environment and the Lack of developed materials needed to furnish those children with an effective and proper treatment.
- The results put on show that, parent's late intervention impacts negatively child's chance entering school. The evidence was when the speech therapist pointing out that that speech therapy is a time consuming matter and parents may put her in troubles and challenging if they expected faster treatment in spite of their late intervention.
- The findings reveal that, the majority of cases that we have chosen prefer to stay isolate and not pay attention to parents' requests. This specific result agrees with Kleek (1988) "Children with delayed language development may have peer interaction

problem. First, some children with language delays also have problem in social perception" (p. 678).

- From the findings, most cases with speech language delay and disorders produce single, immature, broken, distorted and misunderstood words. It also shows that, they have problems of breathing, drooling, and other oral physical impairment. So, we deduce that the later problems affect negatively speech articulation and motor skills functioning.
- The results indicate that, most cases prefer stay a long hours in front of televisions this may be considered as a risk factor if it becomes a habit in which child may lose the cognitive and social skills by the end leading up to speech and language deficiency.
- Other results demonstrate that most of mothers subjected with unusual conditions and illness during the period of pregnancy that presented as inborn risk factor. In one sense, most of neurological disorders are inborn with child. For example, High fever can affect brain function as the case of Abed nour who suffers from expressive aphasia because the damage of the Broca's area in the brain in which speech language production takes place. Also, the case of Yasser who also has the same problem of stuttering and brain dysfunction due to the illness of his mother during pregnancy. Additionally, the case of Mohamed suffers from brain's tumor injury because of the medical conditions during his mother's pregnancy. Moreover, the results reveal that the cause behind the problem of speech language delay and disorders is neurological inborn risk factor.
- From the description of Safia's and Khawla's case we interpret that their problems of speech language was inherited it means family history or environmental genes can cause this disturbances in speech and language so this result strongly agree with the evidence of Lweis (2006) "member studies of environmental factors are needed to identify important influences on speech language disorder and to understand the interaction of genes" (p.305)
- Parent neglect, divorce, emotional deprivation and parents' absenteeism are the psychosocial risk factors what we deduce from some cases like the case of Ayoub that

his parents are most of time working and Mohamed and the emotional deprivation, due to parents' divorce and mother's neglect because of working.

- Most of the cases that we have studied are late to walking and they find difficulties in pronouncing تر فی ر, نرق , parents may figure out the problem during the early physical and speech milestones.
- An important finding was that most children have specific language disorders (receptive and expressive language disorders).
- The findings put on show that, parents were so late concerning their intervention about the problem and they didn't take them in the kid garden before. So, a plenty of obstacles may appear throughout the period of therapy screening.

2. Recommendations and Tips for Parents

Based on the previous discussions results and conclusions and in light of the study it is very crucial and initial to propose the following recommendations and tips for parents in order to make the most of their children's strengths and cope with their adversity of speech and language impairment.

- ✓ Since the present study was confined to analyze the reasons and risk factors behind speech and language preschool children's impairment, we need to recommend for conducting further researches dealing with other issues concerning psycholinguistics' field such as: learning disabilities in school (dyslexia, aphasia, slow learning...etc.), autism, hearing loss, stuttering, children self-centrism, attention disorders, bilingualism...etc.
- ✓ Parents have to be patient especially if the problem is inborn, in so saying the child has a wide long time to overcome his points of weaknesses and acquire a wide range of social cognitive and importantly, the linguistic skills.
- ✓ Since the early intervention seeks to be the major endeavor to reach effective outcomes, parents have to be more aware of early treatment and screening of their children at highest track o in order to facilitate the speech therapy practices. Hence, speech therapy is a time consuming matter.

- ✓ Parents have to care of their physical, mental and nutrition health to protect their child's communicative basic skills.
- ✓ A lot of developed materials, sources and special cervices should be furnished in public speech therapy training centers. As much as the speech therapy tare entertaining and comfortable to children, they are likely to be eager to attend sessions.
- ✓ Parents of to be alert to any disturbances in child's cognitive, behavioral physical, linguistic properties and specifics. Because the more they know about them the more they can supply them from risk of late intervention about such abnormalities.
- ✓ Speech therapists have to be more creative and flexible in the implementation of speech therapy devices because the use of traditional devices can make the speech therapy's session dull for children. So, promote children by with various requirements will achieve new skills from each method as well as facilitate the speech therapy process.
- ✓ Taking to the speech therapist about what parents do and what avoid to do by promoting them by a list of tips an advices, may considered as an effective process to enrich the speech therapy at home.
- ✓ Children are not aware about their abnormal behaviors so parents have to be sympathetic and broad-minded, because they are novice and need more guide and highest degrees of emotional support don't compare the child with another as well as blaming the child because he can't follow a right direction and sequence of speech and language.
- ✓ High communication, the creation of supportive loving home environment give and take open discussions likely to foster the child to express ideas even the speech is introduced with few, singe and misunderstood words. Hence, children's ideas are valued and respected.
- ✓ Don't foster the child to speak if he refuse this will make him frustrated, confused and anxious and he is likely to prevent him from speaking next time.
- ✓ Listening to child acts a basic parameter in which parents show him that what he is trying to say is appreciated. Thus, children are likely to improve a high self-esteem and positive self-confidence.

- ✓ Pay attention to child's facial expressions, body language, eye contact and gestures to notice whether the child receives an input from parents' discussions and if he interacts with stories telling.
- ✓ Parents have to ask what happen to child's speaking when they quit home or going to work. That will inform them about the changes in speaking during parents' absenteeism and existence.
- ✓ Parents have to show a great deal of importance and care to both infancy and preschool because they are regarded as the crucial events' of child intellectual growth and linguistic development.
- ✓ Children need also motivations and involving in play and to their experiences, explore more of their talents and make the happy, comfortable as well as appreciate their mental energies.
- ✓ Because language delay and disorders can affect negatively all child's learning areas such as speaking and listening and poor achievement for their school stage, it's important to reach their basic communicative skills effectively such as promoting them by singing or share with them role play in order to enable the child to share thoughts and construct relationships.
- ✓ Parents have to give a plenty of time to produce a full responses and avoid interrupting them even their speech seems inaccurate as well as simple language and requests can help the child to figure out what he is going to say or reply. Hence, A successful acquisition of both receptive and expressive language skills.
- ✓ In care settings, educators can more support child language communicative skills that play a significant role child's future school effective outcomes rather than pose potential issues concerning speech and language difficulties. So, a range of efforts have to be exerted by those educators in order to endorse care and kid garden settings with a flexible and creative strategies to get them ready to go school and learning settings as well as attempt to get rid of the risk of learning disabilities.

3. Limitations of the Study

The study has a number of limitations some of them we identified as follow:

- ❖ The resources restriction and the difficulties when gathering data.
- Since the current study of the cases' study was in an Algerian public center of speech therapy, it was so hard matter to translate data from Algerian dialect to English language especially medical words.
- ❖ The time was also the biggest issue because most of parents have not attend constantly therapy sessions and most of them refuse stay a long time to answer questions
- ❖ Most parents refuse answering some questions for example if they mistreat their children or if there is any physical abuse or problems in the family so, most of them run way from the validity of responses.
- ❖ A distinction between the information given by parents about our cases of study and what the speech therapist pointing out, put us in the troubles of data analysis.
- ❖ The variety of cases required us to exert greatest degrees of efforts to choose the needed ones whereby our aim of research can be accomplished.
- ❖ Due to the few years of the speech therapist's working experience, we couldn't afford much opportunity to reap extra information about the speech therapy world much more.

Conclusion:

In this chapter, we attempted to discuss our findings obtained from the target research instruments (speech therapists and parents' interview), in relation to other scholars' points of view, we tried to compare it with our hypothesis. So, in this chapter was proved that the reliability and the validity of those hypotheses. We shed the light on an overview of the study by presenting the main reasons and risk factors behind speech language delay and disorders as well as parents can make a preemptive diagnosis about the abnormal signs of speech and language impairment. All in all, giving some recommendations and tips of parents, ending by listing the main limitations of the study.

General Conclusion

The whole work tried to examine and find out the main possible reasons and risk factors preschool children associated with and in what extent the early intervention and primary preemptive parents' diagnosis eliminate the harmful effects in daily activities as well as to reach school stage. It is also attempted to aid both speech therapists and parents to implement practical strategies and enhance with more creativity and flexibility speech therapy sources and skills. Importantly, to foster and uphold this those children to overcome their points of weaknesses as well as give them more positive energies to struggle with the obstacles that may impede their intellectual and communicative capacities.

After gathering and analyzing the obtained data, it is explored that speech therapy career is hard and challenging task under the lack of developed speech therapy's materials and sources and the early intervention of parents to serve the child from his adversity of speech and language difficulties. The majority of parents' and speech therapist responses agree that these children reveal abnormal linguistic, social and physical features. A side from, they associated with primary concern of receptive and expressive language disturbances as well as impaired speech mechanisms and phonological disorders.

Throughout the description of cases study, we uncover that the core of reasons and risk factors behind speech language delay and disorders namely: first, inborn (inherited or genetic reasons, neurological reasons). Second, some acquired (the environmental risk factors.)

Therefore, parents have to be patient and accept the child's problem with a broad mind and also, the awareness of high negative impact of late intervention (a preemptive diagnosis), as well as providing the child with the emotional support and the linguistic environmental requirements play a crucial role in improving butter communicative skills and effective psychological factors such as positive self-esteem.

Moreover, speech therapy tasks may be a time consuming matter and the upholding of a wide range of new procedures of evaluation and screening materials which can facilitate more that process. Hence, children will be keen to attend the speech therapy sessions.

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Appendices

Appendix 01: Speech therapist interview

- ✓ Background information:1- Official job:
- 2- Place of employment:
- **3-Date of interview:**
- 4-Gender:
- 5-Work experience:

6-Age:

Question 1:

What are the main important skills or personal abilities for being successful in speech language therapy field?

Question 2:

In what extant do you find your path's treatment pleasing and challenging?

Question 3: how much time do you spend each week?

Question 4:

A speech language therapist is a very beneficial job nowadays. What behind your decision in such currier?

Question 5:

Talk to me please about the most effective devices do you implement the most?

Question 6:

For The achievement of good outcomes in speech language therapy needs an assisted performance. What do you think?

Question 7:

What are the best session's moments make you feel enjoyable and advocate?

Question 8:

It is true that there is a distinction between boys and girls in speech language development?

Question 9:

Regarding to the previous question, who suffer the most with speech language delay and disorders among the cases you have under speech therapy?

Question 10:

What are the most challenging, harsh perspectives did you coincide with in the speech therapy currier?

> Description of the cases :

Question1:

Please, would you tell me about the major signs that may help parents to identify if their child's speech is at the risk of a delay or disorders?

Question 2:

According to your working experience and the various cases that you have treat before and in that period of time how do you indentify with a full description the main signs behind speech language delay and disorders for the cases that I have selected for my practical framework (Abed nour, Khawla, Yacer, Safia, Ayoub, Mohamed) ?

Question 3:

What are the most challenging, harsh perspectives did you coincide with in the speech therapy currier?

Question 4:

In what extant speech language delay and disorders can be prevented?

Appendix 02: Parents' Interview:

➤ Birth History and conditions following birth:

Question 1:

Can you describe please any troubles, unusual conditions, and illness coincides with during the period of pregnancy?

Question 2:

Did your child have problems in breathing, allergies, fever, ear infection and bronchitis? If yes, describe please

Question 1:

Do you think that your child hearing is normal? If no, did you ever test your child hearing?

> Social and personal functioning:

Question 1:

Does your child play is shared (cooperative) or parallel? Describe please how they interact with others.

Question 2:

Please, tell me if there are any instances of speech language disorders or hearing loss (grandparents, uncles, siblings....)?

Question 3:

Can you list the most activities your child prefer to do at home?

Question 4:

How do you describe the relationship with your child?

> Receptive and Expressive language:

Question 1:

What the most things do you think that can be easy for your child to understand?

Question 2:

Which method can tell you what your child want or need?

> Parent's intervention:

Question 1:

When it was your primary concern about the problem of speech language impairment?

-Thank you for your participation-