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A Study of Language Delay in Children: From Acquisition to Disorder.

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Abstract :

This study addresses the issue of language delay in children from a developmental speech-therapy perspective, tracing the trajectory from typical language acquisition to manifestations of language and speech disorders. It examines the course of language development across the pre-linguistic and linguistic stages, highlighting the cognitive, auditory, and environmental factors that influence this process. The study further distinguishes between learning difficulties, language disorders, and speech disorders in terms of conceptual definition, etiology, and clinical manifestations. The findings suggest that language delay may serve as an indicator of receptive and/or expressive impairment requiring comprehensive, multidimensional assessment. The study concludes by emphasizing the necessity of early intervention within an integrative framework involving speech therapists, psychologists, and educators to support language development and enhance the child's academic and social adjustment.

Keywords: Language delay; Speech disorders; Language disorders; Language acquisition.

Introduction

Language constitutes an integrated system of sounds, words, and syntactic structures that enables individuals to express their thoughts, needs, and emotions. As such, it represents the primary medium of communication and mutual understanding among individuals and communities. Definitions of language have varied across classical and modern linguistic traditions, reflecting differences in theoretical orientations and methodological approaches.

Among the classical definitions, Ibn Khaldun conceptualized language as the speaker's expression of intended meaning through a deliberate linguistic act arising from communicative intent. He emphasized that such expression becomes an acquired faculty rooted in the speaking organ and shaped by the conventions of each linguistic community¹. This definition underscores the functional dimension of language as an intentional and socially regulated act grounded in learned competence.

Language production extends beyond observable verbal output. It involves a complex sequence of integrated neurological and physiological processes. The process begins in the brain, where ideas are formed and organized, and then proceeds through the nervous system to the speech organs, supported by the respiratory and auditory systems to ensure effective transmission and reception.

Any dysfunction affecting one or more of these components "whether neurological, organic, or functional "may result in what is termed a language disorder, which negatively impacts the individual's ability to express, comprehend, or both.

1. The Process and Stages of Language Acquisition:

The mother tongue is the first language acquired by the child and serves as the primary medium through which members of a given community communicate and interact. Its acquisition occurs during the early stages of life and is closely linked to the child's immediate environment, particularly the mother. Through direct interaction "addressing the child, engaging in affectionate speech, and repeatedly modeling sounds" the mother gradually facilitates the development of accurate articulation and familiarization with the phonological system of the language.

Among the theoretical perspectives addressing the relationship between early speech sounds and maternal interaction is that of Jespersen, who observed that the earliest consonantal sounds produced by infants are typically /b/, /p/, and /m/. These bilabial sounds rely on lip movement, which is extensively practiced during breastfeeding or bottle-feeding. Continuous muscular engagement of the

lips during feeding facilitates the later production of such sounds, enabling the child to articulate simple words such as “mama” and “papa” at an early age².

Language acquisition represents a crucial indicator of the child’s integration into society. It reflects cognitive development and the gradual transition from egocentric perception to more objective understanding, as well as from superficial awareness to the comprehension of relational structures among objects and phenomena.

However, this development does not occur automatically. It requires sustained interaction between the child and more experienced interlocutors through daily engagement and reciprocal dialogue. Adults guide the child, expand their awareness of the surrounding world, and assist in understanding and utilizing environmental resources effectively.

Language thus constitutes the fundamental link between the child and the adult, serving as the principal tool through which interaction occurs. Its acquisition is neither purely spontaneous nor an innate endowment realized without effort. Rather, it necessitates articulation practice, exposure to expressive forms, and continuous participation in diverse communicative contexts.

It is important to note that language acquisition begins at birth, and some research suggests that preparatory processes may even occur prenatally. This developmental trajectory invites a distinction between two primary stages of acquisition: the pre-linguistic stage and the linguistic stage.

First: The Pre-Linguistic Stage.

During this stage, the mother plays the primary role in laying the foundation for language acquisition. Although the child’s family environment includes parents and siblings who speak around him or her, they do not all contribute equally to the acquisition process. Some merely provide a general auditory background that has no direct or distinctive impact on the construction of the child’s language. In contrast, those who engage in direct interaction "addressing the child, responding to vocalizations, and participating in early attempts at expression" exert a more significant influence on language development.

Thus, the active individuals in the child’s environment are not merely those who speak near the child, but those who speak with the child and occupy a meaningful place in his or her emotional and social world. The mother often occupies this central position, as she represents a source of security, care, and sustained communication³.

The pre-linguistic stage includes three main phases:

1- The Crying Stage:

The cry produced by the infant at birth represents the first indication of vocal ability. It also reflects the proper functioning of the respiratory system and larynx, both of which are essential for the later development of speech.

Crying during this stage constitutes a natural reflexive response to hunger, pain, or discomfort resulting from an unpleasant position. It is therefore an instinctive expression of emotional states rather than intentional linguistic behavior. According to Stein, this stage generally lasts for approximately the first two months of life.

2- The Babbling Stage:

Babbling represents a more advanced step in the course of language development. During this phase, the infant begins producing repeated syllabic sounds and appears to derive pleasure from repeating them. This stage typically extends from the fourth or fifth month to approximately the eighth or ninth month⁴.

Linguists indicate that vowel sounds generally emerge before consonant sounds. Among the earliest common sounds is /m/, followed by /b/, which explains the frequent repetition of syllables such as “mama” and “baba.” More complex sounds, such as /l/ and /r/, usually appear later. It has also been observed that female infants begin babbling slightly earlier than males on average and demonstrate greater variability in sound production during this stage⁵.

This phase constitutes the second major step toward language learning following crying, as the child begins to build an initial repertoire of sounds, practicing and refining them in preparation for more mature expressive forms.

3- The Imitation Stage:

This stage is also known as the imitation phase (Imitation Stage). During this period, the child begins to imitate the sounds and words heard in the surrounding environment. Early imitation is often imperfect; children may change the position of sounds, omit certain elements, or substitute them with easier articulatory alternatives.

Imitation during this stage extends beyond vocal sounds to include gestures, facial expressions, and body movements, which function as significant means of

non-verbal communication. The child learns through observation and repetition, utilizing all available expressive resources.

In this context, Michael Corballis argues that early human communication historically relied heavily on manual gestures accompanied by a limited number of sounds. Over time, vocal communication gradually increased while the role of gestures diminished, leading speech to become the primary mode of communication, with gestures retaining a complementary function⁶.

Thus, the pre-linguistic stage forms the foundational basis upon which later stages of language acquisition are constructed, guiding the child from instinctive emotional expression toward intentional and organized communication.

Second: The Linguistic Stage:

The linguistic stage represents an intentional and goal-oriented phase in the developmental trajectory. It enables the child to achieve a higher level of cognitive and social development and facilitates effective integration into the surrounding environment. During this stage, the child begins producing words and sentences that form part of an emerging personal linguistic system, which gradually becomes governed by the grammatical rules being acquired.

This stage is divided into two principal phases:

A- The Vocabulary Acquisition Phase:

Children typically produce their first meaningful word around the tenth or eleventh month of age. This word often consists of a repeated monosyllabic structure and may function as an entire sentence, conveying a comprehensive meaning within a specific context. At this period, the child's speech is often referred to as "child language," characterized by simplicity, repetition, and clarity. It may denote the language used by children when addressing adults or the simplified speech employed by adults when addressing children.

Sociolinguistic studies indicate that the earliest words produced by children often imitate the names of familiar individuals in their environment, followed by names of objects closely associated with their daily needs and experiences. Frequently, these words are repeated through imitation without full comprehension of their precise meanings⁷.

B- The Sentence Formation Phase:

The child does not typically construct a clearly structured sentence until acquiring a considerable lexical repertoire, generally ranging between one

hundred and two hundred words. However, lexical richness is not measured solely by the number of memorized words, but by the child's ability to employ them in syntactically and semantically appropriate constructions.

This competence is achieved through imitation of linguistic patterns heard in the surrounding environment and through the child's capacity to infer the analogical principles underlying these patterns. In other words, the child does not acquire syntactic competence by mechanically reproducing entire sentences; rather, he or she internalizes the generative processes that produce them. The child thus acquires general rules and structural patterns rather than isolated lexical items⁸.

Although children typically pass through natural stages of language acquisition and rule learning, they may encounter various difficulties that hinder linguistic progress. These difficulties may result from language delay, developmental language disorders, or psychological, organic, and environmental factors.

This raises several essential questions: What is the nature of these difficulties? What is meant by language delay? What types of disorders may arise from it, and what are their underlying causes?

Before addressing the language disorders that children may experience, it is therefore necessary to examine the principal difficulties that may arise during the process of language learning.

1– Language Learning Difficulties in Children:

1-1 The Concept of Learning Difficulties:

Special education has long focused on children who experience academic difficulties primarily resulting from sensory impairments (such as hearing or visual impairments), intellectual disabilities, severe emotional disturbances, or speech and language communication disorders. In addition, certain medical or physical health conditions may also adversely affect academic performance.

In response to the needs of these populations, educational institutions have developed diversified curricula and instructional strategies that take individual differences into account and aim to support students in overcoming barriers to their academic and social development.

2-1 Language Learning Difficulties in Primary School Years:

Through early interaction with children during preschool or early childhood, some preliminary indicators of potential difficulties may be observed by parents or detected through routine medical examinations in clinics and healthcare centers. However, certain difficulties "particularly those related to language" may only become evident after sufficient time has passed to reveal a child's inability to master essential foundational skills.

The most prominent language-related learning difficulties during the primary school years include the following:

2-1-1 Reading Learning Difficulty:

This difficulty is characterized by an inability to read or by severely limited reading proficiency. It is among the most common challenges faced by primary school pupils and represents a significant concern for both teachers and parents⁹.

Children with reading difficulties may initially appear diligent, sitting quietly with their books and attempting to complete assignments. However, over time, their inability to read texts accurately becomes apparent. They may guess simple words or rely on accompanying images to infer meaning rather than demonstrating genuine reading comprehension.

2-1-2 Mathematics Learning Difficulty:

This difficulty refers to noticeable impairments in learning mathematics and typically emerges in the early years of primary education, particularly in the second grade. It may be observed even in basic arithmetic operations such as simple addition.

For instance, a child may correctly recall on one day that $2 + 2 = 4$ but fail to retrieve the same information the following day. The child may also hesitate between using addition or subtraction, suggesting that mathematical knowledge is based primarily on rote memorization rather than conceptual understanding.

2-1-3 Writing Learning Difficulty:

This difficulty manifests as weaknesses in handwriting skills. Letters may be inconsistent in size, poorly formed, and developmentally inappropriate for the child's age or grade level. A child with writing difficulties often requires significantly more time than peers to complete a written task, yet the resulting work may remain unclear and poorly organized, making it difficult to read.

Although it is difficult to determine an exact prevalence rate for children with language learning difficulties "due to insufficient systematic diagnostic

procedures in many educational institutions" some estimates suggest that the percentage may reach approximately 10% ¹⁰. Nevertheless, these figures remain subject to debate among researchers and specialists in the field.

As previously noted, such difficulties may stem from language delay or from broader language disorders that require appropriate professional intervention.

1– Language Disorders:

The term language disorders refers to impairments affecting either receptive language or expressive language. Receptive language concerns the child's ability to understand spoken language and follow verbal instructions, whereas expressive language refers to the ability to articulate thoughts, ideas, and emotions clearly¹¹.

Language disorders are defined as significant impairments in a child's ability to produce speech sounds accurately, maintain verbal fluency, or develop receptive and/or expressive language skills adequately, thereby necessitating specialized educational or therapeutic intervention¹².

Such impairments may be attributed to disturbances in one or more of the following areas:

- ❖ Disruption in the processes of speech transmission or reception (i.e., speaking or listening).
- ❖ Noticeable negative impact on linguistic, emotional, and academic development.
- ❖ Difficulties in social adaptation and peer interaction.

The term language delay is often used to describe certain manifestations of these disorders; however, conceptual clarification is required to distinguish delay from broader language impairment.

First: Language Delay in Children:

1- Definition of Language Delay:

Language delay is characterized by a marked slowness in the development of linguistic skills, whether related to comprehension (receptive language) or verbal expression (expressive language). Consequently, the age at which language acquisition begins may vary among children¹³.

The typical developmental window for the onset of spoken language ranges between approximately ten months and two years of age. If a child exceeds this developmental period without initiating speech, or demonstrates a significantly limited vocabulary, this may indicate the presence of a language disorder requiring professional follow-up.

Language delay also refers to a condition in which a child's linguistic performance falls below expectations for their chronological age. In such cases, the child's "language age" is lower than their actual age, and their vocabulary and communicative competence are noticeably limited compared to peers. The delay may affect receptive language (understanding instructions and spoken language), expressive language (speech production), or both domains simultaneously¹⁴.

2– Causes of Language Delay:

Language delay may result from multiple interacting factors, which can be categorized as follows:

2-1 Hearing Impairment:

Hearing constitutes the primary gateway to language acquisition. Therefore, when language delay is suspected, auditory capacity must be carefully assessed. If hearing loss is identified as the underlying cause, intervention may involve the use of hearing aids or, in severe cases, cochlear implantation.

2-2 Intellectual Limitations:

There is a strong relationship between cognitive ability and language development. Language is considered a higher-order cognitive function dependent on the efficiency of mental processes. As the severity of intellectual impairment increases, language delay tends to become more pronounced, and the child's opportunities for linguistic development decrease¹⁵ (Bougreba 50).

2-3 Environmental (Social and Psychological) Factors:

The family environment plays a crucial role in language development. Influential factors may include:

- ❖ Excessive overprotection or harsh parenting practices.
- ❖ Persistent parental conflict.
- ❖ Favoritism among siblings.
- ❖ Mockery or ridicule of the child's speech.

- ❖ Intense fear of specific individuals or situations.
- ❖ The loss of a significant attachment figure, particularly the mother¹⁶.

These factors often originate in early childhood, a developmental stage during which the child is particularly sensitive to psychological and social influences.

3-Bilingualism and Its Impact on Language Delay:

The issue of bilingualism in a child's environment has generated considerable debate among researchers. Some studies suggest that exposure to more than one language in the home does not negatively affect language development; on the contrary, it may enhance cognitive abilities when both languages are introduced in a balanced and structured manner.

Conversely, other research argues that bilingual exposure may lead to temporary confusion, particularly when the languages differ significantly in grammatical structure or phonological systems, such as variations in word order or phonological rules. This may result in code-mixing or slower acquisition of one or both languages.

The impact of bilingualism depends on several factors, including:

- ❖ The mode of acquisition (simultaneous vs. sequential bilingualism).
- ❖ The level of proficiency of caregivers in each language.
- ❖ The clarity of separation between linguistic contexts (home, preschool, school).

Language delay may also emerge when the language used in preschool or school differs substantially from the language spoken at home, creating a gap between two linguistic environments.

Having outlined the concept and causes of language delay, it is necessary to examine its manifestations and degrees more precisely.

1– Concept of Speech Disorders:

Many children with learning difficulties experience speech disorders and exhibit syntactic and grammatical errors. Their responses may be limited to single words due to difficulty constructing complete sentences. They may omit words, add unnecessary elements, produce incorrect word order, distort sounds, or struggle to form grammatically coherent sentences.

Before defining speech disorders, it is essential to clarify the concept of speech itself. Samuel Kirk defines speech as "the process of producing linguistically meaningful sounds resulting from respiration, phonation, resonance, articulation, and prosodic features"¹⁷.

2– Speech Disorders:

Speech disorders have been defined as disturbances affecting the flow, content, meaning, and contextual coherence of speech, including disruptions in thought organization, communicative intent, lexical selection, and speech rate¹⁸.

Ahmed Jaradat describes speech disorders as speech errors resulting from improper coordination of jaw, lip, and tongue movements and the lack of appropriate sequencing during articulation¹⁹.

2-1 Manifestations and Clinical Presentation of Speech Disorders:

Parents or caregivers may observe the following signs in children with speech disorders:

- ❖ Delayed onset of speech.
- ❖ Articulatory heaviness or difficulty during speech attempts.
- ❖ Limited expressive ability.
- ❖ Pronunciation errors such as distortion.
- ❖ Involuntary movements (e.g., tongue protrusion).
- ❖ Anxiety, social withdrawal, irritability, and poor adjustment in academic or play settings.
- ❖ Difficulty understanding vocabulary.

Researchers have identified three groups of children at higher risk for language disorders:

1. Children with sensory or neurological impairments that interfere with normal language development (e.g., intellectual disability or cerebral palsy).
2. Children with chronic medical conditions associated with general developmental delay.

3. Children experiencing significant social or family difficulties, such as parental separation²⁰.

3– Articulation Disorders

Articulation disorders occur as a result of errors in producing speech sounds accurately or forming them correctly. Minor articulation errors may be observed in early childhood; however, persistence beyond the expected developmental stage indicates a genuine articulation disorder requiring professional evaluation and intervention.

3-1 Causes of Articulation Disorders:

3-1-1 Organic (Biological) Causes:

Articulation impairments may result from structural anomalies affecting the speech mechanism, such as tongue deformities, pharyngeal abnormalities, or cleft palate. They may also stem from physiological factors, including partial or total paralysis of speech muscles or palatal dysfunction²¹.

Hearing impairment may also contribute, as difficulty perceiving sounds can affect accurate sound production. Intellectual limitations may likewise increase vulnerability to articulation problems.

3-1-2 Psychological Causes:

In the absence of observable organic impairments, psychological factors may influence speech production. These include anxiety, internal conflict, fear, emotional trauma, social withdrawal, low self-esteem, emotional deprivation, or repeated experiences of embarrassment.

Such factors may manifest as fluency disruptions, including stuttering, hesitations, or sudden speech blocks.

3-1-3 Environmental Causes:

Environmental factors may include:

- ❖ Exposure to multiple dialects or languages without structured guidance.
- ❖ Linguistic dependency and overreliance on others.
- ❖ Family dysfunction or persistent conflict.
- ❖ Overprotection or excessive authoritarian control.

- ❖ Meeting the child's needs without encouraging verbal expression.
- ❖ Faulty modeling or inadequate language stimulation.
- ❖ Poor academic or social adjustment.

These factors may weaken or hinder the natural development of articulation skills.

3-2 Symptoms of Articulation Disorders:

Articulation disorders present in various observable forms, including:

- ❖ Delayed speech and limited vocabulary.
- ❖ Aphasia types (e.g., expressive aphasia, anomic aphasia, or receptive difficulties).
- ❖ Grammatical inaccuracies.
- ❖ Immature or strained speech patterns.
- ❖ Substitution errors or sound distortions ²².
- ❖ They may also include:
- ❖ Fluency disorders such as stuttering.
- ❖ Resonance disorders (e.g., hypernasality).
- ❖ Excessive speech rate accompanied by sound omissions, blending, or phonological confusion.

These disorders may be accompanied by secondary motor behaviors, such as shoulder or hand movements, or foot pressing during speech attempts—often reflecting internal tension or increased articulatory effort.

In conclusion, articulation disorders are multifactorial in origin and diverse in presentation. Accurate diagnosis is essential in order to determine the most appropriate therapeutic or educational intervention.

3– Types of Articulation Disorders:

3-3-1 Distortion:

Distortion involves the inaccurate production of speech sounds in a way that does not precisely match the target word. Such errors may be developmentally

acceptable in early childhood; however, persistence after school entry is no longer considered typical.

For example, a child should pronounce the word *masāḥa* correctly and not produce a distorted form such as *mathāḥa*. Distortions may occur across age groups but are frequently observed in specific phonemes, particularly sibilant sounds such as /s/ and /ʃ/. These sounds may be produced laterally or from the side of the mouth and tongue, resulting in imprecise articulation.

3-3-2 Omission and Addition:

Omission is one of the most common articulation errors and occurs when a child deletes a sound from within a word²³.

For example, a child may pronounce *ṣabūra* as *sūra*, omitting one of the phonemes. Conversely, addition occurs when a child inserts an extra sound into a word, such as saying *wardāt* instead of *warda*. Both patterns reflect instability in phonological representation and production.

3-3-3 Substitution:

Substitution errors occur when a child replaces a target sound with another, inappropriate sound²⁴.

For instance, a child may substitute /s/ for /ʃ/, saying *sarāb* instead of *sharāb*, or replace /r/ with /w/. Substitution errors are more common among younger children and are particularly frequent between the ages of five and seven, a developmental stage often associated with dental transition.

Some children may pronounce *shams* as *shamth*, substituting /θ/ for /s/. While certain substitutions may resolve spontaneously, persistence beyond the expected developmental period warrants professional evaluation.

Such articulation errors may stem from psychological factors or from imitation of incorrect speech models, particularly among frequently interacting family members.

3-3-4 Pressure Errors:

Pressure-related articulation errors occur when certain consonants require adequate intraoral pressure for correct production. Proper articulation of sounds such as /r/ and /l/ necessitates appropriate tongue placement against the hard palate. Failure to generate sufficient articulatory pressure may result in inaccurate sound production²⁵.

4– Written Language Disorders:

Written language represents a secondary symbolic system composed of graphic representations of spoken language. It consists of written symbols (letters) arranged according to conventional orthographic rules. Because writing is largely arbitrary and conventional, some scholars have proposed phonetic orthographic systems aligned more closely with phonemic representation²⁶.

Difficulties in written language may involve impairments in spelling, grammatical structuring, written expression, or orthographic processing, often co-occurring with broader language disorders.

Conclusion:

Language constitutes a fundamental pillar of communication and interaction with the external world, particularly within educational contexts, where it serves as the primary tool for acquiring knowledge, constructing experience, and developing cognitive and social competencies.

Accordingly, any language disorder "whether affecting spoken or written language" poses a significant obstacle to overall development, especially in children, due to its direct impact on academic achievement, psychological well-being, and social adjustment.

Early intervention is therefore essential to mitigate these disorders or prevent their progression. Effective management requires accurate diagnosis and ongoing monitoring. Furthermore, a multidisciplinary approach is strongly recommended, involving speech-language pathologists, psychologists, and educators working collaboratively.

An individualized intervention program tailored to the child's specific needs should be developed to optimize language development and facilitate effective integration into academic and social environments.

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