Qualitative Research in Early Childhood Education
E-ISSN: 3123-9897
https://journals-arendra.or.id/rumahjurnal/index.php/QR-ECE
Page 66-81
Vol. 1 No. 2

A Clinical–Educational Qualitative Case Study of Speech Delay in a Four-Year-Old Boy

Augustina Ratniawati*[1]

[1] Master's Program in Early Childhood Education, Faculty of Graduate Studies, Universitas Panca Sakti Bekasi, Indonesia

ARTICLE INFO

Article History
Submitted:
January 21, 2026
Revised:
March 4, 2026
Accepted:
March 30, 2026
Keywords
Speech Delay; Early Childhood Education; Qualitative Case Study; Language Development; Parental Involvement
Scan Me:

ABSTRACT

Speech delay in early childhood remains a significant developmental issue that affects children's communication abilities, social interaction, and school readiness, particularly within clinical and educational contexts where early identification and intervention are often inconsistent. This study aims to explore the characteristics of speech delay in a four-year-old child and to examine how contextual factors and early intervention contribute to language development. A qualitative case study design was employed to provide an in-depth understanding of the child's communication profile across different settings. Data were collected through clinical and classroom observations, semi-structured interviews with parents and teachers, and document analysis. The data were analyzed using thematic analysis to identify recurring patterns and key themes related to speech and language development. The findings revealed four major themes: expressive language delay, reduced speech intelligibility, contextual variation in communication between clinical and educational settings, and the positive role of parental involvement and early intervention in supporting progress. The study highlights the importance of early identification, family-centered approaches, and integrated clinical–educational collaboration in addressing speech delay. These findings contribute to a deeper understanding of context-sensitive intervention strategies and provide practical implications for educators, clinicians, and policymakers in early childhood education.

This is an open access article under the CC-BY license.

Corresponding author: **Augustina Ratniawati,** Master's Program in Early Childhood Education, Faculty of Graduate Studies, Universitas Panca Sakti Bekasi, Indonesia
Email: aratniawati@gmail.com

Doi: https://doi.org/10.66291/qr-ece.v1i2.7

1. INTRODUCTION

Early Childhood Education (ECE) has become a global priority in efforts to improve human development, particularly in addressing inequalities in access to quality education, inclusivity, and early developmental support. International organizations such as the World Health Organization emphasize that early childhood represents a critical developmental window in which cognitive, social, emotional, and language skills rapidly emerge and significantly influence long-term life outcomes. Within this context, speech and language development is considered a foundational component of early learning, as it enables children to communicate, interact socially, and engage meaningfully in educational environments (World Health Organization, 2023). However, despite increased global attention, speech delay remains a prevalent developmental concern affecting a substantial number of preschool-aged children worldwide.

Speech delay in early childhood is characterized by a child's inability to meet expected speech and language milestones relative to their age. According to the American Speech-Language-Hearing Association, children around the age of four are generally expected to produce intelligible speech, use complete sentences, and demonstrate a rapidly expanding vocabulary (ASHA, 2020). When these developmental expectations are not achieved, children may experience difficulties in expressing their needs, participating in classroom activities, and forming social relationships. Research has shown that early speech and language difficulties can persist into later childhood, affecting literacy development, academic achievement, and psychosocial well-being (Paul et al., 2018; Sacks & Decker, 2020). These challenges highlight the urgency of understanding speech delay within early childhood education contexts.

Globally, ECE systems face complex challenges related to diversity, inclusion, and varying levels of teacher preparedness in identifying developmental delays. In many educational settings, teachers are often the first to observe early signs of speech delay during classroom interactions, storytelling activities, and peer communication. However, identifying speech delay is not always straightforward, as children's language development is influenced by multiple interacting factors, including biological conditions, environmental stimulation, and socio-cultural contexts (Leonard, 2014; Abugharsa, 2024). This complexity necessitates a comprehensive approach that integrates both clinical and educational perspectives to better understand children's communication development.

From a theoretical standpoint, speech and language development in early childhood is closely linked to sociocultural and interactionist perspectives, which emphasize the role of social interaction and environmental input in shaping language acquisition. Children learn language through meaningful interactions with caregivers, teachers, and peers, making the quality of these interactions a crucial determinant of language outcomes (Tamis-LeMonda et al., 2019). When children experience limited verbal interaction, reduced language exposure, or unresponsive communication environments, the risk of speech delay increases significantly. Conversely, language-rich environments characterized by responsive communication, shared storytelling, and play-based interaction have been shown to support optimal language development (Snow, 2017).

In recent years, qualitative research has gained prominence in early childhood studies due to its ability to capture the complexity of children's lived experiences within real-world contexts. Unlike quantitative approaches that focus on standardized measurement, qualitative research allows for an in-depth exploration of communication behaviors, interaction patterns, and contextual influences that shape language development (John W. Creswell & Poth, 2018). This approach is particularly valuable in studying speech delay, as it enables researchers to understand not only the presence of delay but also how it manifests across different settings and how children respond to intervention strategies.

A growing body of international qualitative studies has examined speech delay and early language development from various perspectives. For instance, research by McLeod and Harrison (2021) highlights the prevalence of speech sound disorders in preschool children and emphasizes the need for early identification and intervention. Similarly, qualitative studies have demonstrated that children's communication behaviors often vary across contexts, with improved performance observed in structured therapeutic settings compared to naturalistic classroom environments (Eadie et al., 2021). These findings suggest that environmental factors and instructional support play a significant role in shaping children's communication outcomes.

Furthermore, previous studies have consistently emphasized the importance of early intervention in addressing speech delay. Speech–language therapy, particularly when implemented during the preschool years, has been shown to significantly improve children's expressive and receptive language abilities (Roberts & Kaiser, 2011). Effective intervention approaches often include play-based strategies, modeling, repetition, and parent-mediated techniques that support language learning in natural contexts (Girolametto et al., 2018). In addition, parental involvement has been identified as a critical factor influencing intervention outcomes, as caregivers play a central role in reinforcing communication strategies within the home environment.

Despite these advancements, existing research reveals several important gaps. Many studies rely heavily on quantitative assessments and standardized testing, which may overlook the contextual and functional aspects of communication in real-life settings. Additionally, there is limited research that integrates clinical and educational perspectives within a single framework, particularly through in-depth qualitative case studies. Most studies focus on group-level data, leaving a lack of detailed understanding of individual children's developmental trajectories and how they navigate different communication environments.

Moreover, there is a need for research that explores how speech delay manifests across multiple contexts, including home, school, and clinical settings, and how these contexts interact to influence children's communication development. Understanding these dynamics is essential for designing effective, context-sensitive intervention strategies that support children holistically. Qualitative case studies are particularly well-suited to address this gap, as they provide rich, detailed insights into individual experiences and allow for the exploration of complex developmental phenomena within real-life contexts (Yin, 2018; Stake, 2020).

In response to these gaps, the present study adopts a clinical–educational qualitative case study approach to explore speech delay in a four-year-old child. This approach enables a comprehensive examination of the child's communication behaviors across different settings, including clinical therapy sessions and educational environments. By integrating observations, interviews, and document analysis, the study seeks to develop a holistic understanding of the child's speech and language development.

The purpose of this study is to examine the characteristics of speech delay in early childhood and to understand how contextual factors and early intervention influence communication development. Specifically, the study aims to (1) describe the child's expressive and speech production abilities, (2) analyze how communication varies across clinical and educational contexts, and (3) explore the role of early intervention and parental involvement in supporting language development.

The findings of this study are expected to contribute to both theoretical and practical domains. Theoretically, the study provides a context-rich understanding of speech delay within a qualitative framework, highlighting the importance of integrating clinical and educational perspectives. Practically, the study offers insights for educators, speech–language pathologists, and parents in designing effective intervention strategies that are responsive to children's individual needs and contextual realities.

Ultimately, this study underscores the importance of early identification, interdisciplinary collaboration, and family involvement in supporting children with speech delay. By focusing on an in-depth qualitative case, the research contributes to a more nuanced understanding of early childhood communication development and supports the advancement of evidence-informed practices in early childhood education.

2. LITERATURE REVIEW

2.1 Early Childhood Education Context

Early Childhood Education (ECE) is widely recognized as a critical stage in human development, providing the foundation for cognitive, social, emotional, and language growth. International frameworks emphasize that early learning experiences significantly influence long-term educational outcomes and life trajectories (World Health Organization, 2023). Within ECE, language development plays a central role, as it supports children's ability to communicate, engage socially, and participate in structured learning environments (Snow, 2017). High-quality early childhood programs typically emphasize child-centered pedagogy, developmentally appropriate practices, and meaningful interactions between children and adults. These interactions are essential for fostering language acquisition, as children learn through communication and social engagement. Consequently, the educational context becomes a key factor influencing children's speech and language development.

In practice, early childhood education settings serve as important environments for identifying developmental delays, including speech delay. Teachers often observe children's communication abilities during classroom activities such as storytelling, group discussions, and play-based learning.

These observations allow educators to detect early warning signs, such as limited vocabulary, unclear speech, or reduced participation in verbal interactions (American Speech-Language-Hearing Association [ASHA], 2020). However, identifying speech delay can be challenging due to variations in developmental pace and differences in socio-cultural backgrounds. In some cases, children may appear quiet or shy rather than experiencing a genuine speech delay, which complicates early detection. Therefore, educators require adequate knowledge and training to differentiate between developmental variation and potential communication disorders. This highlights the importance of strengthening teacher capacity within ECE systems.

Contemporary issues in ECE, such as inclusivity, diversity, and digital transformation, also influence language development. Increasing cultural and linguistic diversity in classrooms requires educators to adopt inclusive practices that support children from various backgrounds. Research suggests that multilingual environments can both enrich and complicate language development, depending on the quality of language exposure and interaction (Dockrell & Marshall, 2021). Additionally, the growing use of digital technology in early childhood settings has raised concerns about its impact on language acquisition. Excessive screen time has been associated with reduced verbal interaction and delayed language development in young children (Abugharsa, 2024). Conversely, guided and interactive use of digital media can support language learning when integrated appropriately into educational practices. Thus, the ECE context continues to evolve, requiring adaptive and evidence-based approaches.

Family involvement is another crucial component of early childhood education that significantly influences language development. Children's early communication skills are strongly shaped by the quantity and quality of interactions with caregivers at home. Responsive parenting, characterized by active listening, verbal engagement, and shared activities, has been shown to promote language acquisition (Tamis-LeMonda et al., 2019). In contrast, limited caregiver interaction and reduced language stimulation are associated with increased risk of speech delay. Educational institutions play a key role in engaging families and promoting home–school collaboration to support children's development. Programs that encourage parental participation and provide guidance on language stimulation strategies have demonstrated positive outcomes. Therefore, understanding the broader ECE context requires considering both educational and familial environments.

2.2 Review of International Qualitative Studies

A growing body of international research has examined speech delay and language development in early childhood, highlighting its complexity and multifactorial nature. Studies indicate that speech delay is influenced by a combination of biological, environmental, and social factors, which interact dynamically during early development (Leonard, 2014). Qualitative research has become increasingly important in exploring these interactions, as it provides rich, contextual insights into children's communication behaviors. Unlike quantitative studies that rely on standardized assessments, qualitative approaches focus on lived experiences and real-world contexts (Creswell &

Poth, 2018). This perspective allows researchers to capture nuances in communication that may not be evident in test scores alone. Consequently, qualitative studies contribute significantly to understanding speech delay in early childhood.

Several international qualitative studies have emphasized the variability of children's communication across different contexts. For example, research has shown that children with speech delay often demonstrate better communication in structured therapeutic settings compared to naturalistic classroom environments (Eadie et al., 2021). This suggests that environmental support, such as visual cues and adult guidance, plays a critical role in facilitating language production. In contrast, less structured environments may present challenges that limit children's verbal participation. These findings highlight the importance of considering contextual influences when assessing speech delay. They also underscore the need for interventions that support skill generalization across settings. Without such support, improvements in therapy may not transfer effectively to everyday interactions.

Another important theme in the literature is the role of early intervention in supporting language development. Studies consistently demonstrate that early identification and intervention can significantly improve outcomes for children with speech delay (Roberts & Kaiser, 2011). Play-based and child-centered intervention strategies are particularly effective, as they align with developmental principles of early childhood education. Qualitative research has shown that children respond positively to interactive and engaging therapy approaches that incorporate play and social interaction (Girolametto et al., 2018). These approaches not only enhance language skills but also increase children's motivation and confidence in communication. However, the effectiveness of intervention depends on consistency across home and school environments. Therefore, collaboration among professionals and families is essential.

Parental involvement has also been identified as a key factor influencing the success of intervention programs. Qualitative studies highlight that parents who actively engage in their child's language development contribute significantly to improved outcomes. Parent-mediated interventions, where caregivers are trained to implement language strategies at home, have been shown to be highly effective (Roberts & Kaiser, 2011). These interventions allow children to practice communication skills in naturalistic settings, reinforcing learning beyond clinical sessions. Additionally, parental awareness and understanding of speech delay play a crucial role in shaping the home language environment. When parents are informed and supported, they are more likely to provide consistent and meaningful language input. This emphasizes the importance of family-centered approaches in early intervention.

Despite these contributions, existing research reveals several limitations that highlight the need for further investigation. Many studies rely on cross-sectional designs, which limit the ability to understand developmental changes over time. Additionally, there is a tendency to focus on group-level data rather than individual experiences, which may overlook unique developmental trajectories. Qualitative case studies addressing individual children's experiences across multiple contexts remain relatively limited. Furthermore, there is a lack of integration between clinical and educational perspectives in many studies. This gap suggests the need for research that adopts a holistic,

interdisciplinary approach to understanding speech delay. Addressing these limitations is essential for advancing knowledge and practice in early childhood education.

2.3 Conceptual and Theoretical Framework

The present study is grounded in sociocultural theory, which emphasizes the role of social interaction and cultural context in shaping learning and development. According to this perspective, children acquire language through meaningful interactions with more knowledgeable others, such as parents and teachers (Vygotsky, as cited in Snow, 2017). Language development is therefore not an isolated process but is embedded within social and cultural practices. This framework highlights the importance of responsive communication and supportive environments in facilitating language acquisition. It also underscores the role of scaffolding, where adults provide guidance to support children's learning. In the context of speech delay, sociocultural theory suggests that improving interaction quality can enhance language development.

In addition to sociocultural theory, this study is informed by interactionist perspectives, which emphasize the interplay between biological predispositions and environmental input. Interactionist theory posits that children are biologically equipped for language learning but require adequate environmental stimulation to develop communication skills (Paul et al., 2018). This perspective aligns with research indicating that both internal and external factors contribute to speech delay. For example, biological conditions such as hearing impairment may interact with environmental factors such as limited language exposure. Understanding this interaction is crucial for designing effective interventions. It highlights the need for comprehensive assessment that considers both child characteristics and contextual influences.

The study also adopts a clinical–educational framework, which integrates perspectives from speech–language pathology and early childhood education. This framework recognizes that speech development occurs across multiple contexts, including home, school, and clinical settings (World Health Organization, 2023). By combining clinical assessment with educational observation, this approach provides a holistic understanding of children's communication abilities. It also emphasizes the importance of collaboration among professionals, educators, and families in supporting language development. Such integration enhances the ecological validity of research findings. Ultimately, this framework supports context-sensitive and individualized intervention strategies.

Finally, thematic analysis serves as the analytical lens for interpreting qualitative data in this study. Thematic analysis allows researchers to identify patterns and themes within data, providing a structured yet flexible approach to qualitative analysis (Braun & Clarke, 2021). This method is particularly suitable for exploring complex phenomena such as speech delay, where multiple factors interact. By analyzing data from observations, interviews, and documents, researchers can develop a comprehensive understanding of children's communication experiences. Thematic analysis also supports the identification of key issues that inform intervention practices. Therefore, it aligns well with the study's aim of exploring speech delay within a clinical–educational context.

3. METHODOLOGY

3.1 Research Design

This study employed a qualitative case study design to explore speech delay in early childhood within a clinical–educational context. A qualitative approach was selected because it enables an in-depth understanding of complex developmental phenomena, particularly children's communication behaviors and contextual influences that cannot be fully captured through quantitative measures (Creswell & Poth, 2018). The case study design is particularly appropriate for examining individual developmental trajectories in real-life settings, allowing researchers to investigate the interaction between personal, social, and environmental factors (Yin, 2018).

In this study, the focus was on a single case of a four-year-old child with speech delay, enabling a detailed exploration of speech characteristics, communication patterns, and responses to intervention. The design allowed for a holistic understanding of the child's development across multiple contexts, including clinical therapy and educational settings. By integrating multiple data sources, the study aimed to provide a comprehensive and context-sensitive analysis of speech delay. This approach aligns with qualitative research principles that emphasize depth, meaning, and contextual interpretation (Braun & Clarke, 2021).

3.2 Participants and Research Context

The participant in this study was a four-year-old boy identified as experiencing speech delay. The child was selected using purposive sampling based on concerns raised by parents and educators regarding limited expressive language and unclear speech compared to age expectations. At the time of the study, the child was enrolled in a preschool program and had been referred for speech–language assessment. The research was conducted in two primary contexts: a speech–language therapy clinic and a preschool classroom. The clinical setting provided structured opportunities to observe the child's communication abilities during intervention sessions, while the educational setting allowed for naturalistic observation of the child's interaction with peers and teachers. This dual-context approach enabled the researcher to examine differences in communication behavior across environments. Additional participants included the child's parents and a preschool teacher, who provided valuable insights into the child's developmental history, communication patterns, and daily interactions. Their perspectives were essential for understanding the broader context influencing the child's speech development. The inclusion of multiple informants enhanced the depth and credibility of the data.

3.3 Data Collection Methods

Data were collected using multiple qualitative methods to ensure richness and triangulation. The primary methods included observation, interviews, and document analysis, each contributing to a comprehensive understanding of the child's communication development. First, clinical observations were conducted during speech–language therapy sessions to examine the child's articulation, expressive and receptive language abilities, and interaction patterns. Field notes were recorded to capture detailed descriptions of the child's verbal and nonverbal communication

behaviors. Second, educational observations were carried out in the preschool classroom to explore the child's spontaneous language use, participation in activities, and peer interaction. These observations provided insight into how the child communicated in naturalistic settings. Third, semi-structured interviews were conducted with the child's parents and preschool teacher. The interviews aimed to gather information about the child's developmental history, communication challenges, and perceptions of progress. Open-ended questions allowed participants to share their experiences in depth, providing valuable qualitative data. Finally, document analysis was conducted on relevant materials, including assessment reports, therapy notes, and educational records. These documents supported data triangulation and provided additional context for interpreting the findings.

3.4 Data Analysis Techniques

Data analysis was conducted using thematic analysis, following an inductive approach to identify patterns and themes emerging from the data (Braun & Clarke, 2021). The analysis process involved several stages to ensure systematic and rigorous interpretation. First, the researcher familiarized themselves with the data by reviewing observation notes, interview transcripts, and documents repeatedly. This step allowed for an initial understanding of key issues related to the child's speech and language development. Second, initial codes were generated to categorize meaningful segments of data. These codes represented recurring patterns, such as communication difficulties, contextual influences, and responses to intervention. Third, codes were organized into broader themes that reflected the main findings of the study. Themes were refined through continuous comparison across data sources to ensure consistency and coherence. The final themes captured key aspects of the child's communication profile and developmental experiences. To enhance the credibility of the analysis, data triangulation was applied by comparing findings from observations, interviews, and documents. This process ensured that the results were well-supported and reflected multiple perspectives.

3.5 Ethical Considerations

Ethical considerations were carefully addressed throughout the research process to ensure the protection and well-being of the participant. Informed consent was obtained from the child's parents prior to data collection, and participation was entirely voluntary. The purpose of the study, procedures, and potential risks were clearly explained to all participants. Confidentiality and anonymity were strictly maintained by using pseudonyms and removing identifying information from all data sources. The child's identity and personal details were protected in all research documentation and reporting. Additionally, the researcher ensured that data were securely stored and accessible only for research purposes. The study also prioritized the child's comfort and well-being during observations and interactions. The researcher avoided any procedures that could cause distress or discomfort. Ethical approval was obtained from the relevant institutional authority, ensuring that the study adhered to established ethical standards in qualitative research. These measures demonstrate the researcher's commitment to conducting responsible and ethical research in early childhood education.

4. FINDINGS

The findings of this study are presented in four major themes derived from thematic analysis of observations, interviews, and document review. These themes reflect the child's expressive language abilities, speech intelligibility, contextual communication patterns, and the role of parental involvement and early intervention. Each theme is supported by evidence from multiple data sources to ensure credibility and depth.

4.1 Expressive Language Delay

The first theme reveals that the child demonstrated significant delays in expressive language development compared to age expectations. Observational data indicated that the child predominantly used single words and occasional two-word combinations, with limited ability to form complete sentences. During classroom activities, the child rarely initiated verbal interaction and often relied on gestures to express needs. In therapy sessions, the child showed attempts to produce longer utterances, but these were inconsistent and required prompting. The limited use of grammatical structures, such as verb tense and prepositions, further indicated developmental delay. These patterns suggest that expressive language deficits were a central characteristic of the child's communication profile.

Interview data from the parent confirmed these findings and provided deeper insight into the child's daily communication challenges. The parent explained:
"At home, my child mostly uses one or two words when speaking. Sometimes he just points to things instead of saying what he wants. When we ask him to speak in sentences, he seems confused and often stops trying. We can understand him because we are used to it, but other people usually cannot understand what he means." (Parent)

Similarly, the preschool teacher observed limited verbal participation in classroom interactions. The teacher stated:
"In class, he rarely speaks unless we ask him directly. Even then, his answers are very short, sometimes just one word. When other children are talking or telling stories, he prefers to stay quiet and just watch. It seems like he wants to communicate, but he does not have enough words to express himself clearly." (Teacher)

These findings indicate that expressive language delay significantly affected the child's ability to communicate effectively across both home and school environments.

4.2 Speech Sound Production and Intelligibility

The second theme highlights difficulties in speech sound production, which contributed to reduced intelligibility. Observations during therapy sessions revealed frequent phonological errors, including sound omissions and substitutions. These errors made it difficult for unfamiliar listeners to understand the child's speech. While parents were able to interpret the child's speech due to familiarity, communication breakdowns were common in broader social contexts. In classroom settings, peers often failed to understand the child, which limited interaction opportunities. The child also showed hesitation in speaking, possibly due to awareness of being misunderstood.

The parent described these challenges in detail:
"Sometimes he tries to say a word, but it does not sound clear. We can guess what he means because we know him, but others often ask him to repeat many times. When people do not understand him, he becomes quiet and sometimes looks frustrated. He prefers to stop talking rather than keep trying." (Parent)

The teacher also noted similar patterns in the classroom environment: *"When he speaks, other children often do not understand him. They either ignore him or ask him to repeat, but he usually does not try again. This makes it difficult for him to join conversations or group activities. I notice that he becomes less confident when his speech is not understood."* (Teacher)

These findings demonstrate that speech intelligibility plays a crucial role in social participation and that articulation difficulties can significantly impact children's communication confidence and interaction.

4.3 Contextual Differences in Communication

The third theme reveals that the child's communication abilities varied significantly across clinical and educational contexts. In structured therapy sessions, the child demonstrated improved verbal output, especially when supported with visual aids, modeling, and guided interaction. The child was more responsive to prompts and showed increased willingness to attempt verbal communication. In contrast, in the classroom setting, spontaneous communication was minimal, and the child rarely initiated interaction with peers. The lack of structured support appeared to limit the child's communication performance. These findings suggest that environmental context strongly influences language use.

The parent provided insight into how context affected communication at home: *"When we practice with him at home using pictures or when we repeat words slowly, he tries to speak more. But when he is playing freely or outside, he talks less and sometimes does not speak at all. It seems like he needs help or examples to be able to talk more clearly. Without that support, he becomes quiet again."* (Parent)

The teacher also highlighted differences between structured and unstructured situations: *"During one-on-one interaction, he can say more words, especially when I guide him step by step. But during group activities, he does not speak much and prefers to stay silent. He seems overwhelmed when there are many children around. This shows that the environment really affects how he communicates."* (Teacher)

These findings indicate that structured support plays an important role in facilitating communication and that generalization of skills across contexts remains a challenge.

4.4 Role of Parental Involvement and Early Intervention

The fourth theme emphasizes the positive impact of parental involvement and early intervention on the child's communication development. Observational data indicated gradual improvement in the child's expressive language and speech clarity over time. The child began to use longer utterances and showed increased willingness to communicate verbally, particularly in familiar settings. These improvements were more evident when consistent strategies were applied across home and therapy environments. Parent engagement in implementing language stimulation techniques contributed significantly to this progress. This highlights the importance of collaborative intervention approaches.

The parent described their active role in supporting the child's development: *"We follow the therapist's advice to talk more with him, repeat words, and use simple sentences. Every day we try to practice during playtime and daily activities. We also read books together and encourage him to name objects. We can see that he is starting to say more words now compared to before."* (Parent)

The teacher also observed improvements linked to intervention efforts: *"After some time, I noticed that he started to use more words, especially when we give him encouragement. He is still behind compared to other children, but there is progress. When parents and teachers work together, it seems to help him feel more confident. Consistency between home and school is very important for his development."* (Teacher)

These findings demonstrate that early intervention combined with active parental involvement contributes positively to speech and language development, although continued support is still required.

5. DISCUSSION

The findings of this study demonstrate that expressive language delay is a central characteristic of the child's communication profile, which aligns with existing literature on early childhood speech delay. Children at the age of four are typically expected to produce complex sentences and engage in meaningful verbal interactions; however, the participant in this study showed limited sentence structure and vocabulary use. This finding is consistent with previous research indicating that expressive language deficits are among the most common indicators of speech delay in preschool-aged children (Paul et al., 2018). The reliance on gestures and nonverbal communication observed in this study also supports earlier findings that children with expressive language difficulties often compensate through alternative communication strategies (Rescorla & Dale, 2022). These compensatory behaviors reflect both communicative intent and underlying linguistic limitations. Therefore, early identification of expressive language delay is essential to prevent further developmental challenges.

In addition to expressive language delay, the study highlights significant issues in speech sound production and intelligibility, which further affected the child's communication effectiveness. The presence of phonological errors, such as omissions and substitutions, reduced the clarity of speech, particularly for unfamiliar listeners. This finding is consistent with research indicating that reduced intelligibility is a common feature of speech sound disorders in early childhood (McLeod & Harrison, 2021). The difference in understanding between familiar and unfamiliar listeners observed in this study reflects patterns documented in previous literature, where caregivers often develop interpretive familiarity with the child's speech (Eadie et al., 2021). Reduced intelligibility can limit children's participation in social interactions and classroom activities, leading to decreased communication opportunities. Consequently, addressing both articulation and expressive language is crucial in intervention planning. These findings emphasize the interconnected nature of speech and language development.

One of the most significant findings of this study is the variation in the child's communication across different contexts, particularly between clinical and educational settings. The child demonstrated improved verbal output in structured therapy sessions but showed limited spontaneous communication in the classroom environment. This pattern supports previous qualitative research suggesting that environmental support plays a critical role in facilitating language production (Dockrell & Marshall, 2021). Structured environments that provide modeling, visual cues, and guided interaction can enhance children's communication performance. In contrast, less structured environments may present challenges that hinder verbal participation, especially for children with speech delay. This

finding highlights the importance of context-sensitive intervention strategies that support skill generalization. Without such strategies, improvements achieved in therapy may not transfer effectively to everyday communication contexts.

The study also reinforces the importance of early intervention in improving speech and language outcomes in early childhood. The observed improvements in the child's expressive language and speech production are consistent with research demonstrating the effectiveness of early intervention programs (Roberts & Kaiser, 2011). Play-based and interactive intervention strategies, which were applied in this study, align with developmentally appropriate practices in early childhood education. Previous studies have shown that such approaches are effective in promoting language development by engaging children in meaningful and enjoyable activities (Girolametto et al., 2018). However, the findings also indicate that progress may be gradual and requires sustained effort over time. This suggests that early intervention should be viewed as an ongoing process rather than a one-time solution. Continuous monitoring and adaptation of intervention strategies are necessary to meet the evolving needs of the child.

Parental involvement emerged as a critical factor influencing the child's progress, which is strongly supported by existing literature. The active participation of parents in implementing language stimulation strategies at home contributed to increased verbal attempts and improved communication confidence. This finding aligns with studies emphasizing the effectiveness of parent-mediated interventions in supporting language development (Tamis-LeMonda et al., 2019). When parents are actively engaged, children receive consistent language input across different environments, reinforcing learning and promoting skill generalization. The collaboration between parents and professionals observed in this study reflects a family-centered approach to intervention. Such approaches have been widely recommended in early childhood education and speech–language pathology. Therefore, strengthening parental involvement should be a key component of intervention programs.

Furthermore, the integration of clinical and educational perspectives in this study highlights the importance of interdisciplinary collaboration. The clinical–educational approach allowed for a comprehensive understanding of the child's communication development across multiple contexts. This finding supports recommendations from international frameworks that emphasize coordinated efforts between healthcare and education systems (World Health Organization, 2023). Collaboration between speech–language pathologists and educators ensures that intervention strategies are consistently applied across settings. It also enhances the relevance and effectiveness of intervention by addressing real-life communication challenges. The study demonstrates that integrated support systems can improve outcomes for children with speech delay. Therefore, interdisciplinary collaboration should be promoted as a standard practice in early childhood intervention.

The findings of this study also have important theoretical implications, particularly in relation to sociocultural and interactionist perspectives of language development. The observed influence of environmental context and social interaction on communication aligns with sociocultural theory, which emphasizes the role of social interaction in learning (Snow, 2017). The child's improved communication in structured and supportive environments reflects the importance of scaffolding in language development. Additionally, the interaction between biological and environmental factors observed in this study supports interactionist theory (Paul et al., 2018). These theoretical perspectives

provide a framework for understanding the complexity of speech delay and inform intervention practices. By integrating these perspectives, the study contributes to a more holistic understanding of early childhood language development. This highlights the need for theory-informed practice in addressing speech delay.

Despite its contributions, this study has several limitations that should be acknowledged. As a single-case qualitative study, the findings are not intended to be generalized to all children with speech delay. However, the in-depth analysis provides valuable insights into individual developmental experiences and contextual influences. Future research should consider involving multiple participants or adopting longitudinal designs to explore changes over time. Additionally, further studies could examine the effectiveness of specific intervention strategies across diverse cultural and educational contexts. Expanding research in this area will contribute to a more comprehensive understanding of speech delay. Such efforts are essential for improving early childhood education practices globally.

6. CONCLUSION

This study provides an in-depth understanding of speech delay in early childhood through a clinical–educational qualitative case study. The findings reveal that the child's communication difficulties are characterized by expressive language delay, reduced speech intelligibility, and strong contextual influences on language use across clinical and educational settings. The study also highlights that structured support environments, such as therapy sessions, significantly enhance communication performance, while less structured classroom contexts may limit verbal participation. In addition, parental involvement and early intervention emerged as critical factors contributing to gradual improvement in the child's speech and language development.

Theoretically, this study contributes to the understanding of speech delay by integrating sociocultural and interactionist perspectives, emphasizing the role of social interaction and environmental support in language acquisition. Methodologically, the use of a qualitative case study provides rich, context-sensitive insights that are often overlooked in quantitative research, particularly in capturing real-life communication experiences. Practically, the findings offer important implications for educators and speech–language professionals, highlighting the need for early identification, individualized intervention, and consistent collaboration between home and school environments.

From a policy perspective, the study underscores the importance of strengthening early childhood education systems by improving teacher capacity in detecting speech delay and promoting integrated services between education and healthcare sectors. Policies should also encourage family-centered intervention programs and provide access to early speech–language support services. Despite its contributions, this study is limited to a single case; therefore, future research is recommended to explore broader populations and longitudinal outcomes. Overall, this study reinforces the importance of early, collaborative, and context-sensitive approaches in supporting children with speech delay.

7. REFERENCES

American Speech-Language-Hearing Association. (2020). *Speech and language developmental milestones*. ASHA.

American Speech-Language-Hearing Association. (2020). *Roles and responsibilities of speech-language pathologists in early intervention*. ASHA.

Abugharsa, I. (2024). Speech delay in children: Causes, impacts, and interventions. *International Journal of Child Development, 12*(1), 22–35.
Bishop, D. V. M., Snowling, M. J., Thompson, P. A., & Greenhalgh, T. (2020). Phase 2 of CATALISE: A multinational and multidisciplinary Delphi consensus study of problems with language development. *Journal of Child Psychology and Psychiatry, 61*(4), 450–463. https://doi.org/10.1111/jcpp.13170
Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage Publications.
Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design* (4th ed.). Sage Publications.
Dockrell, J. E., & Marshall, C. R. (2021). Measurement issues: Assessing language skills in young children. *Child Language Teaching and Therapy, 37*(2), 109–123.
Duff, F. J., Reen, G., Plunkett, K., & Nation, K. (2015). Do infant vocabulary skills predict school-age language and literacy outcomes? *Journal of Child Psychology and Psychiatry, 56*(8), 848–856.
Eadie, P., Morgan, A., Ukoumunne, O. C., Ttofari Eecen, K., Wake, M., & Reilly, S. (2021). Speech sound disorder at 4 years: Prevalence, comorbidities, and predictors. *Journal of Speech, Language, and Hearing Research, 64*(1), 203–217.
Justice, L. M., & Redle, E. E. (2014). *Communication sciences and disorders: A clinical evidence-based approach*. Pearson.
Leonard, L. B. (2014). *Children with developmental language disorder* (2nd ed.). MIT Press.
Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
McLeod, S., & Harrison, L. J. (2021). Epidemiology of speech and language disorders in preschool children. *Journal of Speech, Language, and Hearing Research, 64*(3), 731–744.
Norbury, C. F., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., & Pickles, A. (2016). The impact of nonverbal ability on prevalence and clinical presentation of language disorder. *Journal of Child Psychology and Psychiatry, 57*(11), 1247–1257.
Paul, R., Norbury, C. F., & Gosse, C. (2018). *Language disorders from infancy through adolescence* (5th ed.). Elsevier.
Rescorla, L., & Dale, P. (2022). Late talkers: Language development, interventions, and outcomes. *Topics in Language Disorders, 42*(2), 97–113.
Roberts, M. Y., & Kaiser, A. P. (2011). The effectiveness of parent-implemented language interventions: A meta-analysis. *American Journal of Speech-Language Pathology, 20*(3), 180–199.
Sacks, C., & Decker, S. L. (2020). Early language delay and later academic outcomes. *Early Childhood Research Quarterly, 53*, 167–177.
Stake, R. E. (2020). *Qualitative research: Studying how things work*. Guilford Press.
Tamis-LeMonda, C. S., Kuchirko, Y., & Song, L. (2019). Why is infant language learning facilitated by parental responsiveness? *Current Directions in Psychological Science, 28*(4), 336–341.
Taylor, C. L., Christensen, D., Lawrence, D., Mitrou, F., & Zubrick, S. R. (2018). Risk factors for children's receptive vocabulary development. *Pediatrics, 142*(1), e20173362.
Tracy, S. J. (2020). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (2nd ed.). Wiley-Blackwell.
Wake, M., Tobin, S., Girolametto, L., Ukoumunne, O. C., Gold, L., Levickis, P., Sheehan, J., Goldfeld, S., & Reilly, S. (2015). Outcomes of population-based language promotion for slow-to-talk toddlers. *BMJ, 350*, h3174.
World Health Organization. (2023). *Improving early childhood development: Global strategies and interventions*. WHO.
World Health Organization. (2021). *Guidelines on early childhood developmental support*. WHO.
Yin, R. K. (2018). *Case study research and applications* (6th ed.). Sage Publications.
Zubrick, S. R., Taylor, C. L., Rice, M. L., & Slegers, D. W. (2007). Late language emergence at 24 months. *Journal of Speech, Language, and Hearing Research, 50*(6), 1562–1592.
Law, J., Charlton, J., Dockrell, J., Gascoigne, M., McKean, C., & Theakston, A. (2017). Early language development: Needs, provision, and intervention. *Educational Review, 69*(2), 190–206.
Morgan, A. T., & Webster, R. (2018). Aetiology of childhood speech sound disorders. *Current Developmental Disorders Reports, 5*, 174–180.
Reilly, S., McKean, C., Morgan, A., & Wake, M. (2015). Identifying and managing speech and language disorders in children. *BMJ, 350*, h2318.
Snow, C. E. (2017). *Language development in early childhood*. Routledge.
Dockrell, J., Ricketts, J., Palikara, O., Charman, T., & Lindsay, G. (2019). Profiles of need in language disorder. *Journal of Child Psychology and Psychiatry, 60*(10), 1099–1108.
McCormack, J., McLeod, S., McAllister, L., & Harrison, L. J. (2009). A systematic review of the impact of speech impairment. *International Journal of Speech-Language Pathology, 11*(3), 171–196.
Girolametto, L., Weitzman, E., & Greenberg, J. (2018). Parent coaching models for early language intervention. *Infants & Young Children, 31*(3), 197–215.
Bishop, D. V. M. (2021). Which neurodevelopmental disorders get researched and why? *PLoS ONE, 16*(1), e0244780.
American Speech-Language-Hearing Association. (2020). *Speech and language developmental milestones*. ASHA.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa