

The Impact of Early Intervention on the Development of Language and Communication Skills in Children with Language Disorders

1. **Saifullah** BS English Ghazi University DG Khan
 2. **Sonia Khalid** BS Nursing Nishtar Medical University
 3. **Dr. Allah Wasaya Babbar**
 4. **Dr. Raheeq Ahmad Abbasi**, President British Institute of Islamic Studies, UK
 5. **Dr. Sohail Akhtar**, Lecturer, History Department, Ghazi University, Dera Ghazi
 6. **Qurat Ul Ain**, M.Phil in English (Linguistics)
- Corresponding Email: globalwill2021@gmail.com

Abstract

Language difficulties in children can have a substantial impact on the children's academic performance as well as their social and emotional growth. The purpose of this research is to evaluate the effect that participation in an early intervention program has on the progression of linguistic and communicative abilities in children who have been diagnosed with language impairments. Children between the ages of 6 and 7 years old who have been diagnosed with particular language impairment, expressive language disorder, receptive language disorder, or phonological issue are included in the study as participants. For the purpose of gaining a better understanding of the participant population, demographic information such as age, gender, and language disorder was gathered. The results of the study highlight the significance of early intervention in terms of providing support for children who have language difficulties. The promotion of favourable results in language development is significantly aided by the use of individualized intervention programs, collaborative efforts across disciplines, and the participation of parents. This study makes a significant contribution to the existing body of knowledge on evidence-based practices for the treatment of language disorders and argues for increasing awareness of and support for early intervention programs in educational and healthcare settings.

Keywords: intervention, development, language and communication skills, language disorders etc.

Introduction

For children who are diagnosed with a language problem, early intervention is extremely important in the process of developing their language and communication skills. Language disorders are a broad category that includes a variety of problems that interfere with a person's capacity to comprehend, process, or express language. A specific language disability, an expressive language disorder, a receptive language disorder, or any of several other forms of developmental or acquired communication issues could be among these conditions. Early intervention may have a major and far-reaching impact on the language and communication skills of children who are diagnosed with language impairments.

Early intervention programs help children with language difficulties to be identified and diagnosed at an earlier age. Because children's brains are more malleable throughout the early years, it is simpler for them to acquire new abilities and remodel neural pathways. Early detection enables prompt intervention, which is important because children's brains are more pliable during this time.

Early intervention programs offer children individualized and customized treatment strategies that are developed depending on the requirements of the kid in question. These programs could include speech therapy, language therapy, occupational therapy, or some mix of these and other interventions that are geared to address the specific difficulties faced by the child.

When it comes to connecting with other people and developing social bonds, language, and communication are necessary. Early intervention can help children with language problems acquire better communication and social skills, minimizing the frustration and isolation that may emerge from challenges in successfully expressing themselves. This is because early intervention can help children with language disorders develop better communication and social skills.

Skills in language and communication are absolutely necessary for academic achievement. Children who suffer from language difficulties may benefit from early intervention, which can help

them develop their language skills and make it easier for them to grasp and express themselves in a classroom environment. If language abnormalities are addressed at an early age, it may be possible to prevent the development of secondary concerns such as behavioral problems, issues with self-esteem, and emotional difficulties that may come as a result of difficulties communicating.

Early intervention programs typically include the participation of parents and other caretakers in the therapeutic process. It is possible to have a good impact on a child's development by educating the child's parents and providing them with the tools necessary to promote their child's language development. The neuroplasticity of the brain is at its peak during the first few years of life. When delivered at this time, interventions have the potential to lead to more successful rewiring of brain networks, as well as better results related to language and communication.

In the long term, early intervention can be the most cost-efficient option. It is possible to avoid the need for therapies that are more extensive and costly later on in a child's life if language issues are addressed at an earlier age. The ability to communicate and use language effectively is necessary for both day-to-day functioning and involvement in a wide range of activities. An improvement in a child's capacity to communicate with their family, friends, and teachers can be one of the many ways that early intervention can raise that child's overall quality of life.

The benefits of early intervention can have a lasting effect on a child's language and communication skills, which in turn can affect the child's academic success, employment chances, and social interactions throughout their entire life. Early intervention is essential for children who have language disorders because it enables prompt detection and targeted therapy. This, in turn, leads to improvements in the children's language and communication abilities, as well as their academic performance, social relationships, and general quality of life. Through participation in early intervention programs, parents, carers, educators, and healthcare professionals all play an important part in assisting children who struggle with language problems and fostering their overall growth.

The issue is that children who have language disorders have a much harder time developing their language and communication abilities, which can have repercussions for their academic achievement, their ability to interact socially, and their quality of life in general. Early intervention has been recognized as a beneficial technique; nevertheless, additional research on the precise impacts and benefits of this approach on the growth of language and communication abilities in this population is required.

Research Objectives

The purpose of this study is to assess the effectiveness of early intervention in improving language and communication skills in children with language disorders and to explore the long-term impact of early intervention on the academic performance and social interactions of children with language disorders.

Research Questions

1. How does early intervention contribute to the improvement of language and communication skills in children with language disorders?
2. What are the long-term effects of early intervention on the social interactions and academic performance children with language disorders?

Literature Review

Significant effects can be seen when developmental language disorder, also known as DLD (Bishop, 2017), is present. These effects can be seen in language development, social development, and engagement in society. According to Durkin and Conti-Ramsden (2010), having good language abilities is necessary for functioning successfully in society. It is possible to experience a variety of difficulties in one's day-to-day existence as a result of difficulties in understanding what others say or an inability to explain oneself clearly.

For instance, persons who have DLD have a lower educational attainment, are more likely to be unemployed, and have a higher risk of poor-quality friendships in comparison to adults who do not have DLD (Conti & Durkin, 2012). Children who have DLD also have difficulty participating in society for a variety of reasons. They have more difficulty interacting with their peers and report being victimized more often than their peers who are developing normally (TD) (van den et al., 2018). TD peers encounter fewer challenges in these areas.

(Yew & O'Kearney, 2017) Research has shown that children who struggle with their language skills early in life are at a greater risk of developing challenges later in life, such as issues with school

attainment and social-emotional functioning. Early intervention is vital (Singleton, 2018) because it can help prevent or at least minimize an increase in the number of language issues and co-occurring problems. Early intervention appears to be beneficial for young children who have language difficulties, according to a number of studies (Heidlage et al., 2020; Roberts et al., 2019). This is because the children's language proficiency can increase in a number of different areas. Additionally, there is a possibility that academic performance and social-emotional behaviors will improve as a direct consequence of early intervention (Rinaldi et al., 2021). Because of this, children with language delay (LD) who are between the ages of two and four and live in the Netherlands can participate in an intensive early language intervention program.

The intervention is a system that is applied all across the country and includes a mix of individual speech and language treatment, group speech and language therapy, and language intervention that is carried out by the child's parents. The provision of individual speech and language therapy (Heidlage et al., 2020) and parent-implemented language intervention (Roberts et al., 2019) has been shown to be beneficial by empirical research (Broomfield & Dodd, 2011). On the other hand, there is a significant dearth of evidence supporting the efficacy of group language intervention, and even more so for the success of combining all three modalities of intervention in a single program.

Because children learn best in a social setting, the intense early language intervention program incorporates group therapy (Wiefferink, 2021). Children not only develop language abilities but also gain social communication skills and conversational skills through engaging with their environment. This is because language is the foundation for all of these other skills. This is of utmost importance for children who have learning disabilities (LD), as research has shown that those youngsters have a harder time communicating with important people in their surroundings (van et al., 2010).

Communication difficulties make it more challenging to start and continue interactions, with fewer opportunities to learn language as a result. The early language intervention program includes a component called group language intervention. This component provides participants with opportunities to learn language within the context of social interactions. A social learning environment is provided for the children in these groups so that they can practice their newly acquired language abilities in real-life settings and activities with the assistance and direction of trained experts (Sansavini et al., 2021). For instance, if a youngster has trouble expressing himself when interacting with a peer, specialists can manage the engagement and provide support for the child as necessary. Two preschool teachers, a speech and language therapist (SLT), and a psychologist are responsible for leading the group language intervention sessions that take place three mornings a week.

Children participate in both group and individual therapy sessions with a speech-language pathologist (SLT) as part of the early language intervention program. Each child's unique language difficulties are taken into account while developing therapy goals by the SLT. Because of the one-on-one nature of the session with the SLT, it is feasible to tackle individual linguistic issues in a manner that is more targeted. One new sentence structure, for instance, can be more easily practiced and repeated when the SLT is guiding the student in a one-on-one situation as opposed to a group setting. Several studies report that speech and language therapy (and the techniques used in this therapy) have positive effects on both receptive language domains (Broomfield & Dodd, 2011) and expressive language domains (Broomfield & Dodd, 2011).

Children ages 2 to 4 are eligible to participate in the early language intervention program that is being provided. The age at which a child is diagnosed determines the age at which they can begin the program. This indicates that some children begin the intervention program when they are as young as 2 and a half to three years old, while others do not begin until they are at least three years old (Singleton, 2018). Children who begin receiving intervention at a younger age are likely to demonstrate more linguistic growth during the course of the intervention when compared to children who begin receiving intervention at a later age for a number of reasons.

To begin, it is important to begin treatment for children as early in life as possible so that they can make faster progress in developing their language skills. A number of studies highlight the significance of early intervention and argue for the abandonment of the so-called "wait-and-see approach" (Kaiser et al., 2022). This is because delaying treatment may lead to an increase in the number of language difficulties experienced by children who have LD. Early diagnosis is essential

because it paves the way for early participation in intervention, which, in turn, ought to result in improved language results.

Second, the length of therapy varies due to the fact that children enroll at various ages, and the majority of children finish the intervention around the age of four, when they begin their transition to school. Therefore, children who began intervention at a younger age are likely to have a longer treatment duration compared to children who enrolled at a later age, which could in turn alter language results. Children who started intervention at an older age are likely to have a shorter treatment duration. A longer treatment time indicates a greater amount of treatment, which may be advantageous for the results of language. When investigating the effects of an intervention, it is crucial to take into account how long the treatment was administered (Law et al., 2017).

Thirdly, some children may turn out to be late talkers, which refers to children whose language development is delayed but who may eventually catch up without receiving language help (Rescorla & Dale, 2013). Late talkers are children whose language development is delayed but who may later catch up without receiving language intervention. According to previous studies (Nouraei et al., 2021), roughly one-fifth of children younger than three years old start talking later than their peers.

After the age of three, Norbury et al. (2016) found that a diagnosis of DLD was given to between 5 and 7 percent of these children. It is not possible to make a diagnosis of DLD in children of this age because it is difficult, if not impossible, to differentiate between children who are late talkers and children who later turn out to have DLD (Bishop, 2017). As a result, it is not possible to diagnose DLD in children of this age. The language problems of children who suffer from DLD are more persistent and difficult to resolve (Boyle et al., 2010). As a result, when examining the intervention results of young children participating in a language intervention program, the possible presence of late talkers needs to be taken into account because this may lead to an overestimation of the intervention's effectiveness. In contrast, the language development of late talkers may show spontaneous improvement.

Material and Methods

In order to evaluate the effects of early intervention on children with language disorders on their language and communicative abilities, this study utilized a mixed-method design that included both qualitative and quantitative approaches. Children in Pakistan who are exhibiting language difficulties are referred to speech and hearing centers in order to undergo multidisciplinary evaluations. The goal of these evaluations is to determine whether or not the children in question suffer from a language disorder, in addition to ruling out potential causes of language disorders including hearing loss.

All of the children in this study, which included 30 boys and girls aged 6-7 years old, were diagnosed with a language issue. There were 14 girls and 16 boys. A child was chosen to receive linguistic intervention from five professionals over the course of two mornings each week: three preschool instructors, two speech and language therapists (SLT), and two psychologists. Children ages 2 to 4 are eligible to participate in the early language intervention program that is being provided. The age at which a child is diagnosed determines the age at which they can begin the program. This indicates that some children begin participation in the intervention program anywhere between the ages of 2 and 5 years old, while others don't begin until after the age of 3 years old.

Children who begin receiving intervention at a younger age are likely to demonstrate more linguistic growth during the course of the intervention when compared to children who begin receiving intervention at a later age for a number of reasons. Children enroll at a variety of ages, and the majority of them finish the program by the time they are four years old when they begin their transition to school. The treatment period varies. Therefore, children who began intervention at a younger age are likely to have a longer treatment duration compared to children who enrolled at a later age, which could in turn alter language results. Children who started intervention at an older age are likely to have a shorter treatment duration.

The first step in the process of collecting data was to have thirty girls and boys fill out a questionnaire. The questionnaire inquired about the individuals' medical-familial history, age of language disorder identification/intervention, and quality of intervention program (auditory training, speech reading, and lip reading). The second step in the process of collecting data was conducting interviews with a total of five individuals: two preschool teachers, two speech and language therapists

(SLT), and one psychologist. The questions asked during these interviews focused on the intervention program. Analyses were performed using SPSS version 25 for quantitative data, and NVivo version 11 was utilized for qualitative data to generate themes and graphs.

Results

Quantitative Analysis

The demographic information of the people who took part in the study is presented in Table 1. Age, gender, and language disorder are some of the variables that are included in the table. Regarding the age factor, half of all of the participants (n = 15) were 6 years old, and the other half (n = 15) were 7 years old. Regarding the question of gender, 53.3% of the participants (out of a total of 16) described themselves as being male, while 46.7% (out of a total of 14) identified themselves as being female. The following is how the distribution looked for the variable called Language Disorder: Phonological Disorder was present in 16.7% of individuals (n=5), Specific Language Impairment was present in 43.3% of participants (n=13), Expressive Language Disorder was present in 23.3% of participants (n=7), and Receptive Language Disorder was present in 16.7% (n=7).

Table 1: Demographic Information

Variables	Option	Values	
		f	Percent
Age	1. 6 Year	15	50.0%
	2. 7 Year	15	50.0%
Gender	1. Boys	16	53.3%
	2. Girls	14	46.7%
Language Disorder	Specific Language Impairment	5	16.7%
	Expressive Language Disorder	13	43.3%
	Receptive Language Disorder	7	23.3%
	4. Phonological Disorder	5	16.7%

The participants' perceptions of the various parts of the intervention program are compiled in Table 2, which contains descriptive data for those characteristics. With a mean score of 1.4667 and a low standard deviation of .50742, suggesting a high degree of agreement among respondents, participants indicated that the language problem was accurately identified using their medical and family history.

A mean score of 1.6333 and a reasonably low standard deviation of .49013, indicating that the majority of participants agreed with family consultations, provided that family members were involved in the preparation of the intervention. Positive feedback was obtained regarding the engagement of family members in the development of the intervention. The participants believed that the issue with their language was diagnosed at the appropriate time, as indicated by a mean score of 1.7333 and a low standard deviation of .44978, which indicates that respondents are in high agreement with one another.

However, participants thought that the intervention program's auditory training component, which aimed to improve listening and language abilities, had room for improvement. This was shown by a mean score of 2.1667 and a higher standard deviation of 1.01992, which shows that respondents had more diverse opinions. The participants thought the auditory training was interesting and applicable to their situations. The average score was 1.9333, and the standard deviation was moderate at .82768, which suggests that the majority of participants agreed that it was effective, but that there was room for some disagreement.

With a mean score of 3.8333 and a high standard deviation of 1.1167, the participants in the intervention program generally agreed that the auditory training was engaging and relevant to participants. This is indicated by the fact that there was a widespread consensus among participants. With a mean score of 2.4000 and a reasonably low standard deviation of .49827, the participants in the intervention program generally agreed that the speech-reading exercises were beneficial. This is indicated by the fact that there was a widespread consensus among participants.

With a mean score of 3.3667 and a larger standard deviation of 1.18855, indicating some heterogeneity in responses, participants stated that the speech-reading activities improved both their lip-reading and speech comprehension skills. Positive comments were made by respondents regarding the lip-reading component of the intervention program. This component obtained a mean score of

2.7667 and a moderate standard deviation of 1.07265, which indicates that respondents are generally in accord.

However, the judgments of the participants about the usefulness of the lip-reading activities revealed some diversity, with a mean score of 2.9000 and a higher standard deviation of 1.49366. This indicates that the participants are not all of the same opinions. With a mean score of 2.3667 and a moderate standard deviation of .92786, indicating overall agreement with the program's efficacy, participants reported that they believed the intervention program addressed their needs in terms of language and communication.

Table 2: Descriptive Statistics

language issue was properly diagnosed using the participant's medical and family history.	1.4667	
family members were consulted during intervention planning.	1.6333	
participant's language issue was diagnosed at the right time.	1.7333	
language intervention program started at an appropriate age.	2.1667	
intervention program's auditory training improved listening and language abilities.	1.9333	
auditory training was engaging and relevant to participants.	3.8333	
reading in the intervention program helped the participant grasp spoken language.	2.4000	
speech-reading exercises improved participants' lip-reading and speech comprehension.	3.3667	
intervention program's lip-reading component helped participants understand nonverbal clues and facial expressions.	2.7667	
The lip-reading exercises helped participants.	2.9000	
the intervention program met the participant's language and communication needs.	2.3667	

Qualitative Analysis

Table 3 contains an exhaustive listing of the study's nodes, along with the sources and references that correspond to each node. The analyst node represents the individual or group responsible for analyzing the data or the conclusions of the research. It is backed by five references, which indicates that information about the analyst involved in the study is provided by various sources. The Child's Language and Communication node concentrates on the overall language and communication capabilities of the child. It is supported by four references, which leads one to believe that these sources provide information about the child's language and communication abilities.

The Child's Language Development node focuses in particular on the process of the child's language development and is supported by ten references, demonstrating that knowledge about the child's language development trip may be obtained from many sources regarding various elements of the journey. The Communication node stands for the more comprehensive idea of communication, which most likely incorporates both verbal and non-verbal components. It is supported by 10 references, which suggests that these sources offer insights into various aspects of communication in the context of the study.

The Intervention Program node is related to nine references, which indicates that these references give information regarding various aspects of the intervention program, including its design and execution. This node belongs to the intervention program that was implemented in the study. The Program for Intervention The fact that the Therapists or Educators node is backed by four sources suggests that these sources contain information regarding the functions performed by and credentials held by the therapists or educators who are taking part in the intervention.

The Language Skills node focuses on the particular language skills of the kid and is supported by eleven references. This indicates that the references contain information about the various language skills that were tested or targeted in the study. The Lip-Reading node is based on two references, which suggests that these sources offer insights on the utilization and effectiveness of lip-reading techniques

during the intervention program. The Lip-Reading node explicitly represents the aspect of lip-reading within the intervention program.

The Parental Involvement node most likely refers to the level of parental participation in the intervention program. This node is derived from six references, which suggests that these sources provide information about the role that parents play in supporting their kid's language development when the child is participating in the intervention. The fact that the therapist's node is backed by four sources suggests that these sources provide information concerning the credentials and areas of specialization of the therapists who are taking part in the research project or program.

Table 3: List of Nodes

	References
	5
Child's Language and Communication	4
Child's Language Development	10
Communication	
Intervention Program	
Intervention Program Therapists or Educators	
Language Skills	
Lip-Reading	
Parental Involvement	
Therapists	

The most important findings about the frequency of words can be seen in Table 4. The term "Language" appeared 95 times, making it the most commonly stated word overall. This finding lends credence to the notion that issues having to do with language were a primary focus of the interviews. The terms "Children" and "Intervention" were also cited quite frequently, with 64 and 49 occurrences, respectively, which demonstrates the relevance of children's participation in the intervention program.

Table 4: Words Frequency in Interview

Language	
Children	
Intervention	
Program	
Speech	
Pre-School	
Therapist	
Teacher	
Child	
Development	
Skills	
Communication	

Other terms of note include "Program" and "Speech," which both appeared a total of 36 times, showing that the debate was on the design of the intervention program as well as aspects linked to speech. In addition, words like "Pre-School," "Therapist," and "Teacher" were referenced a lot, which brings attention to the role that these experts play in the intervention. The terms "Child," "Development," and "Skills" were also noteworthy, with 24 and 22 occurrences, respectively, highlighting the emphasis placed on the development of children and their linguistic abilities. In conclusion, the word "Communication" was mentioned 18 times, which is an indication of how important it was in the context of the interviews.



Figure1: Words Graph in Interview

Preschool Teacher 1: In my opinion, the intervention program was quite successful. During the course of the program, there was a discernible shift towards an improvement in the children's linguistic and communicative abilities. The therapists did a wonderful job of adapting the therapies to the specific need of each child, and the exercises were fun to participate in.

Preschool Teacher 2: The intervention program contributed well to the children's progress in the development of their language skills. During the exercises in the classroom, we observed an increase in both engagement and confidence in communicating. The therapists worked closely with us, and we were able to track the development of the children as a result of their efforts.

Speech and Language Therapist 1 (SLT 1): The intervention program was well-structured and evidence-based. I am speaking from the point of view of the therapist. It appeared that the procedures implemented for auditory training and speech reading were successful with the children. The partnership with many teachers and carers played an important and pivotal role in the development of the student's language abilities in a variety of contexts.

Speech and Language Therapist 2 (SLT 2): The youngsters reacted to the intervention and left me feeling satisfied. Because of the program's emphasis on individualized objectives, participants showed considerable improvement in their capacity for both expressive and receptive language. In addition, the involvement of the parents was excellent since they put the techniques into practice with their children at home.

Psychologist: Children's development, and it gave me great satisfaction to witness the good changes brought about by the intervention program. Language difficulties can have a substantial

impact on a child's development; however, with the help of this program, not only did we witness improvements in their language skills, but also in their social relationships, as well as an overall boost in their confidence.

Discussion

The quantitative analysis of the study offers extremely helpful insights into the demographic information of the study participants as well as their opinions regarding the intervention program. The demographic information is presented in Table 1, which shows that half of the participants were between the ages of 6 and 7, with an even distribution of participants between those two ages. In addition, the gender distribution of the participants shows that there are a little bit more males (53.3% of the total) than females (46.7% of the total). Specific language impairment was the most common type of language problem among the individuals (43.3%), followed by expressive language disorder (23.3%) and phonological disorder (16.7%).

Moving on to Table 2, you'll see that it presents the opinions of the participants regarding the intervention program. The participants, on average, indicated a high degree of agreement with the accuracy of the diagnostic of language problems (mean = 1.4667). Participants were in agreement that family members were consulted throughout the process, which indicates that the family's participation in the preparation of the intervention was well welcomed (mean = 1.6333). In addition, the participants thought that the language problem was diagnosed at an appropriate time (mean = 1.7333), which indicates that they were pleased with the timing of the intervention.

Participants provided favorable feedback on certain aspects of the intervention, such as auditory training (mean = 1.9333), indicating that it was helpful in increasing listening and language ability. However, there was potential for improvement, as was demonstrated by the higher standard deviation (SD = 1.01992), which suggested that participants had a variety of perspectives. On the other hand, participants highly agreed that the aural training was interesting and meaningful (mean = 3.8333), which demonstrates their appreciation for this component of the program. In a similar vein, the participants' capacity to comprehend spoken language improved as a result of the speech reading exercises, which obtained a mean score of 2.4000.

Participants acknowledged the usefulness of the intervention's lip-reading component in gaining an awareness of nonverbal clues and facial expressions, which led to a favorable perception (mean = 2.7667) of this aspect of the intervention. However, there was a significant amount of divergence in opinion regarding the efficacy of lip-reading exercises (mean = 2.9000), which indicates that there is space for development.

The fact that the participants, as a whole, believed that the intervention program satisfied their requirements in terms of language and communication (mean = 2.3667), indicates that they were satisfied with the effectiveness of the program. Table 3 offers a detailed listing of nodes and the sources that are related to them, illuminating the most important aspects of the topic that were investigated in this study. These nodes cover a wide range of topics, some of which are child language and communication, development, and the roles played by therapists and educators. Table 4 is an illustration of the frequency of words cited in the interviews. It emphasizes the relevance of "Language" as the most usually uttered phrase, highlighting the fact that it plays a vital part in the talks. In addition, concepts like "Children," "Intervention," and "Program" were brought up quite a few times, which highlights the significance of these ideas in the overall framework of the study.

The debate with preschool teachers, speech and language therapists, and a psychologist sheds light on the success of the intervention program as well as the beneficial influence it has had. The children's language development was significantly helped by the teamwork that took place between specialists and the children's parents. The individualized strategy taken in the intervention led to increases in both the children's expressive and receptive language skills, which in turn boosted the children's confidence and the general quality of their social relationships. Overall, the quantitative and qualitative analyses give a comprehensive picture of the study's findings, highlighting the success of the intervention program in aiding language development in children who were diagnosed with language impairments. The good response from participants and professionals involved underscores the value of early intervention and focused therapies in improving language and communication abilities in children who have been affected by the condition.

Conclusion

The purpose of this research was to investigate the effects that early intervention has on the growth of linguistic and communicative abilities in children who suffer from language difficulties. The quantitative analysis of the demographic information showed that there was an even distribution of participants between the ages of 6 and 7, with a little higher representation of males than girls. A specific impairment in one's use of language was shown to be the most common form of language disorder among the participants.

The participants' impressions of the intervention program were, for the most part, favorable, with a high degree of consensus existing about the precision of the language problem diagnosis and the participation of family members in the intervention planning process. Through the use of auditory training and speech-reading exercises, the intervention program was thought to be successful in enhancing the participants' listening and language capabilities. The lip-reading component received excellent feedback as well, with participants noticing an improvement in their comprehension of nonverbal cues and facial expressions as a result of participating in the activity.

The qualitative analysis found critical nodes linked to the language and communication of children, the development of their language, intervention programs, and the engagement of therapists. The results of the study highlighted the significance of individualized treatments, parental participation, and teamwork between experts in the process of assisting children in the development of their language skills.

The positive responses to the intervention program that were received from preschool instructors, speech and language therapists, and a psychologist contributed significantly to the program's overall success. They noticed considerable gains in the children's overall confidence as well as their language skills, communication abilities, and overall ability to express themselves. The successful results showed the significance of early intervention in the treatment of language impairments and the development of healthy social interactions.

The findings of this research shed significant light on the efficacy of early intervention in terms of improving children's linguistic and communicative abilities, particularly those children who suffer from language impairments. The findings highlight the importance of individualized therapies, involvement from families, and experienced experts in the process of supporting children as they develop their language skills. This research makes a contribution to the expanding body of information on early intervention strategies, which further advocates for the implementation of programs that are supported by evidence in order to enhance the lives of children who have language difficulties.

Recommendation

Following are some recommendations that should be considered in light of the findings:

1. The findings of this study illustrate the favorable impact that early intervention can have on the development of language and communication skills in children who are diagnosed with language impairments. As a result, it is suggested that educational institutions, healthcare facilities, and other relevant agencies prioritize and invest in early intervention programs for children who have been recognized as having challenges with language. These types of programs ought to be fashioned in such a way as to provide individualized help and attend to particular linguistic requirements.
2. It was determined that the effectiveness of the intervention program might be due, in part, to the teamwork that took place between a variety of experts, such as preschool teachers, speech and language therapists, and psychologists. It is advised that practitioners receive specialized training in language disorders and approaches for intervention that are based on research in order to increase the likelihood of successful treatment. In addition, encouraging interdisciplinary collaboration among professionals can result in a strategy that is more holistic and all-encompassing in its approach to assisting children in the development of their language skills.
3. The findings of this study emphasize how important it is for parents to be involved in the intervention process. As a result, it is strongly suggested that intervention programs actively involve parents in the language development journey of their kids. It is possible to further improve the child's development by educating the parents on effective language stimulation approaches and by integrating the parents in the process of putting intervention tactics into practice at home.

References

- Bishop, D. V. (2017). Why is it so hard to reach agreement on terminology? The case of developmental language disorder (DLD). *International Journal of Language & Communication Disorder*, 52(6), 671–680.
- Boyle, J., McCartney, E., O'Hare, A., & Law, J. (2010). Intervention for mixed receptive-expressive language impairment: A review [Review]. *Developmental Medicine and Child Neurology*, 52(11), 994–999.
- Broomfield, J., & Dodd, B. (2011). Are speech and language therapy effective for children with primary speech and language impairment? Report of a randomized control trial [Article]. *International Journal of Language & Communication Disorders*, 46(6), 628–640.
- Conti-Ramsden, G., & Durkin, K. (2012). Postschool educational and employment experiences of young people with specific language impairment. *Language, Speech, and Hearing Services in Schools*, 43(4), 507–520.
- Durkin, K., & Conti-Ramsden, G. (2010). Young people with specific language impairment: A review of social and emotional functioning in adolescence. *Child Language Teaching and Therapy*, 26(2), 105–121.
- Heidlage, J.K., Cunningham, J.E., Kaiser, A.P., Trivette, C.M., Barton, E.E., Frey, J.R., & Roberts, M.Y. (2020). The effects of parent-implemented language interventions on child linguistic results: A meta-analysis. *Early Childhood Research Quarterly*: 50 6-23.
- Kaiser, A. P., Chow, J. C., & Cunningham, J. E. (2022). A case for early language and behavior screening: implications for policy and child development. *Policy Insights from the Behavioral and Brain Sciences*, 9(1), 120–128.
- Law, J., Dennis, J. A., & Charlton, J. J. (2017). Speech and language therapy interventions for children with primary speech and/or language disorders. *The Cochrane Database of Systematic Reviews*, (1), 2017.
- Norbury, C. F., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., Vamvakas, G., & Pickles, A. (2016). The impact of nonverbal ability on prevalence and clinical presentation of language disorder: Evidence from a population study. *Journal of Child Psychology and Psychiatry*, 57(11), 1247–1257.
- Nouraei, P., Ayatollahi, M. A., & Moghadas, M. (2021). Late language emergence: A literature review. *Sultan Qaboos University Medical Journal*, 21(2), e182.
- Paul, R., & Norbury, C. F. (2012). *Language disorders from infancy through adolescence*. St. Louis: Elsevier Health Sciences.
- Rescorla, L., & Dale, P. (2013). Late talkers. *Brookes, Baltimore. Late Talking Toddlers*, 6, 219–240.
- Rinaldi, S., Caselli, M. C., Cofelice, V., D'Amico, S., De Cagno, A. G., Della Corte, G., Di Martino, M. V., Di Costanzo, B., Levorato, M. C., & Penge, R. (2021). Efficacy of the treatment of developmental language disorder: A systematic review. *Brain Sciences*, 11(3), 407.
- Roberts, M. Y., Curtis, P. R., Sone, B. J., & Hampton, L. H. (2019). Association of parent training with child language development: A systematic review and meta-analysis. *Jama Pediatrics*, 173(7), 671–680.
- Sansavini, A., Favilla, M. E., Guasti, M. T., Marini, A., Millepiedi, S., Di Martino, M. V., Vecchi, S., Battajon, N., Bertolo, L., & Capirci, O. (2021). Developmental language disorder: Early predictors, age for the diagnosis, and diagnostic tools. A scoping review. *Brain Sciences*, 11(5), 654.
- Singleton, N. C. (2018). Late talkers: Why the wait-and-see approach is outdated. *Pediatric Clinics*, 65(1), 13–29.
- van den Bedem, N. P., Dockrell, J. E., van Alphen, P. M., Kalicharan, S. V., & Rieffe, C. (2018). Victimization, bullying, and emotional competence: longitudinal associations in (Pre)adolescents with and without developmental language disorder. *Journal of Speech Language and Hearing Research*, (8), 61.
- Wiefferink, C. (2021). *Databank effective jeugdinterventies: Beschrijving 'Methodiek TOS'*. Utrecht: Nederlands Jeugdinstituut.
- Yew, S. G. K., & O'Kearney, R. (2017). Language difficulty at school entry and the trajectories of hyperactivity-inattention problems from ages 4 to 11: Evidence from a population-representative cohort study. *Journal of Abnormal Child Psychology*, 45(6), 1105–1118.

Questionnaire

1. Age:
2. Gender:
3. Language Disorder:

1=Strongly Agree, 2=Agree, 3=Undecided, 4=Disagree, and 5=Strongly Disagree

4. The language issue was properly diagnosed using the participant's medical and family history.
5. Family members were consulted during intervention planning.
6. The participant's language issue was diagnosed at the right time.
7. The language intervention program started at an appropriate age.
8. The intervention program's auditory training improved listening and language abilities.
9. Auditory training was engaging and relevant to participants.
10. Speech reading in the intervention program helped the participant grasp spoken language.
11. The speech-reading exercises improved participants' lip-reading and speech comprehension.
12. The intervention program's lip-reading component helped participants understand nonverbal clues and facial expressions.
13. The lip-reading exercises helped participants.
14. The intervention program met the participant's language and communication needs.

Interview

1. How was the intervention program overall?
2. Which parts of the intervention program helped your child's language and communication?
3. Is there anything the intervention program could do better to support your child's language development?
4. How did the intervention program's therapists or educators help your kid learn and engage?
5. Can you give examples of how the intervention programme improved your child's language and communication?