Evaluation of Family Satisfaction with Three Types of Speech Therapy Intervention for Children with Language Disorders

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Abstract

Objectives: This study aimed to evaluate and compare family satisfaction with three types of speech therapy interventions for children with Developmental Language Disorder (DLD): direct intervention, family counseling (indirect intervention), and a combined approach. It also explored the role of family involvement in perceived effectiveness and satisfaction.

Methods: A cross-sectional quantitative design was used. Fifty-one families were randomly assigned to one of three groups according to the intervention received. Data were collected through a self-developed 29-item online questionnaire assessing satisfaction with the therapist,

level of family involvement, information received, and perceived treatment effectiveness. Non-parametric tests were applied to compare outcomes between groups.

Results: Significant differences in satisfaction levels were found across intervention types. Families receiving family counseling reported the highest overall satisfaction, especially regarding communication with the therapist and recognition of their role. The professional-centered group reported lower satisfaction in terms of involvement and information received, but perceived greater improvement in speech outcomes. The combined intervention group showed balanced scores in both satisfaction and effectiveness.

Conclusions: Family involvement plays a key role in perceived satisfaction. Interventions that include counseling elements tend to improve family experience, while direct interventions may be more efficient in achieving speech improvements.

Practice Implications: Designing speech-language therapy programs that integrate both professional-led sessions and structured family guidance may enhance outcomes and engagement. Including families as active agents can contribute to more sustainable and satisfying intervention models.

*Keywords***:** Language Disorder: childhood; intervention; speech therapy; language delay.

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Data availability statement

The data supporting the findings of this study are available from the corresponding author, upon reasonable request.

Introduction

Approximately 7% of children worldwide have Developmental Language Disorder (DLD) (Bishop et al., 2016; Norbury et al., 2016; Tomblin et al., 1997). However, a study conducted in a large region of Spain (Andalusia) found a prevalence rate of 8.27 per thousand (‰) (Lirola, 2022), , suggesting that the disorder may be underdiagnosed or unevenly identified across regions. This highlights the importance of understanding how intervention practices are implemented in real-world contexts and how family participation may influence their effectiveness and satisfaction with services.. Although DLD is typically identified around the age of 4 years (Norbury et al., 2016; Sansavini et al., 2021), it is suggested that optimal detection should occur between the ages of 2 and 3 years (Sansavini et al., 2021). DLD is a neurodevelopmental disorder characterized by unexplained and persistent difficulties in language acquisition (American Psychiatric Association, 2013). These difficulties include a limited vocabulary, grammatical problems, and significant speech impairments, which pose major challenges in social interaction, communication, and academic performance. It is essential to rule out cognitive, sensory, psychomotor, or neurological issues as possible causes of these difficulties (Aguilar-Mediavilla et al., 2019; Andreu-Barrachina et al., 2014; Bishop et al., 2016). Delayed production of gestures, receptive and/or expressive vocabulary development, syntactic comprehension, and word combination up to 30 months of age have been identified as early predictors of DLD (Sansavini et al., 2021). In some cases, children who initially present delays or difficulties in language are later diagnosed with DLD or exhibit characteristics common to this disorder (Gleason & Ratner, 2022). However, children with Language Delay (LD) are generally in the 10th percentile or below in terms of expressive vocabulary compared to other children their age between 18 and 30 months, without presenting sensory or neurodevelopmental deficits (Fisher, 2017). These children, who are between 18 and 42 months old (Cable & Domsch, 2011; DeVeney et al., 2017; Hawa & Spanoudis, 2014), show a

delay of six months or more in expressive or receptive language development. Approximately 10% to 20% of children older than 24 months experience this delay (Carson et al., 2022; Collisson et al., 2016). As with children with DLD, this difficulty cannot be attributed to any other concurrent problem (Arzaga & Jackson-Maldonado, 2021).

There are various approaches to language intervention for Late Talkers (LT) and Developmental Language Disorder (DLD). According to DeVeney et al. (2017), three main approaches can be identified: (a) general language stimulation; (b) focused language stimulation, which may complement the first but focuses on identifying specific aspects; and (c) context- or child-interest-centered stimulation, which involves instructing people close to the child, primarily within their family circle, to modify their way of expressing themselves. Additionally, intervention can be direct, meaning that the speech-language therapist or another specialist takes full responsibility for delivering the therapy, or indirect, where an adult (father/mother), under the supervision of a specialist, collaborates in implementing the therapy (Boyle et al., 2009). Direct intervention approaches can be either group-based or individual. Lieberman and Michael (1986) emphasize that while individual therapy provides direct support to establish and stabilize specific speech and language behaviors, group therapy additionally promotes the development of appropriate interpersonal and social skills. Ebbels et al. (2019) present a different categorization of intervention approaches, including Level 1, which involves training other professionals and implementing education programs for parents of children without language difficulties to promote general speech and communication development. Levels 2, 3A, and 3B focus on intervention for children with language difficulties or disorders. Level 2 centers on individual family training, while Level 3A involves direct intervention by a speech-language therapist. In the present study, this Level 3A approach is referred to as a professional-led approach, since the speech-language therapist

assumes full responsibility for planning and delivering the sessions. This terminology is used to distinguish it from the family-led and combined approaches described later in the Method section. However, Law et al. (2019) highlights that families tend to prefer training programs when children are younger. The training programs in Levels 2 and 3A can be classified into three types: (a) child-directed approach; (b) adult-directed approach; and (c) hybrid approach (Tukiran et al., 2023). Recent clinical guidelines also synthesize current evidence-based approaches for interventions targeting Developmental Language Disorder, emphasizing the importance of individualized, family-centered, and multimodal frameworks (Neumann et al., 2024). Numerous studies have evaluated family satisfaction with speech-language therapists for children with speech and language difficulties (Keilmann et al., 2004; Lederer, 2001), family commitment (Melvin et al., 2020), and satisfaction with intervention effectiveness (Lederer, 2001; Ruggero et al., 2012; Watts et al., 2016). However, no studies have been found that evaluate whether differences in satisfaction exist depending on the type of intervention received. Understanding this is important since family satisfaction and adherence to speech therapy contribute to achieving better results. Additionally, analyzing satisfaction can help identify potential changes that can be made in different types of therapy (Templeman, 2019).

For this reason, the objectives pursued in this study are: (a) to analyze and compare family satisfaction with the speech-language therapist across different types of intervention received (direct, indirect, or combined); (b) to analyze and compare families' perception of their commitment to therapy across different types of intervention; (c) to analyze and compare families' perception of the information provided and the effectiveness of speech-language intervention across the three types of intervention received.

Methodology

This research employs a quantitative approach (Brinton & Fujiki, 2003), as the questionnaire used consists of closed-ended and Likert-type questions. The participants are 51 families with children with LD or DLD who undergo three different types of speech-language intervention. Group 1 (17 families) followed the Oral Expression Language Stimulation Program (PELEO), which is a speech-language intervention program based on the professional-led model. Group 2 (17 families) followed the family counseling program based on PELEO-R, and Group 3 (17 families) participated in both programs simultaneously. This research has been "approved by the Ethics Committee of an academic institution (protocol number omitted for blind review)"

Participants

A total of 51 families participated in the study, selected based on the following criteria: monolingual Spanish-speaking children aged between 3 and 5 years, and families with children diagnosed with LD or DLD, without other disabilities or additional difficulties. The selected families must have followed one of the following speech-language intervention programs: the professional-centered intervention program called PELEO, conducted during the 2018-2019 and 2019-2020 academic years; a family counseling program, with data collected during the 2020-2021 and 2021-2022 academic years; or both programs simultaneously, with data collected during the 2022-2023 and 2023-2024 academic year. The selection of participants was carried out as follows: six speech-language therapists, trained in the Oral Expression Language Stimulation Program (PELEO), in the family counseling program based on PELEO-R, and in the simultaneous implementation of both programs, were responsible for conducting the intervention. A total of 81 families completed the intervention programs, and after completion, they were sent an online questionnaire. Out of these, 59 families responded, distributed into three groups: 21 families who

received professional-centered intervention, 21 who received family-centered intervention along with a counseling program, and 17 families who received only family counseling. To standardize the number of participants at 17 per group, 17 families were randomly selected from the two groups that originally had 21 participants. Group 1, which received professional-centered intervention, had a mean age at the start of treatment of 4.18 years ($\sigma = 0.73$). The average number of siblings per participant was 0.65 ($\sigma = 0.61$), and they attended an average of 1.41 therapy sessions per week ($\sigma = 0.51$). Group 2, which received family counseling programs, had a mean age at the start of treatment of 4.24 years ($\sigma = 0.75$). The average number of siblings was 0.88 ($\sigma = 0.78$), and all participants attended an average of 1 therapy session per week ($\sigma = 0.00$). Finally, Group 3, which received both interventions simultaneously, had a mean age at the start of treatment of 4.35 years ($\sigma = 0.79$). The average number of siblings was 0.76 ($\sigma = 0.66$), and they attended an average of 1.76 therapy sessions per week ($\sigma = 0.44$). The sociodemographic characteristics of the participants in each group are presented in Table 1. Although detailed sociodemographic data from parents were not systematically collected, all participating families shared similar socioeconomic and cultural characteristics, as they were recruited from the same urban and semi-urban areas and received therapy at the same clinical centers. All parents were native Spanish speakers and primary caregivers actively involved in their child's intervention process. This homogeneity helped minimize variability related to parental background that could influence perceptions of satisfaction and engagement.

Instrument

A questionnaire was designed using Microsoft Forms for the families that participated in the three intervention groups. To develop it, a preliminary literature review was conducted to ensure

that the selected sections addressed key aspects related to satisfaction and family commitment in speech-language intervention. The questionnaire was structured into five sections:

- Section 1 included 11 multiple-choice questions on sociodemographic data (Klatte et al., 2024).
- Section 2 consisted of 5 Likert-scale questions regarding satisfaction with the speech-language therapist (Scarinci et al., 2018).
- Section 3 contained 8 Likert-scale questions about family commitment to speech-language intervention.
- Section 4 included 1 multiple-choice question and 9 Likert-scale questions about the information provided by the speech-language therapist (Scarinci et al., 2018).
- Section 5 comprised 8 Likert-scale questions on satisfaction with the effectiveness of the speech-language intervention.

To validate the questionnaire, a two-phase process was followed. First, 10 experts in LD and DLD were selected, 60% of whom held doctoral degrees, all working at Spanish universities: 60% from the University of XXXXX, 30% from the Open University of Catalonia, and 10% from the University of Pamplona. The experts received a Microsoft Forms questionnaire with the designed instrument, along with instructions for evaluation. They were asked to rate the clarity, relevance, and appropriateness of each section on a scale from 1 to 5, and they were given the option to provide additional comments (In supplementary Table 1). In addition, the questionnaire underwent a second phase, in which a pilot test was conducted with five families to ensure its clarity and relevance. The feedback obtained during this phase allowed for minor adjustments before its final application. It is important to note that, due to the questionnaire's design in Microsoft Forms, all closed-ended questions were mandatory, ensuring the absence of missing data in the study's quantitative aspects. After incorporating the experts' comments, all suggested

improvements were implemented, and the final questionnaire was developed, which is presented in Supplementary Table 2. Additionally, ethical and practical considerations were taken into account during the administration of the questionnaire, ensuring the confidentiality of responses and obtaining informed consent from all participating families. The Cronbach's alpha index was also calculated to assess the internal consistency of the questionnaire, yielding a result of 0.913, indicating a high reliability of the instrument (Oviedo & Campo-Arias, 2005).

Procedure

The procedure varied across participant groups but shared common aspects. All sessions took place in a multidisciplinary clinic (including psychology, speech therapy, and physiotherapy), and participants were assessed at the beginning and end of the intervention using linguistic tests. Language performance was assessed using standardized tools widely employed in Spanish-speaking populations: the Prueba de Lenguaje Oral de Navarra-Revisada (PLON-R; Aguinaga et al., 2004), the Registro Fonológico Inducido (Monfort & Juárez, 1989), and the Peabody Picture Vocabulary Test–Third Edition (PPVT-III; Dunn & Dunn, 1997). Participant allocation to the intervention groups was consecutive and non-randomized, based on clinical suitability and family availability. Although blinding was not applicable due to the nature of the interventions, all procedures followed standardized supervision protocols to ensure consistency. Participants were selected from four schools and six speech therapy clinics, where therapists identified children with potential language difficulties. The six speech-language therapists leading the interventions used inclusion criteria to determine eligibility. A detailed protocol was established to ensure standardization and consistency across therapists and centers, with all therapists receiving prior training and using standardized materials. Intervention types varied by academic year: during 2018-2020, the Oral Expression Language Stimulation Program (PELEO) was implemented; in

2020-2022, a family counseling program was used; and in 2022-2024, families received both programs. Group 1 followed PELEO, which lasted 14-21 weeks, focusing on professional-centered therapy. All PELEO-R sessions were delivered in person, individually, and following a structured face-to-face format in clinical settings. The program has been previously implemented and described in detail in Ayuso-Lanchares et al. (2022), showing significant language gains in children with developmental language disorder during in-person sessions. Group 2 participated in a six-session family counseling program based on PELEO-R, with guidance for language stimulation (Jones et al., 2023; Kerai et al., 2022; Manolson, 1992; Carvalho et al., 2016; Weisleder & Fernald, 2013; Venker et al., 2020), this indirect approach involved parental training delivered both in-person and online under therapist supervision, as described in Ayuso-Lanchares et al. (2025), where family counseling was shown to enhance satisfaction and engagement. Group 3 received a combined intervention, alternating between PELEO sessions and family counseling, maximizing involvement of both children and families in the language stimulation process.

For replication purposes, a concise summary of the three intervention models compared in this study is provided below:

- Professional-led (PELEO-R): direct, in-person intervention led by the speech-language therapist.
- Family-centered: indirect parental training (in-person and online) guided by a therapist.
- Combined model: alternation of direct professional-led sessions and home-based family implementation.

All interventions followed standardized session structures (two 45-minute sessions per week for 12 weeks) and were supervised by certified speech-language therapists. The main difference

among them was the degree of family versus professional involvement: in the direct intervention, the speech-language therapist led all sessions; in the indirect intervention, parents implemented activities under therapist guidance; and in the combined approach, both professionals and families shared implementation responsibilities. This consistency in structure ensured fair comparability across intervention types.

Data Analysis

For the statistical analysis, SPSS version 29.0 for Windows was used. Initially, a descriptive frequency analysis and a comparison of means were conducted. To assess the normality of variable distributions, the Shapiro-Wilk test was applied, chosen for its high sensitivity in small samples and effectiveness in detecting deviations from normality. In all cases analyzed, the Shapiro-Wilk test was significant ($p = 0.000$), indicating that the distributions of the variables did not follow a normal distribution. Specifically, for each variable, the results were significant ($p < 0.05$), suggesting a significant deviation from normality. Due to these results, non-parametric tests were chosen for data analysis. First, the Kruskal-Wallis test was applied to identify differences between the three groups studied. Subsequently, the Mann-Whitney U test was performed to determine which specific groups differed from each other.

Results

The results are presented in different tables to facilitate the understanding of families' perceptions regarding the speech-language intervention they received. Table 2 presents parents' responses about their experience with the speech-language intervention. A total of 76.5% of parents in Group 1 (professional-centered intervention) and 100% in Group 2 (family counseling) felt they received sufficient guidance. In Group 2, 88.2% of parents felt involved during the sessions, in contrast to

only 47.1% in Group 1. Additionally, 94.1% of parents in Group 1 perceived the child as the sole patient, whereas Group 2 emphasized greater family involvement. The results in Table 3, which compare family satisfaction, commitment, and the information received across the three types of intervention, reflect significant differences between the groups.

Group 1 (Professional-Centered Intervention) showed high satisfaction with the speech-language therapist in aspects such as understanding their children's specific needs (mean 4.24) and the therapist's ability to address language difficulties (mean 4.18). However, family commitment was lower, particularly in the perception of their role in therapy (mean 1.35) and the guidance on how to get involved in the process (mean 0.76). This group also had the lowest mean in the perception of the child's overall improvement since the start of the intervention (mean 4.18).

Group 2 (Family Counseling) obtained the highest results in most dimensions. This group reported the highest satisfaction with the speech-language therapist in terms of receptiveness and empathy (mean 4.94 in both), as well as in the training received to contribute to therapy (mean 4.88). Additionally, it stood out in family commitment, being the group that most strongly perceived that their role in therapy was clear (mean 4.47) and that the training positively influenced both therapy and learning beyond the clinic (mean 4.94). However, this group reported a lower perception of improvement in the child's articulation (mean 3.59), despite highly valuing the information received.

Group 3 (Combined Intervention) showed a balance in results. Although it did not achieve the highest means in all dimensions, it had a favorable perception of coordination with other professionals (mean 4.24) and a notable improvement in the child's articulation (mean 4.59). Families in this group also reported higher overall satisfaction with their children's observed progress (mean 4.53), indicating that combining both approaches may be beneficial for intervention

outcomes. Table 4 presents only the significant results obtained from the Kruskal-Wallis test for the study variables, with $df = 2$ in all cases. Although all questionnaire options were evaluated, only those showing significant differences are included. Regarding satisfaction with the speech-language therapist, differences were observed in understanding children's needs, responsiveness, empathy, skills, and overall satisfaction. In terms of family commitment, the role of parents and their perception of the therapist showed notable significance. Similarly, in the information provided, training and collaboration among professionals stood out. Finally, significant differences were found in children's improvement since the start of the intervention, the increase in vocabulary, articulation, and overall satisfaction with the effectiveness of the intervention. Table 5 presents the results of the Mann-Whitney U test, which compares satisfaction and perception of effectiveness across three types of speech-language interventions: direct intervention (Group 1), indirect intervention (Group 2), and combined intervention (Group 3). The findings reveal significant differences in several key dimensions. Compared to Group 2, Group 1 showed higher satisfaction in understanding children's needs ($U = 66.500, p = 0.002$), responsiveness to concerns ($U = 59.000, p < 0.001$), and empathy ($U = 49.500, p < 0.001$), among others. Additionally, significantly higher overall satisfaction was observed ($U = 66.000, p = 0.002$), along with a greater perceived need for collaboration and discussion with parents. When comparing Group 1 to Group 3, significant differences were also found, although they were less pronounced in some items. This suggests that direct intervention is perceived as more effective and satisfactory than indirect and combined interventions, particularly in aspects related to communication and family support. These results highlight the importance of selecting an appropriate intervention approach to maximize family satisfaction and perceived effectiveness in the context of speech-language therapy.

Discussion

The discussion will be structured around the three objectives of this research. First, the satisfaction of families with the speech-language therapist will be analyzed and compared based on the type of intervention received (direct, indirect, or combined). Next, the families' perception of their commitment across the different types of intervention will be addressed. Finally, the families' perception of the information provided and the effectiveness of the speech-language intervention in each intervention modality will be examined.

Analysis and Comparison of Family Satisfaction with the Speech-Language Therapist

Several studies have evaluated family satisfaction with speech-language therapy services for children with speech and language difficulties (Keilmann et al., 2004; Ruggero et al., 2012), concluding that families generally report positive satisfaction. However, these studies did not distinguish between types of intervention, which is addressed in the present study. Alternative models, like online therapy, may benefit families in rural areas with limited access to fase-to-face services. Prior research indicates that remote intervention helps overcome barriers and ensures consistent therapy access (Ma et al., 2025). In this study, families who received counseling-based intervention reported significantly higher satisfaction across most items. Notably, they rated therapist responsiveness and empathy with average scores of 4.94. These results may relate to parents' perception of the counseling therapists as warmer, more empathetic, and more informative. Such qualities – highly valued by families – are known to increase satisfaction (Trottier, 2016). Parents likely had more opportunities to interact with therapists, a key factor influencing experience (Watts et al., 2016). Although the same professionals delivvered all three interventions, families' perceptions differed according to the approach. In the counseling group, satisfaction was also high regarding the therapist’s ability to address language difficulties (M = 4.94), surpassing findings by Homidi and Al-Jabri (2021), where families rated technology-based methods with a mean of 3.73.

Group 1, which received professional-centered intervention, showed lower satisfaction, particularly regarding the therapist's understanding of their child's needs (M = 4.24). This is concerning, as Morgan et al. (2019) emphasize that understanding patient needs is essential for effective speech-language therapy. In contrast, Group 3, with a combined intervention, reported balanced results, with an average satisfaction score of 4.53, indicating intermediate satisfaction. The findings confirm that family involvement influences satisfaction and perceived progress, consistent with previous research on family-centered approaches (Melvin et al., 2020; Klatte et al., 2019; Scarinci et al., 2018).

Analysis and Comparison of Family Commitment in the Intervention

A review by Melvin et al. (2020) evaluated qualitative literature on speech-language therapy and family commitment in early intervention. After analyzing 28 studies showedthat parental trust and support from therapists foster open, collaborative communication. Thus, it is unsurprising that the family counseling group felt more involved during sessions (88.2%) compared to the direct intervention group (47.1%), as therapists worked directly with families. Moreover, 100% of parents in the counseling group felt they received sufficient guidance on how to get involved, compared to 76.5% in the direct intervention group. This is crucial since mutual understanding, constructive therapist-family relationship, and appropiate training are key to sustaining commitment (Klatte et al., 2019). Receiving sufficient information is essential to ensure family training. Significant differences also emerged regarding clarity of parental roles, which was higher in the counseling group, who also reported more training to contribute to therapy. In Group 3 (combined intervention), results showed balanced commitment: 64.7% felt involved in sessions, and 35.3% felt like "partners." Additionally, 88.2% felt adequately guided, suggesting the combined approach supports

families effectively. Melvin et al. (2021) noted that informed families develop key engagement traits, explaining the higher role clarity observed in this group (mean 4.59).

Analysis and Comparison of Families' Perception of the Information Provided and the Effectiveness of Speech-Language Intervention

In the study by Keilmann et al. (2004), it was observed that families of children with speech and language difficulties generally reported high satisfaction with intervention outcomes. A similar finding was reported in Lederer (2001), where families of children with LD expressed satisfaction with vocabulary growth and social development. In our study, the family counseling group stood out across all satisfaction-related measures. Parents in this group reported high satisfaction with the information received both before (mean 4.35) and during the intervention (mean 4.94). As previously mentioned, receiving good information is crucial (Klatte et al., 2019). Similarly, research has shown that parents' perceptions of their children's need for language support can influence their engagement in home-literacy practices, although the relationship between these practices and children's language development may be more complex than previously assumed (Lenhart & Lingel, 2023). Nevertheless, the perceived improvements in children were lower in this group, with a mean score of 3.59 for articulation. This finding is noteworthy since DeVeney et al. (2017), reported that parent-led interventions usually yield better results tan clinician-directed ones. Therefore, it is noteworthy that despite the demonstrated benefits of parent-implemented interventions, parents in this group did not perceive significant improvements. Regarding Group 3, which combined both types of intervention, it stood out in the perception of coordination between the speech-language therapist and other professionals, with a mean score of 4.47. This aspect is particularly relevant, because greater collaboration among professionals – through shared knowledge and expertise - positively impacts outcomes (LaFrance et al., 2019). Finally, the results

regarding the effectiveness of the intervention were also statistically significant, showing differences in children's improvement since the start of the intervention and in articulation, with the combined intervention group achieving the best results in these areas. Verbeek et al. (2023) showed that early intervention targeting both language and communication can lead to improvements in language abilities without an increase in behavioral problems, which supports the findings of this study regarding the effectiveness of speech-language interventions for children with developmental language disorders. One limitation of this study is that the number of therapy sessions attended by families was not considered, which could influence both family satisfaction and the perception of results. However, some studies support the idea that the number of sessions received does not significantly affect family satisfaction (Jahromi & Ahmadian, 2018). Another aspect to consider is that the intervention programs were implemented sequentially across academic years (2018–2024). Although all therapists were trained in the same standardized protocols and supervision was maintained throughout, it is possible that their experience increased over time, potentially refining intervention delivery. Nevertheless, the protocols and session structures remained stable, minimizing the likelihood of major variability due to therapist practice. The present study focused on families' perceptions of satisfaction and perceived progress, which provide valuable information about intervention acceptability and feasibility. Objective outcome data were not the focus of this study, as therapists' assessments against normed measures were conducted routinely as part of clinical practice rather than for research purposes. Future studies should integrate both subjective (family- and therapist-reported) and objective (test-based) measures to achieve a more comprehensive understanding of intervention effectiveness.**Conclusions**

This study demonstrates that family involvement is a key factor in satisfaction with speech-language therapy services. Families in the indirect intervention group, who were more actively involved, experienced higher levels of satisfaction compared to those in the direct intervention group, who reported the lowest satisfaction levels, particularly regarding the therapist's understanding of the child's needs. However, in terms of perceived outcomes, families in the direct intervention group rated language progress and articulation improvements more favorably, despite feeling less involved. Meanwhile, the combined intervention group achieved a balance, with high satisfaction levels in both family involvement and perceived child improvement, suggesting that this approach may be the most suitable for achieving an effective combination of therapeutic results and family satisfaction. The practical recommendations that can be made based on this study are to encourage active family involvement, even in professional-centered interventions, as while direct intervention is effective in some aspects, it could benefit from greater family participation. Additionally, combined intervention should be considered a preferred approach, as it successfully balances family satisfaction and perceived effectiveness in child outcomes. Finally, future research should include a more detailed follow-up on the number of sessions attended and the degree of family involvement to analyze their influence on satisfaction and perceived outcomes.

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Supplemental File Descriptions:

Supplementary Table 1: Results of the Expert Review: This table presents the results of the expert review conducted on the questionnaire used in the study, including expert feedback on clarity, relevance, and appropriateness of each question and section of the instrument.

Supplementary Table 2: Self-Developed Questionnaire: This table shows the complete questionnaire used to evaluate family satisfaction and involvement in speech-language therapy, with sections focusing on sociodemographic data, satisfaction with the therapist, family commitment, information provided, and effectiveness of the intervention.

Table 1.

Descriptive statistics of the sociodemographic characteristics of each participant group.

Variable		Group 1: Professional-Centered Intervention (n=17)	Group 2: Family Counseling (n=17)	Group 3: Family-Centered Intervention with Counseling (n=17)
Schooling	Did not attend school/preschool	5.9% (1)	23.5% (4)	5.9% (1)
	Public school/preschool	35.3% (6)	41.2% (7)	52.9% (9)
	Semi-private school/preschool	41.2% (7)	35.3% (6)	35.3% (6)
	Private school/preschool	17.6% (3)	0% (0)	5.9% (1)
Diagnosis	LD	52.9% (9)	64.7% (11)	41.2% (7)
	DLD	47.1% (8)	35.3% (6)	58.8% (10)
Gender	Male	88.2% (15)	58.8% (10)	47.1% (8)
	Female	11.8% (2)	41.2% (7)	52.9% (9)
Other therapies received	No	88.2% (15)	64.7% (11)	70.6% (12)
	Yes	11.8% (2)	35.3% (6)	29.4% (5)

Table 2.

Perceptions of family commitment, particularly regarding the role of families and their participation in therapy.

Question	Response	Professional-Centered Intervention (Group 1)	Family Counseling (Group 2)	Combined Intervention (Group 3)
Sufficient guidance on involvement	No	4 (23.5%)	0 (0%)	2 (11.8%)
	Yes	13 (76.5%)	17 (100%)	15 (88.2%)
Role in therapy	Involved in the assessment	2 (11.8%)	0 (0%)	0 (0%)
	Involved at the end of the session	8 (47.1%)	0 (0%)	0 (0%)
	Involved during the session, but not in the assessment	6 (35.3%)	15 (88.2%)	11 (64.7%)
	Fully involved as "partners”	1 (5.9%)	2 (11.8%)	6 (35.3%)
Perception of client/pacient	The child	16 (94.1%)	1 (5.9%)	1 (5.9%)
	The family	1 (5.9%)	14 (82.4%)	8 (47.1%)
	The child, the family, and all people around	0 (0%)	2 (11.8%)	8 (47.1%)
Active participation	Yes	4 (23.5%)	6 (35.3%)	4 (23.5%)

Table 3.

Means and standard deviation of satisfaction, family commitment, information, and effectiveness of speech-language intervention.

Dimension	Question	Group 1	Group 2	Group 3
Satisfaction	Understanding of child's needs	4.24 (0.56)	4.82 (0.39)	4.71 (0.47)
	Responsiveness to concerns	4.29 (0.59)	4.94 (0.24)	4.71 (0.47)
	Empathy toward concerns	4.12 (0.70)	4.94 (0.24)	4.71 (0.47)
	Skills in addressing language difficulties	4.18 (0.73)	4.94 (0.24)	4.41 (0.51)
	Overall satisfaction	4.24 (0.66)	4.88 (0.33)	4.53 (0.51)
Commitment	Guidance on how to engage in therapy	0.76 (0.44)	1.00 (0.00)	0.88 (0.33)
	Perceived role in therapy	1.35 (0.79)	2.12 (0.33)	2.35 (0.49)
	Clarity about role in therapy	3.71 (1.11)	4.47 (0.62)	4.59 (0.51)
	Training to contribute to therapy	3.41 (0.94)	4.88 (0.33)	4.53 (0.62)
	Training has a positive impact	3.76 (0.83)	4.88 (0.33)	4.53 (0.51)
	Adaptation of therapist’s language	3.88 (0.78)	4.76 (0.75)	4.41 (0.51)
	Overall satisfaction with family commitment	3.94 (0.75)	4.65 (0.86)	4.24 (0.66)
Information	Satisfaction with information before intervention	4.06 (0.90)	4.35 (0.93)	4.71 (0.59)

	Satisfaction with information during intervention	4.12 (0.86)	4.94 (0.24)	4.71 (0.47)
	Information on roles facilitates preparation	3.88 (0.96)	4.94 (0.24)	4.47 (0.72)
	Effective communication between therapist and other professionals	3.59 (1.12)	3.53 (1.84)	4.47 (0.72)
	Coordination between therapist and other professionals	3.47 (1.23)	1.94 (1.25)	4.24 (0.90)
	Overall satisfaction with received information	4.00 (0.71)	4.88 (0.33)	4.53 (0.51)
Effectiveness	Child's improvement since the beginning	4.18 (0.95)	3.82 (0.88)	4.53 (0.51)
	Increase in vocabulary	4.00 (0.61)	3.71 (0.92)	4.59 (0.51)
	Improvement in articulation	4.06 (0.90)	3.59 (1.12)	4.59 (0.51)
	General significant improvements	4.06 (0.90)	3.65 (1.00)	4.53 (0.62)
	Overall satisfaction with progress	4.06 (0.83)	3.76 (0.97)	4.53 (0.51)

Table 4.

Significant Results of the Kruskal-Wallis Test

Dimension	Variable	Kruskal-Wallis H	Asymptotic Significance
Sociodemographic Data	Child's gender	6.566	0.038
Satisfaction with the Speech-Language Therapist	Understanding of needs	11.268	0.004
	Responsiveness to concerns	13.438	0.001
	Empathy	16.633	0.000
	Skills in addressing difficulties	14.441	0.001
	Overall satisfaction	10.583	0.005
Family Commitment	Parents' role in therapy	18.787	0.000
	Perception of the speech-language therapist's client/patient	33.011	0.000
	Clarity of role	7.233	0.027
Information Provided	Training to contribute to therapy	23.916	0.000
	Influence of training on therapy	18.103	0.000
	Training in skills beyond the clinic	14.952	0.001
	Need to discuss with parents	13.157	0.001
	Need for collaboration with parents	16.623	0.000
	Adaptation of the therapist's language to parents' level	14.449	0.001
	Satisfaction with family commitment level	9.735	0.008
	Satisfaction with information during the intervention	14.082	0.001
	Satisfaction with information at the end of the intervention	9.818	0.007

	Information on the role of parents and the therapist	14.679	0.001
	Coordination between the therapist and other professionals	19.594	0.000
	Collaboration between different professionals	28.491	0.000
	Information on resources to support progress	11.445	0.003
	Overall satisfaction with the information received	15.796	0.000
Effectiveness	Child’s improvement since the start of intervention	6.078	0.048
	Increase in the number of words the child says	10.971	0.004
	Improvement in the child's articulation	8.863	0.012
	Significant improvements in the child	6.117	0.047
	Fulfillment of intervention expectations	6.833	0.033
	Satisfaction with the results obtained	6.324	0.042
	Overall satisfaction with intervention effectiveness	7.437	0.024

Table 5.

Mann-Whitney U test results comparing satisfaction and perception of effectiveness across different types of speech-language intervention.

Item	Compared Groups	Mann-Whitney U	Z	Asymptotic Significance (Two-tailed)	Exact Significance [2(One-tailed significance)]*
Understanding of needs	1 vs 2	66.500	-3.089	0.002	0.006
	1 vs 3	82.500	-2.431	0.015	0.031
Responsiveness to concerns	1 vs 2	59.000	-3.530	0.000	0.003
	1 vs 3	91.000	-2.105	0.035	0.067
Empathy	1 vs 2	49.500	-3.807	0.000	0.001
	1 vs 3	77.500	-2.572	0.010	0.020
Skills in addressing difficulties	1 vs 2	58.000	-3.535	0.000	0.002
Overall satisfaction	1 vs 2	66.000	-3.163	0.002	0.006
Training to contribute to therapy	1 vs 2	25.000	-4.447	0.000	0.000
	1 vs 3	51.000	-3.388	0.001	0.001
Influence of training on therapy	1 vs 2	43.000	-3.898	0.000	0.000
Need to discuss with parents	1 vs 2	55.000	-3.310	0.001	0.002

Need to collaborate with parents	1 vs 2	52.000	-3.549	0.000	0.001
Adaptation of therapist's language	1 vs 2	61.500	-3.197	0.001	0.004
Satisfaction with information during the intervention	1 vs 2	53.000	-3.455	0.001	0.002
Satisfaction with information at the end	1 vs 2	40.000	-4.163	0.000	0.000
Information on the role of parents and the therapist	1 vs 2	47.500	-3.722	0.000	0.001
Coordination between the therapist and other professionals	1 vs 2	58.000	-3.056	0.002	0.002
Collaboration between professionals	1 vs 2	31.000	-4.083	0.000	0.000
Information on resources to support progress	1 vs 2	62.000	-3.049	0.002	0.004