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The Communication Patterns between Speech–Language Therapists and Parents/Guardians of Children with Developmental Language Disorders in Private Speech–Language Therapy in Cyprus

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Abstract: Children with developmental language disorder (DLD) experience communication difficulties and receive speech–language therapy (SLT) services in public schools and/or private clinics in Cyprus. This study aims to analyze the context and content of communication between parents/guardians (P/Gs) and speech-language therapists (SLTs) in private practice. The conducted cross-sectional study utilized nonprobability convenience sampling to recruit P/Gs of children with DLD. Participants completed a questionnaire regarding their sociodemographic characteristics, the context of communication, topics discussed, and collaboration level with the SLTs. A total of 189 P/Gs participated, of which 84.1% were married, 79.4% were mothers, and 52.4% held at least a college/university degree. Mothers primarily communicated with SLTs in the setting, discussing their children's performance, progress, behavior, difficulties, and homework. However, 48.7% felt well-informed, 47.1% fully understood their children's goals, 55.6% received thorough briefings from SLTs, 51.3% observed at least a portion of the therapy session, and 77.8% received at least an adequate amount of homework. Additionally, 73.6% reported the use of technology during SLT, and 74.5% expressed good/great satisfaction with their children's progress. Of the 31.1% reporting difficulties, 64.3% mentioned some difficulties related to homework completion and the children's behavior. The proposed solutions included increased SLT briefings, training, and P/Gs observing therapy sessions.

Keywords: developmental language disorder; speech–language therapy; parent; communication; collaboration; children; private practice; Cyprus

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1. Introduction

Developmental language disorder (DLD), a term proposed by professionals in various countries (Bishop et al. 2016, 2017) and previously known as Specific Language Impairment, is a prevalent communication disorder (Law et al. 2019). It affects the domains of speaking, listening, reading, and writing, and it is estimated to occur in approximately 1 in 14 children (around 7% prevalence) during kindergarten (National Institute on Deafness and Other Communication Disorders 2022; McKean et al. 2018). The prevalence of DLD is higher among children from lower socio-economic status (SES) backgrounds (McLeod and Harrison 2009; Bishop et al. 2017). Children diagnosed with DLD experience persistent difficulties in language development, comprehension, and expression during their developmental period, leading to significant communication difficulties (MMS 2023; Norbury

et al. 2008). They may also present with difficulties in short-term memory, literacy, socioemotional and behavioral adaptation, and may have co-occurring neurodevelopmental disorders such as Attention Deficit/Hyperactivity Disorder (Tomblin et al. 1997; McLeod and Harrison 2009; Bishop et al. 2016, 2017).

In Cyprus, children diagnosed with DLD are classified as "special needs" and are entitled to free speech–language therapy (SLT) in public schools, following identification and assessment. However, there is no public policy in place for their identification, and there is a lack of official data on the national prevalence of DLD. Additionally, Greek Cypriots use both Standard Greek and Cypriot Greek, which is a language variety used in everyday communication by Greek-speaking Cypriots. Cypriot Greek differs from Standard Greek in terms of morphology, syntax, semantics, and phonology, which could potentially impact the manifestation of DLD in these children. Thus, Greek Cypriot children exhibit bilectalism (Theodorou et al. 2016), and these factors contribute to possible underidentification and limited knowledge regarding the prevalence, nature, and service delivery for children with DLD in Cyprus.

A study on children with DLD in Cyprus, utilizing a questionnaire completed by a small sample of speech–language therapists (SLTs), revealed that most children receiving services for DLD were seven years of age on average, presented with a mixed receptive/expressive language disorder, and received individual SLT services biweekly (Theodorou et al. 2022). In the public sector, children identified with DLD can access SLT services free of charge through SLTs appointed by the Ministry of Education, Sport, and Youth (MESY) in public schools or by the Ministry of Health (MH) in children's state hospitals. In the private sector, these services can be obtained either through the General Healthcare System, with a limited number of sessions at a discounted price for those eligible, or through private practice, where parents/guardians (P/Gs) can select SLTs of their choice and pay the full cost.

A report providing recommendations to the United Kingdom government on improving service delivery for children with communication difficulties, based on survey data, found that P/Gs felt abandoned after their children's diagnosis and reported limited continuity or irregular contact with SLTs (Bercow 2008). Another study focusing on the perception of communication between SLTs and P/Gs for children with language and literacy disorders revealed that the perception of P/Gs was highly important as it influenced the ability of SLTs to meet their needs and expectations (Porter et al. 2020). The P/Gs in that study emphasized the need for a clear diagnosis and explanation of their children's disorder and prognosis to better understand their children's needs and the expectations of SLTs. The satisfaction of P/Gs with their experience and communication with SLTs was associated with the amount of information they received (Porter et al. 2020). In an additional study examining P/Gs' perception regarding their children's language disorder, it was found that many P/Gs were unable to clearly state their children's language disorder, and it was also found that many P/Gs were unable to clearly state their children's diagnosis and did not fully understand the diagnoses provided by SLTs, leading to a lack of trust for SLTs (Ash et al. 2020). It is worth noting that DLD often requires regular and intensive SLT services for extended periods, which further underscores the importance of collaboration between P/Gs and SLTs, particularly when compared to children with other disorders such as phonological/articulatory disorders.

In a study focusing on children with intellectual disabilities, it was found that the quality of the relationship between P/Gs and SLTs had an impact on the success of the children's SLT program (Carroll 2010). This highlights the critical importance of examining the communication patterns between P/Gs and SLTs. However, in the case of children with DLD, there is limited research exploring the communication between P/Gs and SLTs, particularly in the private sector. Very few studies have examined this subject, and no study has specifically investigated the communication between P/Gs and SLTs in the private sector in Cyprus. Exploring the collaboration and communication patterns of P/Gs and SLTs in the context of DLD can provide insights into areas that require attention or

improvement, as well as shed light on how these patterns affect children's progress. By studying the perceptions of both P/Gs and SLTs regarding SLT services for children with DLD, it is possible to gain a comprehensive understanding of service delivery from each perspective and identify areas of agreement and divergence.

Few studies have examined the extent and nature of communication between SLTs and P/Gs of children with DLD in the public sector. One study focused on the communication between SLTs in the US public school system and the P/Gs of children with language disorders, as well as the factors influencing the frequency of communication (Tambyraja et al. 2017). The records of 292 children were analyzed, revealing that 8.6% of the SLTs had no communication with the P/Gs of children with DLD. Among the remaining 91.4% of the SLTs who contacted the P/Gs, the frequency of communication varied widely, with a maximum of only 64% of the recorded weeks. The most common medium of communication was homework (i.e., using a homework folder with exercises sent at home for completion), whereas telephone communication was the least common. The study found that the only statistically significant factor influencing the frequency of communication was the SES of the families. P/Gs from higher SES backgrounds were more likely to receive communication from SLTs (Tambyraja et al. 2017). This suggests that P/Gs from higher SES were more proactive in seeking communication with SLTs for their children's progress; or conversely, P/Gs from lower SES backgrounds were less proactive, leading to less frequent communication from SLTs. Notably, the study showed that children whose SLTs communicated more frequently with their P/Gs made greater progress in grammar goals compared to children with less frequent communication (Tambyraja et al. 2017).

The results of the study on communication patterns between SLTs and P/Gs in the public sector may not be applicable to children receiving SLT services in the private sector due to the differences in service delivery between these two sectors. In Cyprus, for example, SLTs in the public sector are appointed by the MESY and the MH, which means that parents do not have the ability to choose the SLTs who provide SLT services to their children. On the other hand, in the private sector, parents can select the SLTs they prefer either through the General Healthcare System or private practice, and this selection may influence the quantity and quality of communication between them and the SLTs based on their personal opinions. To gain a comprehensive understanding of the communication patterns between P/Gs and SLTs across service delivery settings for children with DLD, it is necessary to conduct additional studies focusing specifically on communication patterns in the private sector, or studies that encompass both sectors. These studies will help complete the puzzle and provide a more comprehensive picture on the subject. Effective communication between P/Gs and SLTs is crucial, as evidenced by the positive impact of communication frequency on grammatical progress in children with DLD in the US public school study (Tambyraja et al. 2017). Therefore, it is essential to estimate the frequency and context of communications in the private sector.

Few studies have examined the nature of communication between SLTs and P/Gs in the private sector of children with DLD. For children with speech impairment, however, a study in Australia showed that SLTs reported that P/Gs were more involved in the intervention for their children with SLTs in the private sector, compared to educational settings (Pappas et al. 2008). They also reported that, although 80% of P/Gs were present during the intervention, only 35% of them were involved. Interestingly, in both the private sector and educational settings, 95% of the SLTs indicated that they always or usually gave homework in the form of activities for the children to complete through their P/Gs. Almost all SLTs (98%) believed that parental involvement is necessary for the effectiveness of speech therapy (Pappas et al. 2008). Further studies are needed to determine this information in the case of children with DLD.

This current study is unique in that it focuses on the context and content of communication between SLTs and P/Gs for children with DLD who receive SLT services in the private sector. The nature of the interaction between SLTs and P/Gs is different in this sector compared to educational settings because the P/Gs must physically bring their children to

the SLT service and usually wait for them to finish, providing them with more access to the SLTs. In contrast, in the educational system in Cyprus in public schools, P/Gs typically communicate with the SLTs at a specified time, through telephone or rarely in person, as well as through written communication using a communication book. The objective of this study is to examine the context and content of communication and cooperation between the P/Gs of children with DLD and their SLTs. This study investigates various parameters, including the communication context (who, where, how, and how often P/Gs communicate with SLTs), the subject of communication, P/Gs' understanding of SLT goals, potential problems or obstacles throughout the therapy process, P/Gs' perceptions of ways to improve service delivery by SLTs, and their opinion on the key characteristics that define the SLTs and P/Gs relationship.

The study is guided by three research questions as follows:

1. What is the context (who, where, what about) of the communication relationship between the P/Gs of children with DLD and SLTs in private practice in Cyprus?
2. What is the P/Gs' perception of the general communication and cooperation level between P/Gs and SLTs?
3. What are the P/Gs' general viewpoints on their communication/collaboration with SLTs, the potential problems/obstacles in their children's SLT services, suggestions for improvement, and the main characteristics governing the relationship between them?

2. Materials and Methods

This cross-sectional study followed the Strengthening the Reporting of Observational Studies in Epidemiology guidelines (Von Elm et al. 2007). It was carried out at the Research Center of the first author's (L.V.) university. The study population included Greek Cypriot men and women aged 18 years old and above, P/Gs of children diagnosed with DLD, and their viewpoints regarding the in-person SLT services received from registered SLTs in several private practice settings in Nicosia, Cyprus. Nonprobability convenience sampling was used to recruit the participants. Participation was in person, voluntary, and without compensation, and data collection took place from April 2020 to June 2020.

Data were collected using a self-administered anonymous questionnaire filled out in person, which was developed by the researchers, drawing upon the published literature (Auert et al. 2012; Carroll 2010; Glogowska and Campbell 2000; McAllister et al. 2011; Mandak and Light 2017; Ruggero et al. 2012; Rusiewicz et al. 2017). The questionnaire had four sections and contained 33 closed-ended, open-ended, and multiple-choice questions in the Greek language. Even though the questionnaire was administered during the COVID-19 pandemic, it asked the participants to respond by reflecting on their pre-pandemic experiences; i.e., before the COVID-19 restrictive measures were enforced in Cyprus in March 2020. The first section included questions on the P/Gs' socio-demographic characteristics (i.e., gender, marital status, and educational status). The second section included questions assessing the P/Gs' communication with SLTs. The third section included questions related to the cooperation level between P/Gs and SLTs during and/or after the therapy session. The available answers were based on a 5-point Likert scale. The fourth section included three open-ended questions regarding the possible problems or obstacles that P/Gs faced with their children's SLTs, ways to improve the service, and the main characteristics that they believed governed the relationship between P/Gs and SLTs. The answers to the questions were grouped according to their main themes/points and the percentages were calculated.

The study was conducted according to the Declaration of Helsinki guidelines and all procedures involving the participants were approved by the Cyprus National Bioethics Committee (CNBC). Participation was completely anonymous and voluntary, and participants consented to take part in the research before completing the questionnaire.

Descriptive statistics were used and categorical variables (i.e., gender, marital status, and educational status) were presented as absolute (n) and relative (%) frequencies. All statistical tests performed were two-sided, with a statistical significance level set at $\alpha = 0.05$.

The statistical analysis was conducted using SPSS Statistics v. 26.0 (IBM Corp. (2021), Somers, NY, USA).

3. Results

3.1. Characteristics of the Sample

The socio-demographic characteristics of the study sample are presented in Table 1. Overall, 189 P/Gs participated in the study, with the vast majority being parents (94.2%), mostly female (79.4%), married (84.1%), between 31 and 45 years old (64.6%), and holding at least a college/university degree (66.7%).

Table 1. Socio-demographic characteristics of the sample.

Characteristic	Variables	Number (n) (N = 189)	Percentage (%)
Relationship with the child	Parent	178	94.2
	Guardian	11	5.8
Gender	Male	39	20.6
	Female	150	79.4
Age	Under 25 years	5	2.6
	Between 26–30	38	20.1
	Between 31–45	122	64.6
	Between 46–60	24	12.7
Marital status	Married	159	84.1
	Divorced	23	12.2
	Single	7	3.7
Education level	Middle-school graduate	1	0.5
	Lyceum graduate	56	29.6
	College/University graduate	85	45.0
	Master's degree	40	21.2
	Doctorate degree	1	0.5

3.2. Participants' Communication with SLTs

The first research question examined the context of the communication relationship between P/Gs and SLTs. As shown in Table 2, the mothers communicated more often with the SLTs (84.7%), and the communication took place most often in the office (40.2%), therapy room (32.3%), or seating area (22.2%). The topics of communication were usually the performance (88.4%), progress (85.7%), behavior (85.2%), difficulties (82.5%), and degree of cooperation of the children (80.4%) during the SLT sessions, as well as ways to help them at home (80.4%). The SLT program goals (74.6%) and intervention methods used (73.0%) during the sessions were also discussed.

Table 2. Characteristics of P/Gs' communication with SLTs.

Characteristic	Variables	Number (n) (N* = 189)	Percentage (%)
Who communicates more often	Father	43	22.8
	Mother	160	84.7
	Guardian	7	3.7
	Grandfather/mother	4	2.1
Place of communication	Office	76	40.2
	Therapy room		32.3
	Hallway	61	9.5
	Sitting area	18	22.2
	Other	42	4.2

Table 2. *Cont.*

Characteristic	Variables	Number (n) (N* = 189)	Percentage (%)
Subject of communication *	Child's difficulties	1	0.1
	Child's performance	156	82.5
	Child's behavior	167	88.4
	Child's cooperation	161	85.2
	Child's progress	152	80.4
	Ways to help the child at home	162	85.7
	SLT program/therapy goals	152	80.4
	Therapy intervention methods	141	74.6
	Child's difficulties	138	73.0

* multiple answers could be given.

3.3. Communication/Collaboration Level between P/Gs and SLTs

The second research question examined the communication and cooperation levels between P/Gs and SLTs during therapy sessions, as measured by agreement with the statements given on a Likert scale (Table 3). A total of 31.2% of P/Gs believed that the SLTs considered their suggestions for the SLT program well. Many P/Gs also reported the following:

- they were "very well" informed by the SLTs at the end of the session (55.6%);
- they were "very well" satisfied with their communication with the SLTs (51.9%);
- they understood "very well" the results of their children's initial speech–language evaluation (48.7%);
- they did not observe their children's sessions at all (48.7%);
- they understood "very well" why the SLTs set specific goals for their children (47.1%);
- they talked freely with the SLTs regarding the course of their children's intervention (45.5%);
- they managed to discuss their concerns for their children very well with the SLTs

Regarding the subject of homework (i.e., assigning exercises to the children to complete at home), 29.6% of the P/Gs thought that the SLTs gave them enough homework, whereas 48.2% reported being well/very well satisfied with the homework given, with only 41.3% reporting they were given an appropriate explanation for it. Only 28.0% reported that their child completed their homework, 39.2% reported being very well satisfied with the homework, and 38.6% believed that it helped their child's progress towards their SLT goals.

Regarding the use of technology during the SLT sessions, 23.3% reported no use of technology during the session, and 25.9% believed that its use helped their children properly achieve their goals. Additionally, 61.4% believed that the therapy room was appropriate.

Concerning the collaboration of the SLTs with other health professionals and the school, 30.7% and 28.0%, respectively, reported very good agreement, and 41.8% reported very good collaboration with other professionals as well as 32.8% with schools, believing that such collaboration was extremely helpful for their children's progress. A total of 37.6% reported being well satisfied, and 37.0% were very well satisfied with their children's progress.

Table 3. Communication/Collaboration levels between P/Gs and SLTs.

Statement (%)	No Answer	Not at All	A Little	Enough	Well	Very Well
I was adequately informed about results of initial speech-language assessment	0.5	0.0	2.6	15.3	32.8	48.7
I understood the therapy goals set by the SLT	0.5	1.1	1.6	15.9	33.9	47.1
I observed the child's SLT session	0.0	48.7	14.3	11.6	11.6	13.8
I got informed by the SLT at the end of the session	1.1	1.1	7.4	13.2	21.7	55.6

Table 3. *Cont.*

Statement (%)	No Answer	Not at All	A Little	Enough	Well	Very Well
The SLT considered my suggestions for the SLT program	4.2	4.8	9.0	21.2	31.2	29.6
The SLT gave me materials and homework	0.5	7.4	14.3	29.6	25.4	22.8
I was given appropriate explanation on the way to work at home	1.6	3.2	3.2	20.1	30.7	41.3
The child completed the activities given by the SLT at home	2.6	5.3	15.9	26.5	28.0	21.7
The homework given helped get better results for achieving the child's SLT goals	2.6	3.2	3.7	20.6	31.2	38.6
I was satisfied with the homework activities suggested/given by the SLT	2.6	3.2	3.7	18.0	33.3	39.2
Technology (like PC or tablet) was used during the SLT session	3.2	23.3	21.2	18.5	21.2	12.7
The use of technology during the SLT session helped the progress of my child	7.9	15.3	12.2	23.8	25.9	14.8
The room the SLT session took place in was appropriate	0.0	0.0	0.5	9.5	28.6	61.4
I managed to discuss and ask the SLT anything that concerned me about my child	0.0	0.0	8.5	20.1	29.1	42.3
I spoke my opinion freely with the SLT about the course of the therapy	0.0	1.6	4.2	15.9	32.5	45.5
My child is monitored by other health professionals. There was collaboration between them and the SLT	2.1	15.9	3.7	13.8	30.7	33.9
The collaboration between the SLT and other professionals helped their progress	6.3	9.0	1.6	13.8	27.5	41.8
My child attends school (public/private Kindergarten/Elementary). There was collaboration between the SLT and school	2.1	16.9	11.1	17.5	24.3	28.0
The collaboration between the SLT and school helped the child's progress	6.9	9.0	5.8	19.0	26.5	32.8
The progress of the SLT sessions was what I was expecting	1.6	0.5	4.2	19.0	37.6	37.0
I was satisfied with my communication with the SLT	0.0	0.0	3.7	14.3	30.2	51.9
In case there was a previous therapy intervention with another SLT, the way to get informed was the same with the current SLT	15.9	15.9	11.1	17.5	17.5	22.2

Notes: PC = personal computer, SLT = speech–language therapist.

3.4. P/Gs Viewpoints for the Relationship between P/Gs and SLTs

The third research question was examined with open-ended questions answered by a substantial portion of the P/Gs, regarding the potential problems or obstacles with their children's SLT services, the ways they can be improved, and the main characteristics governing the relationship between them and the SLTs. Examples of the viewpoints of the P/Gs are presented below.

When asked about any difficulties they encountered, only 31.1% of P/Gs responded to the open-ended question. Of them, 35.7% reported no obstacles, but the rest reported difficulties that can be grouped into the following:

- 21.4% with homework, i.e., "the children refused to cooperate with the P/Gs for homework," "difficulty setting the same rules at home"

- 11.9% with the children's behavior or lack of cooperation with the SLTs, i.e., "the child did not want to enter the session," "the child complained"
- 11.9% with briefing by the SLTs, i.e., "little time for briefing," "few opportunities," "no direct briefing but through the secretary"
- 9.5% with their inability to observe or be present in the SLT session
- 9.4% with the children's goals or therapy methods, i.e., "reading words," "understanding the SLTs," "understanding the child's goals," "disagreement on the method used"
- 7.2% with various other factors, i.e., "finances," "outside noise and distractions"
- 7.1% with the time, i.e., "progress was too slow," "time pressure to complete too many goals," "not enough therapy time"

When asked about what could improve the SLT services towards their children, 28.7% of the P/Gs responded. Of them, 17.9% reported to be "completely satisfied with their SLT services," whereas 15.4% reported not knowing what could be done to improve them. The rest of the responses for their solutions were grouped into two main themes as follows:

1. SLT-focused solutions:
    - 20.5% suggested increased and more frequent briefing and feedback by the SLTs, i.e., "keeping a progress book," "using videos to demonstrate the homework to parents"
    - 20.5% suggested continuing education and training of the SLTs, i.e., "learning new methods and protocols from abroad," "getting the latest information," "having more experience with children with similar difficulties"
    - 17.9% suggested improving the relationship between children and the SLTs, i.e., their "chemistry," "getting to know, understanding, and paying attention to each other," "the SLTs believing in the children more"
    - 2.6% suggested setting better goals
    - 2.6% suggested having a smaller caseload
2. Non-SLT-focused solutions:
    - 10.2% suggested increasing the number of sessions or having "group sessions"
    - 7.7% suggested having the "parent present" or "observing the sessions"
    - 2.6% suggested enhancing the therapy room, i.e., with a "sensory room"

When asked to provide ways to improve their collaboration with the SLTs, 30.4% of the P/Gs responded to the open-ended question. Of them, 36.6% reported being already "satisfied with their collaboration," whereas others suggested solutions for obstacles based on the following:

- 29.2% suggested having improved quality and quantity of briefing time, i.e., "more consistent briefing and explanation of goals by the SLTs," "sharing of home videos" by the P/Gs, "more time between them";
- 31.7% suggested improving the homework and focusing on collaboration at home, i.e., "explanation of homework" and being able to "observe the session" live or through video, "demonstrating home exercises with the P/Gs present in the session" for carryover, "clearer explanation and directions," "providing solutions to problems," and "materials for the exercise at home," requesting "more homework," "practical daily home tasks for homework instead of free play," "dressing," "washing-up," "toilet";
- 4.9% suggested increased collaboration with the father
- 4.9% suggested upgrading the relationship between P/Gs and SLTs, i.e., "honesty," "friendship"
- 7.3% suggested parent-focused solutions, i.e., "parental counselling," parent-training seminars"
- 2.4% suggested providing "more focus on the child"

Finally, when asked what the main characteristics are of the collaboration between P/Gs and SLTs, 40.0% of the P/Gs responded. The variability in the open-ended responses

by the P/Gs was greater than in the other questions, but the main characteristics mentioned were grouped into the following word clusters:

- "mutual trust," "respect," "honesty"
- "cooperation," "collaboration," "teamwork"
- "communication," "explanation," "dialogue," "availability"
- "understanding," "acceptance," "interest"
- "consistency," "preparedness," "productivity," "functionality," "methodical"
- "advice," "support," "guidance"
- "patience," "persistence"
- "friendship," "kindness," "love," "willingness," "open-mindedness"
- "generalization," "progress," "problem-solving"

4. Discussion

The current study examined the context, content, and main characteristics of the communication/collaboration between P/Gs and SLTs, potential difficulties/obstacles, and ways to improve SLT service delivery for children with DLD. The results showed that SLTs communicated mostly with the mothers, usually in person, in the SLTs' office/therapy room. The topic of communication was usually the children's performance, progress, behavior, difficulties, cooperation, homework, and partly the goals and intervention methods used. The majority of the P/Gs were well/very well informed about the results of the SLTs' initial evaluation of their children and understood the goals set for them. Although about half reported not being able to observe the SLT session, they were well/very well briefed about it at the end of the session. Most P/Gs could talk freely and believed that they were provided with enough time for communication with the SLTs.

The results of the current study are discussed through comparisons from studies in various other countries/continents because of the limited number of studies for children with DLD in Cyprus and the fact that this was the first study in Cyprus on the subject. The finding that more than half of the P/Gs held at least a college/university degree was expected, because service delivery in Cyprus in the private sector is the most expensive type; therefore, it reflected the inclusion of only private practice SLT services in this study. It was also expected that more than half of P/Gs were very well satisfied with their communication with the SLTs, as the sample represented private practice, and if the P/Gs were unsatisfied, they would switch the SLT service for their children to other SLTs.

In the context of communication, the current study showed that most communication was in person (95.8%) in various rooms in the private practice area, which differed from studies on SLT services for children with DLD provided in public schools in the US (Tambyraja et al. 2017). In that context, although most (91.5%) of school-based SLTs contacted the P/Gs, this was carried out inconsistently, and most often using a homework book or in written form rather than in person (Tambyraja et al. 2017). The difference in the results of this study might be because, in private practice, SLTs have more direct access to P/Gs, who bring their children to therapy. On the other hand, there is limited direct contact with P/Gs in school-based settings, at least in Cyprus, as SLTs usually pull the children out of the classroom for therapy and have more direct access to the teacher than to parents. Special arrangements need to be made for SLTs and P/Gs to communicate in person in the public schools in Cyprus; therefore, the possibility of briefing per session is lower compared to the private sector.

Regarding homework, most SLTs (92.1%) in the private sector in Cyprus gave homework to the children through the P/Gs in this study, which was reported as more than enough by most. In the US, SLTs were found to have high variability in the frequency of homework assignments, with some never sending homework home, to some sending homework every week (Tambyraja et al. 2017). Even though the frequency of communication was not measured in the current study, Tambyraja et al. (2017) notably found that the frequency of communication, usually through homework, between P/Gs and SLTs, was positively and significantly related to the P/Gs' SES. The difference in the provision of

homework might also be due to the sector differences between the studies because, in the private sector in Cyprus, where P/Gs pay for SLT services, they might be more likely to expect or request homework, whereas in the public sector/school system this might not be expected or demanded.

Regarding the use of technology in the current study, about three-quarters (73.5%) of the P/Gs reported that it was used at least a little during the SLT session. The use of modern technologies was close, but lower than in the US, where its use was reported by 80.3% of the SLTs, who used it for 50% or less of the session (Thompson and Zimmerman 2019). The reason for the reduced use of technology in Cyprus might be due to the limited availability of electronic applications and websites with therapeutic or educational material in the Greek language. Interestingly, in another article, the use of technology in SLT sessions in Cyprus was effective in helping children reach their SLT goals during the COVID-19 pandemic restrictive measures when SLT services had to be delivered through telepractice. The parents in that study reported that the online/electronic activities which were created in Greek for various target areas of SLT were "useful" (Voniati et al. 2021a). The SLTs in the current study did not have access to these electronic activities and the P/Gs responses reflected their viewpoints on the in-person SLT services offered in the pre-COVID-19 period.

Notably, almost two-thirds (64.6%) of the participants reported the existence of good/very good collaboration between SLTs and other professionals working with their children. This collaborative approach to treatment is very important and, according to Voniati et al. (2021b), it improved treatment efficacy and maximized the children's skills. Evidence of this approach in the private service delivery for children with DLD in Cyprus was a good indicator of the quality of service, especially because there was no legal framework or enforcement for this collaborative approach in Greece or in Cyprus (Voniati et al. 2021b).

The viewpoints of the P/Gs revealed a few obstacles to the SLT session, including completing the homework, the behavior/cooperation of the child in the session, briefing by the SLT after the session, and their inability to observe the session either live or through video, among others. Their viewpoint on the ways to improve the SLT services emphasized appropriate briefing time, improving the relationship between children and SLTs, increasing the collaboration between P/Gs and SLTs, as well as with other professionals, and observing the sessions to become more involved, among others. To improve the collaboration between P/Gs and SLTs, they suggested improving the quantity and quality of briefing time, observing the sessions, improving homework, and focusing on the skills needed at home. Remarkably, in a different article reporting on the switch of all SLT services to telepractice due to the COVID-19 restrictive measures period in Cyprus, when parents were able to observe the SLT sessions of their children, they were reportedly able to understand their children's goals and abilities better, and their expectations were surpassed (Voniati et al. 2021a). Thus, according to the P/Gs, many of the issues mentioned in the current study could be resolved with the opportunity to observe the SLT session.

In this study, in the description of the characteristics of the P/Gs' relationship with the SLTs, emphasis was given to honesty, trust, collaboration, communication, consistency, understanding, acceptance, and support, along with friendship and others. Similarly, in a study examining the P/Gs' expectations, awareness, and experiences of evidence-based SLT services for children with autism in Australia, the P/Gs mentioned personal qualities such as caring, passion, and understanding, as a priority for SLTs so that they could easily build rapport with the children (Auert et al. 2012). Overall, based on the results of the P/Gs' viewpoints mentioned above, the current study reveals the need for P/Gs of children with DLD receiving SLT in private practice in Cyprus to observe their children's SLT sessions, receive help with homework, and receive guidance from SLTs on how to work with their children at home.

This study has several limitations. Firstly, it only included registered SLTs from private settings in Nicosia, which did not reflect the situation in the public sector for school-based or hospital-based SLT services. The fact that two-thirds of the P/Gs had high SES, as indicated by their educational status, combined with the trend that DLD has a higher

prevalence in children from lower SES, the findings may not be generalizable to a more representative range of SES for children with DLD in Cyprus. Additionally, the frequency of communication was not directly measured and its effect on children's outcomes was not a research question. It would be helpful to measure the SLTs' viewpoints and opinions on the same topics to be able to validate the P/Gs' viewpoints or reveal possible disagreements. Moreover, the SES of the P/Gs was not examined for its effect on the SLT progress or frequency of the collaboration between P/Gs and SLTs as in other studies. Additionally, no data were collected on the demographic characteristics, possible bilingualism/bilectalism, and comorbidities of the children. Variables such as the age of the children could be a key factor affecting the frequency and quality of the communication between P/Gs and SLTs communication. It could be that communication was more frequent and more intense with younger children, especially around the age of diagnosis, and could be less frequent in later ages. Moreover, as mentioned, children in Cyprus are bilectal and may also be bilingual. Bilingualism was found to mask DLD symptoms and could impede early referral (Thomas et al. 2019) by P/Gs, pediatricians, or teachers (Bishop et al. 2016). Therefore, these children might have been identified later, and recording their age and the effect on the results would provide further substantial information. Finally, the study only focused on the population of children with DLD.

5. Conclusions

The findings of this study offer valuable insights into the communication between P/Gs and SLTs in the private sector in Cyprus and highlight the areas of improvement, such as greater parental involvement in SLT sessions, consistent communication and feedback, and support from SLTs. As the quality of the relationship between P/Gs and SLTs has been shown to impact the success of SLT programs, future research should explore how this relationship affects outcomes for children with persistent difficulties. Comparing the communication and the service delivery of SLTs in the public and private sectors in Cyprus, as well as between different countries or populations with different communication difficulties, could reveal interesting and valuable information for overall SLT service delivery. This study is the first focusing on the context and content of communication between P/Gs and SLTs in private practice in Cyprus, for children with DLD. The finding that overall, most of the P/Gs were satisfied with the communication was predictable, because if they were not, P/Gs would switch the service delivery for their children to other SLTs. It would be interesting to repeat the questionnaire in future research in the public sector, especially in the public schools in Cyprus, where the P/Gs do not have the ability to choose their children's SLTs and would be unlikely to switch the school of their children in case they were not satisfied with them.

Future research in the field of SLT services for children with DLD should consider collecting demographic characteristics of both the children and the P/Gs. This information can include variables such as SES, age, bilingualism/bilectalism, and linguistic diversity. Investigating the impact of SES on communication patterns and SLT outcomes would be valuable as it can provide insights into potential disparities and inequalities in service provision. Furthermore, exploring the relationship between the quality of the relationship between P/Gs and SLTs and SLT outcomes would help determine the importance of this factor for treatment efficacy. It would also be beneficial to examine the linguistic diversity of children with DLD, particularly in relation to bilingualism, as this may influence their diagnosis and the timing of receiving SLT services. Recording the age of children in future studies is crucial as it can significantly impact the results and shed light on the developmental trajectories and potential age-related differences. To obtain a more representative sample, future research should aim to include both the public and private sectors in each of the countries studied. This would allow for a more comprehensive understanding of SLT services considering the different accessibility and cost factors associated with each sector. Specifically, including the public sector would provide insights into the experiences of families with lower SES, who rely on free services. Lastly, exploring similarities and dif-

ferences between populations with persistent difficulties, such as autism spectrum disorder, intellectual disability, or childhood apraxia of speech, could provide valuable comparisons and contribute to a broader understanding of communication challenges and SLT needs under various conditions.

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