



## **Supporting Children with Speech Delay: Speech Therapy Intervention Frameworks from Preschool Teachers**

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This study drew a brief description of speech intervention frameworks for preschool children with speech delay (SD) across Indonesia. An online survey was distributed via emails and Whatsapp groups to preschool teachers with experience working with 3-year-old to 6-year-old children with SD. The questionnaire was developed by considering cumulative background factors, behavioral performances, and standardised assessment instruments of SD. 482 (96.4%) out of 500 online responses via Google Form passed the inclusion criteria. The findings suggest that the preschool teachers build speech intervention frameworks based on two necessities: community learning with small-group activities (71.16%) and private sessions and individual exercises (28.84%). These necessities follow the lack of parental support or constant nurturing due to economic and educational measures. Community learning features schooling experience and small-group works. Private sessions feature practice drills, individual repetitive exercises, and psychological impressions. There were three sessions within a week, and each activity took 30 to 45 minutes. The therapy lasted for 30 or 32 weeks. Needless to say, this study lacks contextual variability, and future studies should consider the duration, frequency, and intensity of the therapy from varied respondents in different areas and professions.

**Keywords:** speech development, speech therapy, best practice, preschool teachers, preschool children, teachers

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## INTRODUCTION

Pre-school education prepares children to excel in further school years by enhancing development in the following areas: linguistic, psychological, and social (Sierens et al., 2020). Being the manifest portrayal of cognitive intelligence, children with language development problems are vulnerable to acquiring other cognitive, emotional, social, and school-related issues (Davis & Qi, 2020). Evidence suggests that unattended speech delays can remain in 40%–60% of the children (A. Morgan et al., 2017), and these children are at a higher risk for life-long disability (Capone Singleton, 2018). In a global context, developmental disorders involving speech production and language processing are unexceptional, with the possibility of occurrence in boys is twice as much as girls in all native languages (Zehnhoff-Dinnesen et al., 2020). Specifically, around 5-8% of children cannot express their first word during the first three years of age as the brain grows dramatically (Del Tufo et al., 2019).

Any impairment in the development of linguistic competence in children at their critical period becomes a central issue of early education studies since it serves as a attentive indicator of children's overall development (Zehnhoff-Dinnesen et al., 2020). In some cases, language impairment hampers the later comprehension of school subjects. Concerning the issue, numerous surveys (Mostafa & Ahmed, 2018) exposed the increase in public awareness to value early intervention for children with Delayed Language Development (DLD) problems particularly related to speech intervention. This intervention includes language therapy (McDonald et al., 2019), music therapy (Groß et al., 2010), school-commissioned therapy (White & Spencer, 2018), and even integrated model therapy (Smith et al., 2017). However, the surveys suggested that some occupations, especially teachers (Mostafa & Ahmed, 2018), did not see such interventions as demanding.

Pre-school teachers should be the vanguard of promoting a changing attitude towards addressing the best practices in treating speech delay to catch up with pre-school education goals (Kouba Hreich et al., 2020). These practices proceed with the milestones of normal language development concerning time and content (Zehnhoff-Dinnesen et al., 2020). Language milestones are significant since they forewarn potential problems in educational achievement in later developments (Smart et al., 2017). Regardless of the cases in which some children appear to resolve expressive language delays, early interventions must be calculated based on identified symptoms (Del Tufo et al., 2019). Pre-school teachers need to address this issue and develop the best practices to enhance linguistic development and literacy in children with speech delay issues.

In support of a professional assistance, the importance of parental involvement in the treatment of speech delay cannot be understated. Parents play a vital role in providing a supportive environment that is conducive to the child's progress (Kumaş, 2017). In order to be effective, parents should work closely with their child's speech therapist and actively participate in speech therapy sessions. Furthermore, parents should create opportunities for their child to practice their speech and communication skills in a familiar setting, with positive reinforcement for any progress made. Lastly, parents

should demonstrate patience and understanding when it comes to their child's speech development, as this will create an atmosphere of safety and allow the child to progress at their own pace (Véliz-Campos, 2020).

In the Indonesian context, most children with speech delay issues receive little attention from their parents. Parents present neither medical nor environmental support for their children to stimulate linguistic competencies (Hasanah & Sugito, 2020). Some factors contributed to such low-skill parenting, but studies suggested that economic status (Xue & Li, 2020), educational competencies (Muluk et al., 2020), and tight schedules from work were among prominent factors (Hasanah & Sugito, 2020). It leaves the burden of the interventions to the preschool teachers as the children's educational attendants. Several attempts to develop linguistic competencies for children with speech delay issues in a classroom context have been made. Some teachers used music to build language aptitude (Christiner, 2018), while others used a series of drawing media to increase vocabulary mastery and speech production (Aprinawati, 2017). The teachers also tried to assign role-playing to boost pronunciation, fluency, and comprehension (Fika et al., 2019) or using thematic electronic comics to stimulate speaking and storytelling (Ruiyat et al., 2019). Understanding the significance of best practices in speech delay treatments from various contexts and respondents is vitally important (Houtrow & Murphy, 2019). It could provide proper treatments for preschool teachers to design learning activities (Jesus et al., 2019). This study looks for a detailed description of speech intervention frameworks for preschool children with speech delay (SD) across Indonesia to emulate reliable and validated speech therapy intervention for children with speech delay.

## **METHOD**

### **Respondents**

The primary goal of this research was to gather insight from preschool teachers in Indonesia about their experiences working with 3- to 6-year-old children with speech delayed development. The survey instrument was developed using Google Forms. It included questions related to the experiences of teaching preschool children with speech delay. Questions were designed to gather information on teacher's training, experience, and teaching strategies used to help children with speech delay. The sampling plan was based on personal contacts from professional associations in three different regions of Indonesia. It applied the inclusion criteria of being a registered preschool teacher with at least two years of experience teaching preschool children with speech delay. The initial data collection applied inclusion criteria. The respondents have to teach in Indonesia with at least two years of experience as registered preschool teachers. The respondents must be aware of the issue being discussed and have worked with preschool children with SD. Approval of the institutional ethics committee was granted before the distribution of questionnaire forms. The following table summarised the characteristics of the respondents:

Table 1  
Demographics of respondents

Demographics	Summary statistics [ <i>n</i> (%)]	
<b>Age</b>		
<30	228	(47.30)
30 – 40	101	(21.00)
>40	153	(31.70)
<b>Sex</b>		
Male	83	(17.22)
Female	399	(82.78)
<b>Institutional background</b>		
State School	402	(83.40)
Private School	80	(16.60)
<b>Domicile</b>		
Western Indonesia	175	(36.30)
Middle Indonesia	251	(52.10)
Eastern Indonesia	56	(11.60)
<b>Teaching experience</b>		
2 – 9 years	364	(75.52)
10 – 20 years	118	(24.48)
<b>SD Treatment experience</b>		
<1 year	44	(9.12)
2 – 5 years	262	(54.37)
>10 years	176	(36.51)

Awareness of SD treatments was indicated as significant in State Schools from Middle Indonesia as it recorded 207 (51.50%) respondents contributing to the study group. State schools in Western Indonesia recorded 163 (40.55%) respondents, while only 32 (7.95%) respondents were from State Schools in Eastern Indonesia. Private Schools from Western Indonesia recorded 38 (47.5%) respondents, Middle Indonesian Private Schools recorded 22 (27.5%) respondents, and 20 (25%) others were from Eastern Indonesia. Most of the respondents ( $n=449$ , 93.15%) facilitated their first case of SD in the first ten years of their teaching experience. In addition, female respondents spent more years dealing with their SD children than all-male respondents ( $n=73$ , 87.95%) who have less than a year of SD treatment experience. Interestingly, all-male respondents were less than 30 years in the Age groups and from private schools.

### Data Collection

The data were collected as an online survey using Google Form via Whatsapp link sharing and direct emails regarding the respondents' intervention while dealing with children with SD. The questionnaire was developed by considering cumulative background factors, behavioral performances, and standardized assessment instruments of SD as stated in the literature review. The questionnaire has two sections; the first addressed the demographic data of the respondents and the second contained two closed-ended questions and six open-ended questions addressing the respondents' knowledge of SD and their experiences dealing with children with SD. The respondents

were required to provide rationale or reference for the interventions without suggesting brand affiliation. The study also used concept mapping by asking respondents to draw models or describe their practices textually. The respondents were asked to sort out 'essential', 'preferable', and 'unnecessary' from the listed items of common intervention in SD.

### Data Analysis

The dataset from detailed descriptions of respondents' practices was analysed using reflexive thematic analysis and comparative analysis. Reflexive thematic analysis is used to identify patterns and themes in respondents' reflective experiences. The analysis is a form of grounded theory that seeks to discover patterns and meanings in the data. It involves writing a reflexive narrative that serves as an interpretive account of the data including description of the data, a discussion of the patterns and themes that emerged from the analysis, and an interpretation of the findings. Comparative analysis is used to compare two or more similar ideas or processes in order to identify similarities and differences between them. This comparison is done for the purpose of gaining insights or understanding the underlying causes of a speech delay phenomena experienced by the respondents for the purpose of evaluating the efficacy of a particular solution to the problem. Basic descriptive statistics illustrate the level of agreement among respondents concerning their practices.

### FINDINGS

A total of 500 questionnaire forms using Google Form were distributed online via emails and Whatsapp groups, in which 493 responses have returned. 482 responses passed the inclusion criteria. The following table provide a brief information concerning the number of children that the respondents facilitated and their method of speech delay treatments:

Table 2

Responses to question 1 and question 2 [*n* (%)]

Q1. How many children with SD have you facilitated?		
• 1 – 2 children	279	(57.88)
• 3 – 4 children	184	(38.17)
• >5 children	19	(3.95)
Q2. Did you isolate the children with SD from other children in schooling activities?		
• Yes, I did.	14	(2.90)
• No, I did not.	355	(73.65)
• On some occasions/ For special treatment	113	(23.45)

There were 1,964 SD children in total reported by 482 respondents. Most of them (*n*=1,447, 73.67%) were facilitated across State Schools. Respondents who have more than ten years of teaching experience all facilitated more than five children with SD. Almost half of the respondents (*n*=216, 44.81%) believed that a teacher should not simultaneously assist more than two children with SD even if they already have more SD treatment experience. The need for isolation in schooling activities, as Table 2

suggests, was found necessary by 26.34% ( $n=127$ ) of the respondents. Respondents with less than a year of SD treatment experience admitted that they isolated children with SD from all schooling activities. The respondents elaborated that the isolation was needed for the following occasions; (a) to prepare children with SD to adapt to the school environment ( $n=152$ , 31.53%), (b) to allow specific exercises to be applied ( $n=101$ , 20.95%), and (c) to have an intimate or private session with the children along with their parents ( $n=76$ , 15.76%). Respondents who did not isolate the children with SD insisted that such a case would alienate them from the school community and worsen their SD.

Table 3  
Responses to question 3 and question 4 [ $n$  (%)]

Q3. The backgrounds of the family		
• Economically poor with low educational level and no/ restricted social life	38	(7.88)
• Economically poor with low educational level and a decent social life	51	(10.58)
• Middle-class with good educational backgrounds and a decent social life	26	(5.39)
• Middle-class busy-working parents with a normal social life who can't sit their child and provide <i>no parental support</i>	139	(28.84)
• Middle-class with a decent social life with low educational level and strict practice of cultural values	3	(0.62)
• Middle-class divorced parents who live separately with good educational backgrounds and occasionally support their child	164	(34.03)
• Economically stable parents with good educational backgrounds and a decent social life but provide <i>no parental support</i> for their child	61	(12.66)
Q4. Did the parents/ family members involve in the process of treatment?		
• Yes, they did.	406	(84.24)
• No, they did not.	76	(15.76)

The respondents mentioned the following demographic backgrounds of the children's family in the respective order; economic status, educational level, social life, parental support, and cultural belief. Interestingly, most of the respondents ( $n=304$ , 63.07%) assumed that parental consent or assistance played a significant role in determining the current SD status of the children. As Table 3 indicates, the respondents ( $n=200$ , 41.49%) stressed the absence of parental support as an essential demographic factor compared with economic status or educational level. Despite no detailed explanation of how parental consent contributes to the treatment, the respondents agreed that parents' involvement is necessary.

Table 4  
Responses to question 5 and question 6 [*n* (%)]

Q5. What methods or techniques did you apply in your treatment?		
• Recurring and repetitive <i>dialogue</i> ;	139	(28.84)
• Questions and Answers about daily routines;	114	(23.66)
• Target words pronunciation practice/ drill;	93	(19.29)
• <i>Story-telling</i> followed by retelling the story;	73	(15.14)
• <i>Story-telling</i> followed by role-playing;	48	(9.95)
• Immediate physical response;	12	(2.50)
• Playing and singing;	3	(0.62)
Q6. What themes/ topics/ activities did you use in your treatment?		
• Dialogues about daily activities.	116	(24.07)
• Vocabulary learning by focusing on per-word pronunciation	97	(20.13)
• Read aloud and short stories (using picture books).	88	(18.26)
• Physical response with signal words	69	(14.32)
• Fostered socialisation to stimulate peer conversation.	62	(12.86)
• The parents-children session with turn-taking talks.	46	(9.54)
• Asking the child to repeat the answer slowly and precisely.	4	(0.82)

The methods or techniques used by the respondents in treating children with SD revolved around verbal stimulation exercises and immediate physical response. More than half of the respondents ( $n=260$ , 53.94%) stated that repetitive exercises such as dialogue and story-telling were fundamental to the treatment. Concerning the impact of the immediate physical response to the treatment, some respondents ( $n=128$ , 26.55%) believed it encouraged verbal stimulation and helped the children blend with the school community. Immediate physical response is the child's reflexive reaction to a stimulus in the surrounding environment. It is an automatic physiological reaction, which occurred with disciplined trainings such as turning away from bullies, responding with hand gestures to particular inputs, or making notes whenever something new is discovered. Children's personal experiences and vocabularies became the most preferred themes/ topics in the treatment. Both pronunciation and conversation became the most preferred activities while the treatment took place. The respondents drew materials and steps from books ( $n=177$ , 36.72%). They initiated teacher-children and peer-to-peer conversation to stimulate a verbal response by asking questions, encouraging socialisation, or handing dialogues to practice ( $n=317$ , 65.76%). Signal words became triggers to elicit an immediate physical response, while private sessions with parents were initiated to cast a psychological impression upon the children.

The respondents drew SD treatment frameworks from three main sources; books (printed and digital) ( $n=203$ , 42.12%), scientific articles ( $n=112$ , 23.23%), and professional lectures ( $n=102$ , 21.17%) or peer suggestions ( $n=65$ , 13.48%). The respondents accessed printed books via personal libraries ( $n=148$ , 72.90%) and electronic sources via search engines and social media ( $n=55$ , 27.10%). In terms of book genre, most respondents ( $n=127$ , 62.56%) confirmed the applied psychology, and the rest ( $n=76$ , 37.44%) developed their framework from child therapy books. The respondents ( $n=107$ , 92.85%) used laptops and smartphones to access the scientific

articles. Nearly half of the respondents who accessed the scientific articles typed *delayed speech exercise* as keywords ( $n=52$ , 46.43%), while the rest typed *speech therapy* ( $n=49$ , 43.75%) and *how to make children talk* ( $n=11$ , 9.82%). The respondents took notes while attending lectures on campus. They also took the suggestions from experienced professionals from *Speech Therapy Education* (Christina Zapata) and *Speech Therapy Practice* Youtube channels.

Table 5

Responses to question 7 and question 8 [ $n$  (%)]

Q7. What models did you adapt in your treatment?		
• Community learning	216	(44.82)
• Small-group activities	127	(26.34)
• Private individual exercises;	101	(20.96)
• Intimate and private session;	38	(7.88)
Q8. Based on your experience, what do you suggest to enhance the treatment?		
• Endorsing parental care and support	176	(36.52)
• Stressing on stimulation, pronunciation, and spelling drill	165	(34.23)
• Peer learning in coordinated conversational activities and supported social interaction in the learning environment	141	(29.25)

The respondents set up community learning and small group exercises to stimulate verbal communication in natural interaction. The intimate and private sessions were initiated to facilitate pronunciation practice and spelling drills. The private individual exercises were carried out, endorsing psychological impressions from both teachers and parents. The respondents scheduled 2 ( $n=292$ , 60.58%) or 3 ( $n=190$ , 39.42%) sessions per week. Each session took around 20 minutes ( $n=355$ , 73.65%) to 45 minutes ( $n=127$ , 26.35%) for an activity. The treatment lasted for 30 or 32 weeks, and the respondents reported significant language/ speech development after the 20<sup>th</sup> session. Intimate sessions with children involved creating a safe and nurturing environment for the child to express themselves. This environment allowed the child to build trust and feel comfortable communicating, even if it is through gestures or nonverbal communication. The sessions were tailored to the individual child's needs and designed to help the child develop language skills. During the sessions, the parent or teachers observed the child and encourage them to communicate their ideas and feelings. This included providing visuals, such as pictures and symbols, or using music and creative activities. The goal of these sessions was to provide the child with opportunities for meaningful interaction, either through verbal or nonverbal communication. The parent or teachers also provided feedback and positive reinforcement when the child expresses themselves. This included praising the effort, rather than focusing on the result. It was meant to help the child develop self-confidence and a sense of accomplishment.

Learning from best practices developed by preschool teachers across Indonesia, the speech intervention should include community learning and private sessions. Community learning triggers the need to socialize and fosters teamwork initiation. It includes schooling experience and small-group exercises. Schooling experience features blending with the school communities, playing and singing, and adjusting to the school environment. Small-group activities feature role-playing and peer-to-peer



communication. Private sessions enhance the practice drills, allows individual repetitive exercises, and cast psychological impressions on children. The practise drills sharpen the target-word pronunciation and verbal responses on any given stimulation. Individual repetitive exercises stimulate children's capabilities to perform dialogues and tell or retell stories. The psychological impressions through counselling provide bonding moments between parents and children to develop a sense of support and nurture. The treatments should have no less than 20 sessions with three activities per session. There must be three sessions within a week, and each activity within a session should last 45 minutes by considering breaks and specific conditions. The framework of this speech intervention therapy for children SD can be illustrated as follows:

Table 6  
Speech intervention therapy framework

Modes	Features	Activities	Session		
			1	2	3
Community Learning	Schooling experience	blending with the school communities	√	√	√
		playing and singing			√
		adjusting to a school environment	√	√	√
	Small-group activities	role-playing		√	
		peer-to-peer communication		√	
Private Session	Practice drills	target-words pronunciation			√
		verbal responses	√		
	Individual repetitive exercises	performing dialogues			√
		telling stories	√		
		retelling stories	√		
	Psychological Impressions	Counselling	√	√	√

- Each activity takes 30 to 45 minutes;
- Three sessions within a week;
- The therapy lasts for 30 to 32 weeks.

Psychological impressions to children with speech delay meant to provide counseling sessions involving parents. It was, as reported by the respondents, varied depending on their age and level of development or their family's experiences. Generally, these children experienced a range of emotions or mental states such as frustration, confusion, and low self-esteem due to their inability to communicate effectively. They were also reported of being isolated from their peers and becoming withdrawn as a result of their lack of verbal skills. Additionally, they struggled with expressing their thoughts, feelings, and needs, which can lead to feelings of helplessness and hopelessness. Furthermore, these children experienced feelings of embarrassment or shame due to their disability, and may be highly sensitive to criticism or negative comments from

others. The counseling sessions were also meant for parents to remember that each child is unique and that their speech delay does not define them. The teachers imposed this kind of “psychological impressions” to provide a supportive environment for the children, to ensure that they were receiving the best possible care and support.

## **DISCUSSION**

The case of SD among children may be high in numbers, but reported cases are low. Following the demographic backgrounds of the children in this study, lack of parental support or constant nurturing due to economic and educational measures became the most supporting factor to SD conditions in Indonesia. The data suggest limited awareness of SD treatment among Indonesians, and it confirms the current trend (Hasanah & Sugito, 2020) with the same factors (Muluk et al., 2020; Xue & Li, 2020). The treated SD cases are even lower, particularly those facilitated in private schools. This study suggests that teachers were rarely facilitating more than two children with SD at a time despite their reluctance in such cases. Formal educational institutions must be considered in the SD treatment campaign since the ideal supports for SD children enabled them to socialize, achieve, and exercise. Parents, teachers, practitioners, and stakeholders should collaborate to strengthen the role of the formal school as one of SD treatment centres in Indonesia. This appreciation is in line with the global movement to improve speech and language therapy services in formal schools (Gallagher et al., 2019).

Speech therapy intervention usually takes formal measures in a clinical context despite growing informal treatments among speech therapists (Limbrick et al., 2013). These measures were often opted with dynamic assessment by considering cultural and social diversity. This treatment enhanced predictive capacity in vocabulary learning among preschool children with primary language impairment (Camilleri & Law, 2014). Speech therapy was opted to be the best possible treatment to deal with SD children, and the public seems to rely on medical advice (Mostafa & Ahmed, 2018). Therapists often look up the SD identification assessment via language processing tasks before adopting a potential approach to deal with SD children (Li’el et al., 2019). In the global context, studies rarely mention teachers as qualified SD therapists. Parents counsel teachers only for excessive habits of their children, such as smartphone screen time which results in a cognitive delay (John et al., 2021). In the Indonesian context, as this study reveals, teachers were the only candidate for the job. Their involvement was considered ethical and relevant as SD was proven to have no association with known biomedical aetiologies (Bishop et al., 2017). In specific populations, such as Surrey, England (Norbury et al., 2016), children with impaired language abilities who enter formal schools are typical.

Studies concluded that children with SD are vulnerable to difficulties in peer relations and emotional adjustment (Conti-Ramsden et al., 2019). Considering the issue, Indonesian teachers base their best practices in treating SD on two fundamental assumptions: the need for community learning and the necessity for private sessions. Community learning allows children to adjust to schooling experiences where they blend and socialise with peers. Systematically, schools could discipline children to work

within small groups for specific tasks. It will expose SD children to positive peer relations and learn to deal with their emotional difficulties. As this study suggests, most SD children experienced low exposure to language input due to low closeness to parents. Peer acceptance from schooling experience would develop their self-esteem to socialise, triggering the need to communicate verbally (Birkeland et al., 2014).

Teachers in Indonesia believed that private sessions were necessary for speech therapy intervention. Less stimulation from supporting the learning environment and lack of understanding of SD treatments may result in maltreatment. Such condition impacts children's speech development both cognitively and behaviourally. Bonding moment therapy with the turn-taking talks between parents or foster carers and the children would initiate speech aptitude of the child as Byrne et al. (2018) suggests in their study of Out of Home Care children. Teachers also believed that private sessions would strengthen the practice drills to train children for specific pronunciation practice. In certain conditions, children with SD need to practice individually to focus on how they react to certain tasks. In spelling exercises, McCarthy et al. (2019) found that the children with complex communication needs could identify correct spellings and produce significantly greater percentages of consonant and vowel sounds during the spelling generation task. Spelling and pronunciation tasks seem to trigger the perceptual abilities of the children in individual practice modes (Rakhlin et al., 2013).

In terms of exercising single-word levels, dialogue and story-telling may take advantage in private sessions. This study suggests that the teacher uses repetitive dialogues and story-telling to learn the children's verbal responses while engaging with the tasks. Story-reading and story-telling taught SD children to share material understanding as well as develop their phonological awareness. These activities play a critical role in preschoolers' emergent literacy skill development (Bean et al., 2020). Following literacy skill development, repetitive exercises with both phonological and sight-word approaches must positively affect pronouncing single words (Mandak et al., 2018). Standard treatments to children with developmental disabilities (Light et al., 2019) mention the importance of training communication strategies with repetitive tasks such as telling and retelling stories. Practice drills and individual repetitive exercises met the global standard of speech therapy intervention such as Augmentative and Alternative Communication (McNaughton et al., 2019).

Indonesian teachers believed that SD treatment must consider the psychological development of the children. Repetitive drills and exercises are necessary but only instrumental. The task of dealing with SD was not merely teachers' responsibility. Parents and family must provide nurturing support for the children and support their treatments on site. SD children receive special attention, but their treatments should accord with the school's routines and curricula, including the time and sequence of each treatment activity. SD children should experience schooling activities like other children, and they would be tasked to work within groups with their peers. The teachers must adjust drills and exercises to how SD children learn the clues and instructions. In the following treatments, teachers learn the pattern of children's responses based on the given stimulus.

The research results have significant implications for the Indonesian context. It is clear that there is a lack of awareness and access to treatment for children with SD in Indonesia. This lack of access to treatment means that children with SD are more vulnerable to difficulties in peer relations and emotional adjustment. Furthermore, the results indicate that teachers are not adequately equipped to support children with SD, as they are often reluctant to facilitate more than two children at a time. This lack of support can further compound the difficulties experienced by children with SD. Therefore, it is essential that more awareness and access to SD treatment are provided for Indonesian children. This could involve providing more training and support for teachers, as well as formal and informal treatments for speech therapy intervention that consider cultural and social diversity.

The study highlights the need for teachers to provide private sessions in order to effectively intervene in speech therapy. It also emphasizes the importance of considering the psychological development of children with speech difficulties, as well as the need for supportive home and family environments. Furthermore, it suggests that SD treatment should be tailored to the school's routines and curricula, while also giving children the opportunity to work in groups with their peers. Finally, the results suggest that story-reading and story-telling can be used to help children with SD develop their phonological awareness. Overall, this research provides important insights into how to better support children with speech difficulties in the Indonesian context. It highlights the importance of providing private sessions for intervention, as well as the need to consider the psychological development of the children. In addition, it stresses the need for supportive home and family environments, as well as for tailoring SD treatment to the school's routines and curricula. Finally, it suggests that story-reading and story-telling can be used to help children with SD develop their phonological awareness.

## **CONCLUSIONS**

This study provides a speech therapy intervention framework by adopting best practices from preschool teachers across Indonesia. As the findings suggest, the framework is based on two necessities of SD treatments: community learning and private sessions. Community learning features schooling experience and small-group works. Schooling experience emphasizes blending with communities, playing and singing together, and adjusting to school activities. Small-group works emphasize role-playing and peer-to-peer communication. Private sessions feature practice drills, individual repetitive exercises, and psychological impressions. Practice drills accentuate pronunciation exercises and verbal triggers-responses. Individual repetitive exercises accentuate dialogues and conversations, reading aloud, and story-telling/ retelling. Psychological impressions provide a bonding moment between teachers, parents, and children. This speech intervention framework must accord with schools' agenda and curricula. It is suggested that this speech intervention framework should be tailored to the individual needs of each student. Furthermore, greater emphasis should be placed on providing the necessary support and guidance to parents and teachers to ensure that the framework is properly implemented. Additionally, further research should be conducted to analyze the long-term effects of the framework on student's speech development. Moreover, the

framework should be evaluated and revised on a regular basis to ensure its effectiveness. Finally, collaboration between the schools, teachers, and parents should be further encouraged to ensure that the framework is properly integrated into the school environment.

This study lacks contextual variability as it is limited to online surveys. The detailed technical construction of the practices was excluded from the survey due to instrumental limitations. The elements of the constructed framework from the best practices may conform to certain standards, but it did not intend to comply with one. Future studies should aim to explore more contextual variables and include more respondents from different areas and professions. In particular, future studies should investigate the duration, frequency, and intensity of speech therapy intervention. This would provide a more comprehensive understanding of the best practices and allow for a more accurate comparison of results. Furthermore, future studies should also seek to assess the acceptability and efficacy of the best practices. This would require examining the perspectives of the stakeholders involved in the therapy practice, including patients, therapists, and care providers. Additionally, prospective studies should seek to capture the qualitative experiences of the respondents and explore how the best practices influence patient outcomes. This would help to gain a better understanding of the efficacy of speech therapy best practices, as well as how they can be improved in the future.

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