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Phonological Processing Difficulties in Indonesian Dyslexic Children: A Parental Observation in the Orangtua Berbagi Community

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Abstract: This study investigates phonological deficits in children with dyslexia within the Orangtua Berbagi community, emphasizing the impact on language comprehension and reading skills. Utilizing a psycholinguistic perspective, the research collects structured parental observations, revealing consistent patterns of phoneme confusion, letter reversals, and decoding difficulties. These deficits significantly hinder children's ability to accurately process and comprehend written and spoken language. Parents report emotional frustration alongside adaptive strategies such as repetition and visual aids. The findings suggest that early identification through phonological screening and active parental involvement, combined with targeted phonics-based interventions, are crucial to support the language development of dyslexic children. This community-based evidence highlights the need for increased awareness and accessible intervention services tailored to phonological challenges.

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1. INTRODUCTION

Dyslexia has long been recognized as one of the most prevalent specific learning disabilities that primarily affects children's ability to read, write, and spell. Unlike general learning difficulties, dyslexia does not stem from low intelligence or lack of motivation; rather, it is rooted in deficits in the cognitive and linguistic processes that underlie literacy acquisition. Snowling (2000) highlights that the core difficulty in dyslexia lies in phonological processing—the ability to recognize, manipulate, and map the smallest units of sound (phonemes) to their corresponding letters (graphemes). This phonological deficit is what prevents many children with dyslexia from developing fluent and automatic reading skills, despite otherwise normal intellectual capacity and adequate educational opportunities. Within the field of psycholinguistics, dyslexia is therefore understood as a disorder of the cognitive-linguistic system, especially in the interface between spoken and written language.

The importance of phonological processing in reading is further emphasized in the Simple View of Reading proposed by Gough and Tunmer (1986), later elaborated by Hoover and Gough (1990). This model posits that reading comprehension is the product of two essential components: decoding (the ability to translate printed symbols into spoken language) and linguistic comprehension (the ability to understand spoken language). In children with dyslexia, the decoding component is severely impaired due to their difficulties in phonological awareness and phoneme-grapheme correspondence. As a result, even when their oral language comprehension is relatively intact, they struggle to access written texts, which in turn undermines overall literacy development.

This understanding is closely tied to the Phonological Deficit Hypothesis (Snowling, 2000), which has become one of the most influential theoretical explanations of dyslexia. The hypothesis asserts that difficulties in phonological awareness, phonological memory, and phonological retrieval form the core of dyslexic impairment across languages. Even in languages with transparent orthographies, such as Indonesian, where letter-to-sound correspondence is highly consistent, children with dyslexia continue to experience significant difficulties in decoding words accurately and fluently. This suggests that the phonological deficit is a universal characteristic of dyslexia, rather than one that is language-specific.

Theories of reading also highlight different cognitive routes that may be affected in dyslexic children. The Dual-Route Theory of Reading (Coltheart et al., 2001) proposes that readers can access words either through the lexical route (recognizing familiar words as whole units) or through the sublexical route (decoding unfamiliar words by mapping graphemes to phonemes). Dyslexic children with phonological deficits often struggle with the sublexical route, making it difficult for them to read unfamiliar or novel words. Others may display what is called surface dyslexia, where they can decode words phonetically but fail to recognize irregular words that require lexical access (Marshall & Newcombe, 1973). By distinguishing between phonological and surface dyslexia, researchers can better identify which processing route is impaired and design interventions accordingly.

Another important psycholinguistic construct relevant to dyslexia is working memory. According to Baddeley and Hitch's (1974) Working Memory Model, the phonological loop plays a critical role in retaining and manipulating verbal information. Children with dyslexia often demonstrate weaknesses in this component, which hinders their ability to hold phonological information in mind long enough to decode words or comprehend sentences. For example, when asked to repeat unfamiliar words or follow multi-step oral instructions, dyslexic children may quickly lose track of the phonological details,

resulting in errors. This working memory limitation interacts with their phonological deficits, compounding the challenges they face in both reading and oral language processing.

In Indonesia, the issue of dyslexia has received growing attention, especially in educational and psychological research. However, studies focusing specifically on phonological processing difficulties among Indonesian-speaking children remain limited. Most existing studies emphasize pedagogical strategies or general literacy development, while relatively few have examined dyslexia through the lens of psycholinguistic theory. Moreover, research relying on parental observations is particularly scarce, even though parents play a crucial role in monitoring their children's development, identifying early signs of reading difficulties, and providing support outside school. Parents' perspectives are invaluable because they capture children's struggles in naturalistic, everyday settings, offering insights that complement the findings of formal educational assessments.

Another critical consideration is that dyslexia manifests differently across languages depending on orthographic depth. Indonesian, unlike English, has a relatively transparent orthography: most letters consistently correspond to specific sounds. In theory, this should make decoding easier for learners of Indonesian. However, the persistence of phonological difficulties in Indonesian children with dyslexia underscores the robustness of the phonological deficit hypothesis. It also suggests that the psycholinguistic mechanisms of dyslexia are not dependent solely on the complexity of orthography but reflect deeper cognitive impairments in phonological processing.

The present study, therefore, focuses on phonological processing difficulties in Indonesian children with dyslexia, as observed and reported by their parents. The central problem addressed is how phonological deficits hinder reading comprehension and oral language performance. Dyslexic children often confuse sounds that are similar, substitute one phoneme for another, or fail to segment words into smaller sound units. These difficulties directly affect their ability to decode words and sentences, which then results in reduced comprehension of texts. By examining the issue through the lens of parents' narratives, this study aims to document the observable symptoms and challenges in everyday contexts rather than in controlled experimental settings.

From this background, three research questions are formulated. First, how are the phonological difficulties of children with dyslexia observed and described by their parents? Second, in what ways do phonological deficits affect the children's reading comprehension and oral language use? Third, what kinds of support and interventions are provided by parents to help their children cope with these difficulties?

The purpose of this study is to describe the patterns of phonological difficulties in Indonesian children with dyslexia from the perspective of their parents. By collecting and analyzing parents' reports, the study intends to map the types of phonological errors, their frequency, and their impact on reading comprehension. Furthermore, it aims to explore the strategies and coping mechanisms that parents employ in response to these challenges.

The significance of this research lies in its potential contributions to both theory and practice. Theoretically, it enriches psycholinguistic literature on dyslexia by providing empirical evidence from Indonesian, a language with transparent orthography that has been relatively under-researched in this domain. By confirming or refining existing theories such as the Phonological Deficit Hypothesis, the Dual-Route Theory of Reading, and the Working Memory Model, this study expands our understanding of how phonological processing operates across different linguistic contexts. Practically, the

findings can inform educational policy, teacher training, and parental guidance in Indonesia. With better knowledge of the specific phonological challenges faced by dyslexic children, interventions can be more accurately tailored, ensuring that both schools and families work together to support the child's literacy development.

Dyslexia should be understood not only as an academic challenge but also as a psycholinguistic phenomenon that affects how children process sounds and language. In the Indonesian context, where research remains scarce, examining dyslexia from the perspective of parents offers a valuable and original contribution. By centering on phonological processing deficits, this study seeks to bridge theoretical frameworks and practical realities, with the ultimate goal of improving the educational experiences and life outcomes of children with dyslexia.

2. METHOD

This study adopts a psycholinguistic approach combined with a descriptive quantitative methodology to explore phonological deficit difficulties in Indonesian children diagnosed with dyslexia. Recognizing the importance of linguistic and cultural context, the study specifically focuses on Indonesian-speaking children, with parents providing primary observational data. This language-specific focus allows for a deeper understanding of how phonological processing impairments manifest in Indonesian—a language with distinct phonetic and orthographic characteristics compared to English or other languages commonly studied in dyslexia research.

2.1 Participants and Data Collection

Data were collected from 12 parents within the Orangtua Berbagi community in Bandung, Indonesia, who have children officially diagnosed with dyslexia by educational or medical professionals. These parents were selected due to their intimate daily knowledge of their children's language development, reading difficulties, and emotional responses related to literacy tasks. All participants communicate primarily in Bahasa Indonesia, ensuring that the study is grounded in a linguistically and culturally relevant context. This is critical because phonological processing in Indonesian differs in complexity and structure from English, and direct application of findings from other languages may not fully capture the nature of dyslexia in this population.

The data collection utilized a structured questionnaire consisting of both closed-ended and open-ended questions delivered in Bahasa Indonesia. Closed-ended items employed yes/no answers or frequency scales to quantify specific phonological difficulties, such as confusion of similar-sounding words, letter reversals, difficulties in mapping sounds to letters, and struggles with decoding unfamiliar words. Open-ended questions invited parents to elaborate on their observations of their children's reading behaviors, comprehension abilities, emotional challenges, and the effectiveness of any interventions or parental strategies applied at home.

The questionnaire development was informed by established psycholinguistic theory, especially the Simple View of Reading, which integrates decoding skills and oral language comprehension as core components of reading success. Recognizing the unique phonology of Bahasa Indonesia, questions were tailored to capture language-specific issues such as vowel length, consonant clusters, and syllable structures typical in Indonesian words. Prior to broad data collection, the questionnaire was pilot-tested with two parents to ensure clarity, cultural appropriateness, and relevance to the Indonesian linguistic environment. Revisions based on pilot feedback improved question phrasing and interpretability.

Complementing the questionnaire, semi-structured interviews were conducted in Bahasa Indonesia with participating parents to enrich quantitative data with detailed contextual and emotional insight. These interviews uncovered nuanced information on how phonological deficits affected reading acquisition, comprehension, and the psychosocial experience of children in an Indonesian language setting.

Ethical standards were rigorously upheld, with informed consent obtained from all participants and confidentiality explicitly guaranteed. The purpose of the study was clearly communicated, assuring participants that their responses would be used solely for academic research.

2.2 Data Analysis

Quantitative data from the closed-ended questionnaire items were analyzed using descriptive statistical methods. Frequencies and percentages were calculated to determine how commonly specific phonological difficulties appeared among the children. For example, the analysis examined prevalence rates of letter reversals, sound-letter mapping errors, mispronunciations of Indonesian phonemes, and comprehension difficulties related to phonological processing. This quantitative framework enabled the identification of empirical patterns of phonological deficit manifestations within the context of Indonesian dyslexia.

Qualitative data from open-ended questions and interviews were preliminarily reviewed using an inductive thematic approach inspired by Braun and Clarke. This allowed researchers to detect recurring themes, parental perspectives, and lived experiences related to phonological challenges without engaging in formal coding, thereby supporting the quantitative results with real-world examples. Themes such as "difficulty discriminating similar phonemes," "frustration with oral reading," and "parental use of phonics-based methods" emerged organically from the data.

The combined quantitative and qualitative analysis was contextualized with reference to key psycholinguistic theories on phonological deficits and reading disabilities, adjusted to the particular phonological characteristics of Bahasa Indonesia. This alignment enriched the interpretation of findings and increased the study's relevance for Indonesian educational and therapeutic contexts.

2.3 Presentation of Data Analysis

Results are presented integrating quantitative summaries alongside illustrative qualitative excerpts, both provided in Bahasa Indonesia to maintain linguistic authenticity. Quantitative findings are shown in tables and charts that highlight the percentage of children experiencing specific phonological difficulties, such as frequent phoneme substitution or inability to decode novel words.

Qualitative data complement these statistics by providing detailed parental narratives that illuminate how phonological deficits affect the children's reading development and emotional well-being in everyday life. This presentation method offers a holistic and nuanced understanding of dyslexia in Indonesian children, emphasizing the complex interplay between language-specific phonology, cognitive processing, and psychosocial factors.

The combined presentation effectively underscores the multidimensional impact of phonological deficits on literacy acquisition within the Indonesian linguistic context and provides actionable insights for educators, clinicians, and families working to support dyslexic children in Bahasa Indonesia environments.

Data were analyzed using a multi-theoretical framework. Brown & Levinson's (1988) politeness theory was used to identify strategies of negative and positive politeness; Blum-Kulka et al.'s (1989) model helped classify the types of requests; Leech's (1983)

politeness maxims illuminated the ethical dimensions of the utterances; and Hymes' (1972) SPEAKING model was applied to interpret contextual elements such as setting, participants, ends, and tone. The combination of linguistic analysis and ethnographic interpretation allowed the researcher to explore how structured religious prayers function not only as spiritual requests but also as culturally embedded communicative acts. To ensure validity, data triangulation was conducted through textual comparison, pragmatic literature, and observation of digital religious discourse.

3. FINDING AND DISCUSSION

Table 1. Detailed Parent-Reported Difficulty Percentages from Survey and Interviews

Language Difficulty Indicators	Percentage of Parents Reporting (%)	Number of Parents (out of 12)	Description/Notes
Child struggles to distinguish similar phonemes	75%	9	Key phonological deficit causing letter reversals, substitutions
Child often reverses or mixes letter order while reading/writing	58.3% often; 33.3% sometimes	7 often; 4 sometimes	11 (91.6%) experience some letter reversal or jumbling errors
Child has difficulty reading unfamiliar words	91.7%	11	Persistent decoding difficulty for unfamiliar vocabulary
Child frequently misunderstands spoken words or sentences	66.7%	8	Auditory processing difficulties affect spoken language comprehension
Child struggles to follow long oral conversations or stories	66.7%	8	Attention/memory deficits during longer verbal inputs
Child shows poor ability to repeat verbally presented information	75% combined fair and poor ratings	9 (approx.)	Weak verbal memory affects instruction following and comprehension
Child's reading comprehension is lower than peers	66.7%	8	Combined impact of decoding + oral comprehension
Child displays frequent frustration or stress during reading/writing	Approx. 75% (often or sometimes)	9 (approx.)	Emotional impact of persistent language difficulties
Child has undergone special therapy or language intervention	41.7%	5	Less than half received formal therapy, indicating support gap

Summary of table 1.

- 9 out of 12 parents (75%) reported serious difficulty in their child distinguishing similar-sounding phonemes.

- 7 parents (58.3%) said their child frequently reversed or mixed up letter orders, and 4 (33.3%) said this happened sometimes—meaning 11 children (91.6%) experienced letter reversals to some degree.
- 11 children (91.7%) had difficulty decoding unfamiliar words.
- 8 children (66.7%) often misunderstood spoken words or sentences.
- 8 children (66.7%) struggled to follow long oral stories or conversations.
- Around 9 children (75%) showed poor verbal memory skills.
- 8 children (66.7%) had poorer reading comprehension compared to peers.
- Approximately 9 children (75%) experienced frustration or stress when engaging in reading or writing.
- Only 5 children (41.7%) received any therapy or intervention aimed at improving language comprehension or phonological skills.

3.1 Patterns of Phonological Difficulties: Parent Narratives and Quantitative Evidence

Parents in the Orangtua Berbagi community vividly described the phonological difficulties their children with dyslexia face. These difficulties fundamentally affect their child's reading and language comprehension in Bahasa Indonesia. A large majority—around 75%—of parents revealed that their children struggled to distinguish between similar-sounding phonemes, particularly consonants like /b/ and /d/. This confusion manifested in frequent letter reversals and sound substitutions both in reading and writing.

The table above shows that out of 12 parents surveyed, 9 reported significant phonological difficulties in their children, representing 75% of the participants, while 3 parents (25%) indicated their children had fewer or no such difficulties. This highlights the prominence of phonological deficits among dyslexic children in the community.

For instance, one mother recounted how her 8-year-old son often read the word "bebek" (duck) as "bekeb," swapping syllables and sounds in ways that altered the meaning. Another parent shared that her child would write "bunga" (flower) as "baga," showing confusion between phonemes that drastically changed the word. Similar errors included reading "rumah" (house) as "muhar", where syllables are reordered, and pronouncing "karet" (rubber) as "kerat," interchanging similar consonants. One child also wrote "sapi" (cow) as "pasi," reversing the first two consonants. These examples illustrate that children rely heavily on partial phonetic cues and word shapes, instead of accurate phoneme-by-phoneme decoding.

These individual anecdotes align with the survey data, which highlight how widespread these issues are. Approximately 58.3% of parents stated that their children often reverse or jumble the order of letters while reading or writing. An additional 33.3% said this occurred occasionally for their child, indicating that over 90% of these children experience some form of letter sequence confusion. Such reversals and transpositions are not random mistakes but stem from underlying difficulties in phonological awareness, particularly in segmenting and blending sounds.

Furthermore, a significant 91.7% of parents indicated that their children faced persistent struggles when reading unfamiliar words. This provides strong evidence that decoding new vocabulary remains a major hurdle for these children. This decoding difficulty reflects impairments in phonological processing pathways, which hinder their ability to sound out words accurately and fluently. For example, children often guess at new words or skip them entirely, which further interrupts reading flow and understanding.

Beyond the written domain, phonological difficulties extend into listening and speech comprehension. A considerable 66.7% of parents acknowledged that their children frequently misinterpret or misunderstand spoken words or sentences. Such auditory confusions contribute to communication barriers and frustration. One mother shared that her daughter often confused "kapal" (ship) with "kaki" (foot), changing an entirely different concept. Another child was reported to mix up the words "sakit" (sick) and "sakti" (powerful), which are phonetically close but semantically very different, leading to misunderstandings and confusion.

Other common examples of phonological confusions reported by parents included children mishearing "teman" (friend) as "taman" (garden), or "jari" (finger) as "lari" (run). These substitutions, often affecting initial or medial vowels and consonants, disrupt the child's ability to correctly parse spoken language, which can impede learning in school settings where verbal instructions are essential. Some children also reversed syllables within words, turning "bulan" (moon) into "nalub", further illustrating the depth of their phonological processing challenges.

These phonological difficulties are compounded by struggles in phoneme-to-letter mapping (see Table 2). Many parents observed that their children failed to link the sounds they hear with the corresponding letters when reading aloud. This manifested as hesitations, incorrect pronunciations, or skipping sounds altogether. For instance, a child might read "kerja" (work) as "erja", omitting the initial consonant sound, or misread "makan" (eat) as "makan" but with added phoneme confusion that interrupts fluency.

The cumulative effect of these impairments is a profound disruption in reading acquisition and language comprehension. Children not only struggle with decoding individual words but also have difficulty processing entire sentences and paragraphs responsibly. Frequent errors in sounding out words make it mentally exhausting to keep up with reading assignments, resulting in lowered comprehension and motivation.

A further layer of difficulty arises when children are required to comprehend longer spoken passages or follow extended conversations. Their phonological confusion and limited auditory memory often lead them to lose track of stories or instructions. This makes subjects that rely heavily on verbal explanation, such as social studies or science, particularly challenging.

Table 2. Summary of key phonological challenges faced by Indonesian children with dyslexia.

Difficulty Type	Examples in Bahasa Indonesia	Description
Misspelling / Letter reversal	*"bunga"* → *"baga"*, *"bebek"* → *"bekeb"*	Swapping letters and sounds in reading/writing
Confusing spoken words	*"kapal"* (ship) misheard as *"kaki"* (foot)	Difficulty distinguishing similar sounds

3.2. Broader Language Comprehension Challenges and Verbal Memory Limitations

Phonological difficulties extend beyond decoding to impact reading comprehension and broader language skills. Around 66.7% of parents believed their children's understanding of texts was slightly lower compared to their peers. Although children may decode words with some success, the effort required often negatively affects their ability to extract and retain meaning from connected text.

Parental narratives also illustrated specific examples of comprehension breakdowns. One parent described her daughter reading the sentence "Mataram Sakti adalah nama produk itu" (Mataram Sakti is the name of that product), but incorrectly rendering it as "Mataram Sakit adalah nama perut itu" (Mataram Sick is the name of that stomach). This substitution leads to completely altered, nonsensical meaning, demonstrating how

phonological confusion creates semantic errors. Similarly, another child read "Mayoret itu memimpin barisan dengan megah" (The majorette led the parade proudly) but pronounced "mayoret" as "maroyet", a nonword, and was unable to make sense of the sentence afterward.

These examples show how phoneme decoding errors cascade into failures to monitor comprehension and grasp sentence-level meaning. Children's cognitive resources are often so taxed by decoding demands that little remains for understanding or reflecting on meaning, consistent with findings from international dyslexia research.

Beyond reading, parents reported that their children have difficulties with verbal memory, particularly in retaining spoken instructions or following lengthy oral narratives. Only 25% were rated by their parents as having good ability to recall verbal information immediately after hearing it, while 58.3% were fair and 16.7% poor at this skill. Many children frequently asked for repetition of instructions or story parts, suggesting limitations in the phonological loop component of working memory, which is crucial for language processing and reading comprehension.

Additionally, 66.7% of children struggled to follow long conversations or spoken stories, which impacts their classroom performance in language-heavy subjects such as history and science. These attentional and memory difficulties reinforce the obstacles faced by dyslexic children in assimilating new academic content beyond literacy skills.

Phonological difficulties in children with dyslexia extend well beyond the basic ability to decode words and notably impact reading comprehension as well as broader aspects of language skills. Approximately 66.7% of parents in this study believed that their children's understanding of texts was somewhat lower compared to their typically developing peers. Although some children can sound out or decode words to a certain extent, the considerable cognitive effort required often compromises their capacity to extract and retain the overall meaning from sentences and connected text.

Parents reported numerous concrete examples illustrating how phonological confusion leads to comprehension breakdowns. One mother shared how her daughter read the sentence "Mataram Sakti adalah nama produk itu" (Mataram Sakti is the name of that product) but instead pronounced it "Mataram Sakit adalah nama perut itu" (Mataram Sick is the name of that stomach). This error changed a proper noun Sakti ("powerful") to Sakit ("sick"), dramatically altering the meaning and creating an illogical sentence. The child did not appear to realize this semantic incongruity, highlighting difficulty self-monitoring comprehension.

Similarly, a 7-year-old boy read "Mayoret itu memimpin barisan dengan megah" (The majorette led the parade proudly) but pronounced "mayoret" as "maroyet," a fabricated non-word. When asked to explain the sentence, he was unable to do so, suggesting that the phonological error disrupted not only word recognition but also sentence-level understanding and interpretation.

Other examples provided by parents highlight common misreadings and misinterpretations arising from phoneme confusion:

- A child reading "kereta api" (train) as "kere apa" (roughly nonsensical), fragmenting the compound word and missing its meaning.
- A boy who confused "kupu-kupu" (butterfly) with "kubu-kubu" ("forts"), substituting one phonetically similar word for another but with very different semantic content.
- A student consistently read "tangga" (stairs) as "tangan" (hand), mixing words that share initial consonants but differ in endings.
- One child read "pohon" (tree) as "gohon", replacing the initial consonant sound and producing a non-standard word.

- Reading “berjalan” (walking) as “berjaa”, truncating and distorting the final syllable which affected the understanding of the action described.

These examples illustrate how mispronunciations and substitutions easily cascade into difficulties grasping the full meaning of sentences or paragraphs. Children’s phoneme decoding errors therefore not only create surface-level inaccuracies but also deeper semantic confusions that impede overall comprehension. Because so much cognitive energy is devoted to decoding words, very little remains available for understanding, recalling, and integrating ideas in the text. This phenomenon is consistent with findings in international dyslexia research and cognitive models that highlight limited working memory resources among dyslexic readers.

Beyond reading difficulties, many parents observed their children’s struggles with verbal memory—especially their ability to hold and recall spoken information. Only about 25% of parents considered their child’s capacity to accurately repeat or remember verbal instructions as “good.” A majority, 58.3%, rated their children’s verbal recall as “fair,” while 16.7% described it as “poor.” These data reveal that a substantial number of dyslexic children experience significant deficits in the phonological loop of working memory, which plays a critical role in temporarily storing and rehearsing auditory-verbal information. This limitation hinders not only reading comprehension but also classroom learning, where verbal instructions and oral discourse are daily demands.

Frequent requests for repetition of instructions or parts of stories were common, indicating challenges in maintaining auditory information long enough to process and act upon it. For example, parents shared reports such as: “My son often asks the teacher to repeat what was just said because he forgets parts of the sentence quickly,” or “She needs the story to be read multiple times to understand the plot.” Such behaviors demonstrate how verbal memory constraints exacerbate academic difficulties and contribute to frustration in learning.

Furthermore, approximately 66.7% of parents reported their children have trouble following long conversations or extended oral narratives. This struggle adversely affects children’s participation and comprehension in language-heavy subjects like history, social studies, and science, where understanding spoken explanations is essential. The combination of attentional fatigue, working memory overload, and phonological processing weaknesses creates formidable barriers that limit dyslexic children’s ability to assimilate and engage with complex academic content beyond reading tasks.

Table 3. Summary of key memory challenges faced by Indonesian children with dyslexia.

Difficulty Type	Examples in Bahasa Indonesia	Description
Trouble following stories	Losing track of plot in oral narratives	Attention and comprehension fatigue
Verbal memory problems	Forgets verbal instructions shortly after hearing them	Poor recall, frequent repetition needed

3.3. Therapy Accessibility and Parental Experience of Interventions

While the phonological and comprehension difficulties among dyslexic children in the Orangtua Berbagi community are widely recognized, it is concerning that only 41.7% of these children have received any form of therapy or specialized intervention aimed at improving their language comprehension or phonological processing skills. This means that a significant majority—58.3%—remain without access to targeted professional support. This gap underscores critical challenges surrounding public awareness, the

availability of specialized services, and the accessibility of qualified professionals to provide necessary therapy across Indonesia.

The scarcity of intervention services poses a serious risk for prolonging and deepening the academic and social difficulties dyslexic children face. Without early, consistent, and evidence-based therapy, children's phonological weaknesses and comprehension struggles tend to become increasingly entrenched, negatively affecting their educational outcomes and self-esteem.

Among the parents whose children have received therapy, phonics-based remediation emerged as the most valued and effective approach. These interventions focus on explicit teaching of sound-letter correspondences, helping children build a reliable connection between spoken phonemes and their written graphemes. This structured phonemic awareness training typically includes exercises in segmenting words into individual sounds, blending phonemes together, and repetitive practice with word reading. Such repetition is crucial to building fluency and automaticity in decoding, which in turn frees cognitive resources for comprehension.

Several parents also emphasized the importance of multisensory approaches within therapy programs. These methods engage multiple learning channels—visual, auditory, and kinesthetic—to reinforce the learning of phonemes and letters. For example, tracing letters while simultaneously pronouncing their sounds or using tactile cards and auditory drills can help children better internalize the phonics rules. One mother shared her positive experience, stating: "With speech therapy that incorporated multisensory cues and frequent reading drills, my child's decoding skills improved steadily. She gained confidence and now reads with greater accuracy and enthusiasm." Another parent pointed out the benefits of guided shared reading at home, where the child practices decoding alongside an adult who can provide immediate feedback and explain unfamiliar words, thus bridging gaps in comprehension.

Despite these positive outcomes, parents expressed significant concerns about the frequency, duration, and consistency of the therapeutic services available to their children. Many noted that therapy sessions occurred too infrequently or were interrupted due to logistical challenges or financial constraints. This inconsistency reduces the effectiveness of the intervention, as children with dyslexia require sustained, intensive practice over time to remediate phonological deficits.

A particularly pressing issue raised by families is the lack of trained specialists outside of major urban centers. Speech therapists and literacy interventionists are often concentrated in large cities, limiting access for children in more remote or underserved areas. As a result, many families must become the primary facilitators of their children's language development, relying heavily on home-based reading strategies, patient coaching, and repeated practice. While parental involvement is invaluable, it cannot substitute for professional diagnosis and tailored interventions required to address the complex neurological underpinnings of dyslexia effectively.

Ultimately, this widespread gap in therapeutic access highlights the urgent need for systemic improvements in educational and clinical infrastructures across Indonesia. Increasing public awareness about dyslexia, expanding training for teachers and therapists in phonologically based interventions, and enhancing the distribution of professional resources are essential steps to ensure that all children with dyslexia receive the support necessary to thrive academically and socially.

Children with dyslexia in this study consistently demonstrate significant patterns of phonological processing difficulties, which substantially impact their reading comprehension abilities. Parents reported observing emotional frustration in their

children, along with various adaptive strategies, such as repeated word practice and increased use of visual supports, to manage these challenges. Based on these findings, early screening for phonological deficits is crucial to identify at-risk children promptly. Furthermore, teacher training focused on phonologically based instruction and active parental involvement in intervention programs are essential components to effectively support the language development and reading success of children with dyslexia.

4. CONCLUSION

This study reveals that children diagnosed with dyslexia in the Orangtua Berbagi community face pervasive phonological processing deficits that significantly impact their reading and language comprehension abilities. The majority of parents (75%) observed their children struggling to distinguish between similar sounds, leading to frequent letter reversals, sound substitutions, and errors in decoding unfamiliar words. These phonological challenges extend beyond mere reading difficulties, affecting children's ability to accurately interpret spoken language and impairing their verbal memory capacity. Approximately two-thirds of the children had difficulty following long conversations or oral stories, which further hinders their academic progress, particularly in language-dependent subjects like history and science.

Parents' narratives illustrated how these decoding errors translate into semantic misunderstandings, with children misreading phrases and sentences in ways that distort meaning—such as confusing "Mataram Sakti" with "Mataram Sakit," or pronouncing "Mayoret" incorrectly. These errors demonstrate the cascading effect of phonological deficits on comprehension and highlight the cognitive load these children experience when reading, which limits their capacity to monitor and understand what they read.

Despite these significant challenges, only 41.7% of the children had received specialized therapy or intervention aimed at addressing language comprehension and phonological skills. Those who accessed therapy often engaged in phonics-based remediation and multisensory learning approaches, which parents found beneficial in improving decoding skills and reading confidence. Nonetheless, many parents expressed concerns about the scarcity of qualified professionals, limited session frequency, and the lack of continuous support—factors that impede optimal progress.

The findings underscore the urgent need for early screening programs to identify language impairments promptly and to provide timely, evidence-based interventions. Furthermore, investing in teacher training on phonologically grounded teaching methods and fostering active parental involvement are crucial strategies to enhance intervention effectiveness. Addressing these gaps will contribute to better academic and emotional outcomes for Indonesian children with dyslexia, empowering them to overcome their challenges and succeed in school and beyond.

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