

Orthographic Error Forms in a Dyslexic Teenager: A Psycholinguistic Approach to Letter Formation and Cognitive Processing

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ABSTRACT

Orthographic error patterns provide valuable evidence of the psycholinguistic processes underlying written language production in individuals with dyslexia. This study examines the orthographic error patterns produced by an Indonesian adolescent with dyslexia from a psycholinguistic perspective. Employing a descriptive qualitative single-case study design, the research involved a 15-year-old ninth-grade student diagnosed with dyslexia. Data were collected over five months through document analysis of handwritten texts, classroom observation, and semi-structured interviews. A total of 43 written words obtained from sentence-construction and dictation tasks were analyzed using a linguistic classification framework based on phonological and morphological processes. The findings identified nine orthographic error patterns, with consonant substitution (24%) occurring most frequently, followed by vowel substitution (16%), vowel omission (14%), consonant addition (12%), consonant omission (12%), syllable omission (8%), vowel-to-consonant substitution (6%), consonant-to-vowel substitution (4%), and vowel addition (2%). From a psycholinguistic perspective, these patterns suggest systematic difficulties in phonological encoding, grapheme-phoneme mapping, phonological working memory, and morphological processing during written language production. The findings support previous research on orthographic processing in dyslexia while extending its application to the Indonesian language context through a systematic classification of orthographic errors in an adolescent with dyslexia. Although limited to a single participant, this study contributes to understanding orthographic processing in Indonesian adolescents with dyslexia and provides implications for developing explicit phonological, morphological, and multisensory literacy instruction.

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INTRODUCTION

Written literacy is essential for the development of students' language skills. Mastery of written literacy involves proficiency in language structure, including an understanding of orthography as a legal spelling system. Budiani and Putrayasa (2023) argue that learners with good orthographic skills can express ideas precisely and systematically. However, not all learners can master spelling well, especially those who experience learning barriers such as dyslexia.

Dyslexia is a neurological disorder that directly impacts reading and writing skills. Dyslexia

comes from the Greek, “*dys*” and “*lexis*,” which means words. Pollock and Waller as cited in Hargio (2012) define dyslexia as difficulty related to words, such as reading, spelling, writing, or understanding words. Berlin reinforces this opinion in Fahreza (2019) which states that children who have dyslexic characteristics have several problems and obstacles in writing, reading, and spelling. Thus, children with dyslexia experience some difficulties in terms of producing language.

Dyslexic individuals generally show characteristics of writing ability characterized by consistent difficulties in spelling, organization of ideas, and word form errors related to phonological and morphological processing. This condition is not solely due to a lack of grammatical knowledge, but rather neurological barriers that affect the integration between sounds and written symbols. As Shaywitz (2003) asserts, “*dyslexia is an unexpected difficulty in reading in an individual who has the intelligence to be a much better reader*,” which also directly impacts writing ability. Research by Berninger et al. (2008) found that students with dyslexia had significant difficulties in transcription (spelling and handwriting), affecting the quality of their written expression. Furthermore, a study by Tops et al. (2013) showed that even in adolescence, dyslexia continues to impact academic writing skills, including orthographic errors and the development of complex sentence structures.

Although research on language errors in individuals with dyslexia has been conducted extensively, most studies have focused on elementary school-aged children. For instance, Budiani and Putrayasa (2023) investigated children aged 7–12 years, while Hanifah et al. (2023) and Wahyuni et al. (2025) examined students in inclusive elementary school settings. Although Rachmawati et al. (2023) extended the investigation to junior high school students, their study primarily addressed general writing difficulties rather than specific patterns of orthographic errors. Consequently, relatively little is known about how orthographic errors manifest in adolescents with dyslexia, even though previous research has shown that writing difficulties often persist beyond childhood and continue to affect academic performance. Furthermore, no previous study has systematically classified orthographic errors in Indonesian writing based on phonological and morphological processes within a psycholinguistic framework. Such a classification is important because it provides a clearer understanding of the linguistic mechanisms underlying spelling difficulties rather than merely describing surface-level writing errors. Therefore, this study addresses these gaps by examining the orthographic error patterns produced by a dyslexic teenager and interpreting them through phonological and morphological processes from a psycholinguistic perspective. Accordingly, this study aims to describe the forms of orthographic errors produced by a dyslexic teenager. The participant was RDS, a 15-year-old ninth-grade student diagnosed with dyslexia. Specifically, this study investigates the types of spelling errors found in the participant's writing and examines how these errors reflect phonological and morphological processes in the Indonesian language system.

REVIEW OF LITERATURE

Children with dyslexia experience persistent difficulties in associating speech sounds with written symbols, resulting in errors in letters, words, and even sentence construction. These difficulties are closely related to deficits in phonological and morphological processing because written language production requires the efficient conversion of phonemes into graphemes while simultaneously organizing words according to the morphological rules of a language. From a linguistic perspective, phonology examines the sound system of language, including the organization and function of speech sounds (Triadi & Emha, 2021), whereas morphology concerns the internal structure of words and the processes through which words are formed (Suparno, 2015). Since spelling depends on both phonological representations and morphological knowledge, impairments in these domains inevitably affect how individuals with dyslexia perceive, store, retrieve, and reproduce linguistic symbols in both spoken and written language. Consistent with this view, Akbar and Yulianto (2024) reported that children with dyslexia

frequently avoid certain letters or phonemes because of confusion during pronunciation and spelling, indicating weaknesses in phonological encoding and orthographic representation.

Previous studies consistently demonstrate that orthographic errors in individuals with dyslexia are closely associated with deficits in phonological and orthographic processing rather than merely reflecting inadequate spelling knowledge. Moats (1996) reported that dyslexic adolescents frequently produced phonological spelling errors, including letter substitutions, omissions, additions, and transpositions, indicating persistent difficulties in phoneme–grapheme conversion. Similarly, Berninger et al. (2008) argued that writing difficulties in dyslexia extend beyond reading impairment and involve deficits in transcription skills, particularly spelling accuracy, handwriting automaticity, and written language production. Hebert et al. (2018) further explained that these writing difficulties originate from impaired integration between phonological and orthographic representations, making it difficult for learners with dyslexia to translate spoken language into accurate written forms.

Research focusing on adolescents also suggests that orthographic difficulties remain evident beyond childhood. Tops et al. (2014) found that adolescents with dyslexia continue to produce persistent spelling errors that are frequently accompanied by morphological inaccuracies in word formation, indicating that orthographic development does not simply improve with age. Likewise, Peter et al. (2021) demonstrated that spelling errors may reflect broader deficits in sequential and spatial processing, particularly in maintaining the correct order and position of letters during written production. These findings suggest that orthographic errors are systematic manifestations of underlying psycholinguistic processes rather than random mistakes.

The psycholinguistic perspective provides an appropriate framework for explaining these error patterns because it emphasizes the interaction between linguistic knowledge and cognitive language processing. Rather than viewing dyslexia merely as a behavioral learning disorder, psycholinguistics interprets reading and writing difficulties as consequences of disruptions in the language processing system of the brain. Fahreza (2019) identified recurring patterns of phonological impairment in Indonesian children with dyslexia, including substitution, omission, reversal, and addition of phonemes during phoneme-to-grapheme conversion. These impairments reduce reading accuracy and lead to repetitive spelling errors in written production. Consequently, psycholinguistics offers an explanatory framework that links observable orthographic errors with the underlying phonological, morphological, and orthographic processes responsible for written language production.

From this perspective, orthographic errors can be systematically analyzed through their linguistic characteristics. Hanifah et al. (2023) demonstrated that disturbances in phonological and morphological processing frequently result in vowel deletion, consonant addition, and incorrect morpheme formation. Similarly, Wahyuni et al. (2025) found that children with learning disorders consistently produce spelling errors that can be classified according to linguistic categories rather than being treated as isolated mistakes. These findings support the argument that orthographic errors constitute identifiable linguistic patterns reflecting specific deficits in language processing.

Evidence from Indonesian studies further suggests that these orthographic errors exhibit systematic regularities. Chandra et al. (2024) observed that junior high school students frequently omitted vowels, added consonants, and misplaced affixes when producing written texts, while Nurhamidah et al. (2024) reported comparable phonological and morphological errors in students' news writing. Collectively, these studies indicate that orthographic errors arise from weaknesses in organizing phonemes sequentially and constructing morphologically appropriate word forms. However, most Indonesian studies have described spelling errors only at the surface linguistic level without examining how these error patterns reflect underlying psycholinguistic processes.

Building upon these theoretical and empirical findings, the present study adopts a psycholinguistic perspective to classify orthographic errors produced by an Indonesian dyslexic teenager according to phonological and morphological processes. By examining the linguistic patterns underlying spelling errors, this study extends previous research beyond descriptive error

analysis and contributes to a deeper understanding of orthographic processing in Indonesian adolescents with dyslexia

METHOD

This study employed a descriptive qualitative approach using a single-case study design. A qualitative case study was considered appropriate because it enables an in-depth exploration of a complex phenomenon within its real-life context (Creswell & Creswell, 2018). Furthermore, Yin (2018) argues that a single-case study is justified when the case is unique, information-rich, and capable of providing detailed insights into a phenomenon that has received limited scholarly attention. In the present study, the participant represented a unique case of an Indonesian adolescent with dyslexia whose orthographic errors had not previously been systematically examined from a psycholinguistic perspective. Therefore, a single-case design allowed for an intensive analysis of the participant's writing performance and the linguistic processes underlying the observed orthographic errors.

The participant was RDS, a 15-year-old ninth-grade student enrolled in an Islamic junior secondary school (*Madrasah Tsanawiyah*). The participant had been identified as having dyslexia through assessments conducted with the assistance of a language specialist and a professional therapist. At the time of the study, the participant demonstrated limited reading and writing abilities, with reading performance still characterized by letter-by-letter decoding rather than fluent word recognition. No additional developmental or learning comorbidities were identified. However, according to information obtained from the accompanying teacher and the participant's family, the participant had a history of vacuum-assisted delivery, which was reported to have affected neurological functioning. Academically, the participant showed greater interest and achievement in motor-related activities than in literacy-based academic tasks. The participant was selected purposively because adolescents with dyslexia remain underrepresented in Indonesian psycholinguistic research, and limited teacher understanding of dyslexia often results in negative labeling and inadequate educational support.

Data were collected through observation, document analysis, and semi-structured interviews (Creswell & Creswell, 2018). The primary data consisted of handwritten documents containing 43 target words, obtained from classroom writing activities involving sentence construction and dictation tasks. Data collection was conducted over a five-month period to ensure that the writing samples reflected the participant's typical literacy performance rather than temporary fluctuations. Semi-structured interviews with the participant and the accompanying teacher were conducted to obtain complementary information regarding writing habits, learning experiences, and the educational challenges encountered during literacy instruction.

Data were analyzed using thematic linguistic analysis by classifying orthographic errors according to the framework proposed by Akbar and Yulianto (2024), which categorizes spelling errors into consonant substitution, vowel substitution, letter addition, letter omission, syllable omission, and other orthographic error types based on phonological and morphological principles. All orthographic errors identified in the 43 words were included in the analysis. Each error was subsequently interpreted within a psycholinguistic framework to examine how the observed spelling patterns may reflect phonological encoding, grapheme–phoneme mapping, phonological working memory, and morphological processing during written language production.

FINDINGS AND DISCUSSION

Findings

The results of the analysis of orthographic errors in Indonesian spelling found in the handwriting of dyslexic teenager show four types of classification, including the addition of letters, removal of letters, removal of syllables, and changes in letters. In contrast, the classification will be further divided into sub-classifications based on the type of orthographic error. The following is a description of the distribution of errors found.

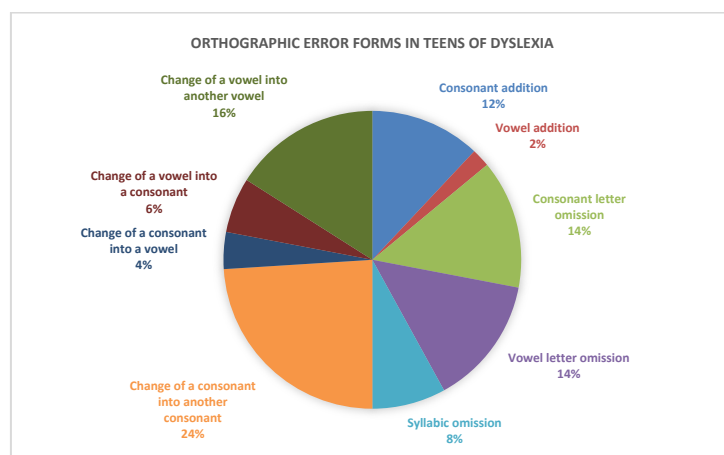


Figure 1. General findings of orthographic errors in dyslexic teenager

The figure above shows nine sub-classifications of orthographic error findings in Indonesian spelling. The sub-classification of changing consonant letters into other consonant letters is the most dominant finding 24%, while the least orthographic error found is the addition of vowels 2%. In addition, several other classifications of orthographic error findings will be presented in the form of tables and discussions below.

1. Orthographic errors of letter addition

The first sub-classification to be discussed is orthographic errors with the addition of letters, both consonants and vowels, in Indonesian words handwritten by dyslexic teenager. The findings show that the addition of consonant and vowel letters in words handwritten by dyslexic teenager. The following are the orthography errors and the distribution of error positions.

Table 1. Orthographic errors of letter addition

No	Orthographic errors	Position	Quantity
1	The addition of consonant letter <i>b</i>	initial	2
2	The addition of consonant letter <i>h</i>	final	2
3	The addition of consonant letter <i>k</i>	final	1
4	The addition of consonant letter <i>n</i>	medial	1
5	The addition of vowel <i>e</i>	medial	1
Total			7

Orthographic errors with the addition of letters are found in consonants and vowels. Orthographic errors in consonant letters are found in the form of the addition of the letter *b* at the beginning in the writing of the words [*byang*] and [*bdisebut*]; the addition of the letter *h* at the end in the writing of the words [*akikah*] and [*apah*]; the addition of the letter *k* at the end in the writing of the word [*watik*]; and the addition of the letter *n* in the middle in the writing of the word [*pistachino*]. Vowel orthography errors were found when adding the letter *e* in the middle of the word [*berecorak*].

2. Orthographic error of consonant letter omission

The second error finding in the writing of dyslexic teenager is the omission of consonant letters distributed in various positions: initial, medial, and final of a word, as illustrated in the following table.

Table 2. Orthographic error of consonant letter omission

No	Orthographic errors	Position	Quantity
1	The omission of consonant letter <i>d</i>	final	1
2	The omission of consonant letter <i>h</i>	final	1
		initial	1
3	The omission of consonant letter <i>n</i>	final	1
		medial	1
4	The omission of consonant letter <i>r</i>	medial	1
5	The omission of consonant letter <i>t</i>	final	1
Total			7

The second type of orthographic error is the omission of consonant letters. The errors are found in the form of omission of letter *d* at the end of the word [*dimaksu*]; omission of letter *h* at the end of the word [*awla*] and the beginning of the word [*ukum*]; omission of letter *n* at the end of the word [*kebahasaan*] and in the middle of the word [*perayajaan*]; omission of letter *r* in the middle of the word [*sekupnya*]; omission of letter *t* at the end of the word [*kua*].

3. Orthographic error of vowel letter omission

The analysis's findings show that consonant letters are also omitted from words written by teenage dyslexia teenager. This condition is illustrated in the table below.

Table 3. Orthographic error of vowel letter omission

No	Orthographic errors	Position	Quantity
1	The omission of vowel letter <i>a</i>	initial	1
		medial	4
2	The omission of vowel letter <i>e</i>	medial	2
Total			7

The next type of orthographic error is the omission of vowels. These errors are found in the form of omission of the letter *a* at the beginning in the writing of the word [*pakah*]; omission of the letter *a* in the middle in the writing of the words [*perhtikan*], [*pangkaian*], [*bateri*], and [*dijumpi*]; omission of the letter *e* in the middle in the writing of the words [*Amrika*] and [*rlasi*].

4. Orthographic error of syllabic omission

There is another pattern besides the addition and omission of vowels, which is the removal of syllables. In dyslexic writing, this pattern is located at the beginning, middle, and end. The following is a detailed explanation of these orthographic errors.

Table 4. Orthographic error of syllable omission

No	Orthographic errors	Position	Quantity
1	The omission of syllabic <i>adi</i>	final	1
2	The omission of syllabic <i>an</i>	final	1
3	The omission of syllabic <i>ktur</i>	final	1
4	The omission of syllabic <i>ma</i>	medial	1
Total			4

Forms of orthographic errors with types of syllabic omission in the middle and

at the end of words. The syllabic omission at the end of the word writing is found in the omission of the syllabic *adi* in the writing of the word [*menj*]; the omission of the syllabic *an* in the writing of the word [*deng*]; the omission of the syllabic *ktur* in the writing of the word [*stru*]; The omission of the syllabic in the middle is found in the omission of the syllabic *ma* in the writing of the word [*berai-ramai*].

5. Orthographic error of the change of a consonant into another consonant

Another unique pattern found in the handwriting of dyslexic teenager is orthographic errors in the form of changing consonant letters into other consonants. This finding was found in the initial, middle, and final position of a word hand written. The following are the details of these findings.

Table 5. Orthographic error of the change of one consonant to another consonant

No	Orthographic errors	Position	Quantity
1	Change of consonant <i>b</i> to consonant <i>d</i>	medial	1
2	Change of consonant <i>c</i> to consonant <i>l</i>	medial	1
3	Change of consonant <i>j</i> to consonant <i>s</i>	initial	1
4	Change of consonant <i>n</i> to consonant <i>d</i>	final	1
5	Change of consonant <i>r</i> to consonant <i>l</i>	final	1
6	Change of consonant <i>r</i> to consonant <i>p</i>	initial	1
7	Change of consonant <i>t</i> to consonant <i>j</i>	final	1
		medial	1
8	Change of consonant <i>t</i> to consonant <i>r</i>	medial	1
9	Change of consonant <i>y</i> to consonant <i>g</i>	initial	1
		medial	1
10	Change of consonant <i>y</i> to consonant <i>j</i>	medial	1
Total			12

Orthographic errors with the type of change of consonant letters into other consonant letters were found to be very varied, including: change of consonant *b* into *d* which is located in the middle of the word [*huba*]; change of consonant *c* into *l* which is located in the middle of the word [*kalang*]; change of consonant *j* into *s* which is located at the beginning of the word [*sepang*]; change of consonant *n* into *d* which is located at the end of the word [*perayajaad*]; change of consonant *r* into *l* which is located at the end of the word [*besal*]; change of consonant *r* to *p* at the beginning of the word [*pangakaian*]; change of consonant *t* to *j* at the end of the word [*dapaj*] and in the middle of the word [*perayajaad*]; change of *t* to *r* at the end of the word [*mere*]; change of consonant *y* to *g* at the beginning of the word [*dingatakan*]; change of consonant *y* to *g* in the middle of the word [*cahaga*]; change of consonant *y* to *j* in the middle of the word [*punja*].

6. Orthographic error of the change of a consonant into a vowel

The following orthographic error variation finding of dyslexic teenager is the change of consonant letters into vowels. The distribution of orthographic error findings in this variant varied in the middle and end of the word. The following are the details of the data findings.

Table 6. Orthographic error of the change of one consonant to a vowel

No	Orthographic errors	Position	Quantity
1	Change of consonant <i>l</i> to vowel <i>i</i>	final	1
		medial	1

Total	2
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Orthographic errors with the type of consonant to vowel letter changes include: the change of consonant *l* into vowel *i* located at the end of the word in the writing of the word [*kedelal*]; and the change of consonant *l* to vowel *i* located in the middle in the writing of the word [*wainut*].

7. Orthographic error of the change of a vowel into a consonant

The following orthographic error was found: the change of vowels to consonants, with the distribution of the position of the error occurring in the middle of the word, as shown in the following table.

Table 7. Orthographic error of the change of a vowel into a consonant

No	Orthographic errors	Position	Quantity
1	Change of vowel <i>u</i> to consonant <i>v</i>	medial	3
Total			3

Forms of orthographic errors involving a change of vowel *u* to consonant *v* are found in the middle position in words written by dyslexic teenager, such as in the preparation of the words [*visval*], [*tahvn*], and [*bvah*].

8. Orthographic error of the change of a vowel into another vowel

The last type of orthographic error found in the writing of dyslexic teenager is the change of vowels to other vowels distributed in the initial, middle and final positions of words. The following is an overview of these findings.

Table 8. Orthographic error of the change of a vowel into another vowel

No	Orthographic errors	Position	Quantity
1	Change of vowel <i>e</i> to vowel <i>a</i>	final	1
2	Change of vowel <i>o</i> to vowel <i>a</i>	medial	1
		final	1
3	Change of vowel <i>u</i> to vowel <i>a</i>	medial	2
		final	2
4	Change of vowel <i>u</i> to vowel <i>o</i>	medial	1
Total			8

Orthographic errors with the type of change of vowels into other vowels are found in the writing of several words, including: change of vowel *e* to vowel *a* located at the end in the writing of the word [*resuma*]; change of vowel *o* to vowel *a* located in the middle in the writing of the word [*contah*]; change of vowel *o* to vowel *a* located at the end in the writing of the word [*anggata*]; change of vowel *u* to vowel *a* located in the middle in the writing of the words [*hukam*] and [*berikat*]; change of vowel *u* to vowel *a* located at the end in the writing of the words [*yaita*] and [*unga*]. The change of the vowel *u* to the middle vowel *o* in [*dituronkan*].

Discussion

The present study demonstrates that orthographic errors produced by the dyslexic teenager are systematic rather than random, reflecting impairments in multiple components of written language processing. From a psycholinguistic perspective, these error patterns indicate disruptions in phonological encoding, grapheme-phoneme mapping, phonological working memory, morphological processing, and visual-spatial processing. Therefore, the findings should not

merely be interpreted as spelling inaccuracies but as evidence of underlying language-processing deficits.

The first prominent finding concerns letter addition and omission, including both consonants and vowels. Examples such as *byang* for *yang*, *bdisebut* for *disebut*, *dimaksu* for *dimaksud*, and *ukum* for *hukum* indicate difficulties in accurately encoding phonological information during written production. Within psycholinguistic theory, these errors are associated with phonological encoding deficits, in which speakers fail to maintain complete phonological representations before converting them into graphemes. Hebert et al. (2018) explained that dyslexic writers experience impaired integration between phonological and orthographic representations, resulting in incomplete or distorted spelling. Likewise, Moats (1996) reported that adolescents with dyslexia frequently produce omissions and additions because of unstable phoneme–grapheme correspondence. The present findings support these studies and further demonstrate that similar patterns occur in Indonesian orthography.

Another important finding is the omission of syllables, particularly in words containing consonant clusters such as *struktur* becoming *stru* and *beramai-ramai* becoming *berai-ramai*. Unlike single-letter omission, syllable omission reflects greater difficulty in retaining longer phonological sequences during writing. From a psycholinguistic perspective, this pattern is associated with limitations in phonological working memory, which temporarily stores and manipulates phonological information while words are being encoded into written form. When phonological memory capacity is insufficient, parts of multisyllabic words are omitted before transcription is completed. This interpretation is consistent with Tops et al. (2014), who found that adolescents with dyslexia continue to exhibit morphological and orthographic simplification when producing longer words, suggesting that spelling difficulties persist beyond childhood.

The most dominant finding in this study is the substitution of one consonant for another, accounting for 24% of all orthographic errors. Similar substitution patterns also occurred between vowels, between consonants and vowels, and vice versa. These errors suggest impairment in grapheme–phoneme mapping, namely the ability to establish stable correspondences between speech sounds and written symbols. According to Moats (1996), substitutions occur because phonological representations remain insufficiently specified, causing learners to confuse phonologically or visually similar letters during spelling. Berninger et al. (2008) likewise argued that deficits in transcription skills reduce the automatic retrieval of correct grapheme representations, forcing writers to rely on unstable phonological approximations. Therefore, the substitution patterns observed in this study support previous evidence that orthographic errors reflect impairments in language processing rather than inadequate spelling instruction.

Several substitutions also involved visually similar letters, such as *b–d*, *y–g*, and *u–v*. These findings indicate that orthographic errors are not exclusively phonological but also involve visual-spatial processing. Peter et al. (2021) demonstrated that spelling errors frequently reveal deficits in sequential and spatial processing, particularly in maintaining the correct order and orientation of letters during writing. Likewise, Mather (2022) argued that mirror-letter errors such as *b/d* and *p/q* may originate from delayed lateralization and inefficient visual discrimination. Although the present study did not directly assess visual cognition, the occurrence of visually related substitutions suggests that orthographic production in dyslexia involves interactions between phonological and visual processing systems.

Morphological processing is also reflected in several orthographic errors involving syllable omission and incorrect word formation. Words such as *berai-ramai* and *perayajaad* demonstrate that the participant experienced difficulty preserving morphological structures while encoding phonological information. Rather than representing isolated spelling mistakes, these errors indicate incomplete processing of morphemic units during written production. This interpretation is consistent with Tops et al. (2014), who found that adolescents with dyslexia frequently produce spelling errors accompanied by inaccuracies in morphological structure. Similarly, Hanifah et al. (2023) reported that disruptions in phonological processing often extend to morphological errors

because both processes operate simultaneously during written language production.

Taken together, the findings reinforce the psycholinguistic view that orthographic errors arise from the interaction of multiple language-processing systems rather than from a single deficit. Letter omission primarily reflects phonological encoding deficits, substitution errors indicate impaired grapheme–phoneme mapping, syllable omission suggests limitations in phonological working memory, while visually related substitutions point to weaknesses in visual-spatial processing. These interacting deficits support the theoretical framework proposed by Berninger et al. (2008), Hebert et al. (2018), Moats (1996), Peter et al. (2021), and Tops et al. (2014), while extending previous research by demonstrating that similar psycholinguistic mechanisms underlie orthographic error patterns in Indonesian adolescents with dyslexia. Consequently, this study contributes not only to the description of spelling errors but also to a psycholinguistic explanation of how phonological, morphological, and orthographic processes interact during written language production in Indonesian

CONCLUSIONS

This study identified nine patterns of orthographic errors in the Indonesian writing of a dyslexic teenager, with consonant substitution emerging as the most frequent error type. From a psycholinguistic perspective, these error patterns suggest systematic difficulties in phonological encoding, grapheme–phoneme mapping, phonological working memory, and morphological processing rather than isolated spelling mistakes. The findings support previous studies (Moats, 1996; Berninger et al., 2008; Hebert et al., 2018; Tops et al., 2014; Peter et al., 2021) while extending their application to the Indonesian language context through a linguistic classification of orthographic errors.

Although this study is limited to a single participant, it contributes to the understanding of orthographic processing in Indonesian adolescents with dyslexia by demonstrating that spelling errors can be systematically interpreted within a psycholinguistic framework. These findings also suggest that literacy instruction for adolescents with dyslexia should target specific error patterns through explicit phonological, morphological, and multisensory spelling instruction.

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