

Gender Differences in Indonesian Vocabulary Mastery Via the Spontaneous Method

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ABSTRACT: Vocabulary mastery is a fundamental component of language skills, playing a crucial role in effective communication. This study investigates gender differences in Indonesian vocabulary mastery through the Spontaneous Method among students at SMA Negeri 45, Central Maluku. Employing a qualitative case study design, data were collected via participatory observation, in-depth interviews, and documentation of both classroom and informal interactions. The analysis focused on lexical quantity, syllabic complexity, and psychological factors influencing spontaneous vocabulary use. Results reveal that female students demonstrate a broader and more varied vocabulary than male students, supported by higher reading interest, richer verbal environments, and greater self-confidence in language use. Linguistic analysis shows that females more frequently produce complex syllabic structures and diverse lexical choices, while males tend to use simpler forms. Psycholinguistic factors such as working memory capacity, motivation, and affective barriers further explain the observed differences. These findings underscore the need for gender-responsive vocabulary teaching strategies in Indonesian language education, particularly in multicultural and multilingual island contexts. The study offers pedagogical recommendations and proposes a context-based spontaneous vocabulary learning model adaptable to local socio-cultural characteristics.

KEYWORDS: Indonesian vocabulary, spontaneous method, gender differences, psycholinguistics, language education.

I. INTRODUCTION

Proficiency in vocabulary is a fundamental component of linguistic skills, serving as the basis for listening, speaking, reading, and writing competencies. The ability of pupils to employ suitable vocabulary is essential for effective communication in both formal and informal contexts when studying Indonesian (Tarigan, 2008). The spontaneous method is a technique that involves requiring students to respond directly and without preparation to specific linguistic stimuli to assess vocabulary mastery. This approach demonstrates pupils' genuine capacity to utilize terminology organically in unstructured situations (Nation, 2001).

Personal characteristics, including gender, significantly impact language acquisition. Studies in psycholinguistics suggest that female students generally exhibit superior verbal skills, particularly vocabulary, attributed to variations in learning processes, motivation, and sociocultural factors (Cameron, 2007; Ellis, 2008). Conversely, male pupils typically have distinct communication habits, frequently characterized by directness and a restricted range of terminology. The complexity of this difference is amplified when examined within a local context, such as at State Senior High School 45 in Central Maluku, where cultural background, native language, and educational access also affect learning outcomes.

The distinct challenge of mastering Indonesian as the national language is exacerbated by the geographical condition of Central Maluku, a multilingual archipelago. Given the wide socio-cultural origins, it is essential to comprehend how pupils from these varied backgrounds spontaneously learn Indonesian vocabulary and how gender influences this process. This study is crucial for enhancing the quality of Indonesian language education tailored to the local context and student attributes.

Vocabulary mastery is a crucial element of linguistic competency that influences an individual's capacity to comprehend and articulate meaning effectively. In the acquisition of the Indonesian language, vocabulary proficiency is shaped not only by linguistic elements but also by psychological and social factors, including gender disparities and the context of language application. Extensive research on vocabulary mastery has been undertaken; however, it predominantly relies on traditional methods such as written assessments or lectures and has not thoroughly investigated language performance in more authentic, spontaneous communication contexts.

Previous research has indicated a propensity for variations in language proficiency according to gender. Maesaroh (2018) discovered that female students had superior knowledge of the Indonesian language relative to their male counterparts at SMP Negeri 1 Cibinong, a finding attributed to their reading interest and learning desire. Nonetheless, the employed approach remains a formal written examination. Dewi (2020) examined language proficiency from a psycholinguistic viewpoint and discovered that

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women are generally more expressive and possess a broader vocabulary range in their speech; however, the study did not concentrate especially on vocabulary mastery.

Prasetyo's (2019) research highlights the significance of engaging and contextual learning techniques, such as language games, in enhancing vocabulary proficiency among elementary school pupils. Nevertheless, the emphasis has not yet shifted to gender disparities or unprompted situations. Hidayat and Komalasari (2021) investigated the proficiency of Indonesian vocabulary among multilingual students in the coastal region of West Kalimantan and determined that pupils whose primary language is not Indonesian necessitate an interactive approach. The study excluded gender characteristics and a spontaneous approach from the analysis.

This mapping indicates that the majority of prior research has failed to cohesively incorporate spontaneous methodologies, gender disparities, and psychological and linguistic issues, particularly within the unique island and multilingual environment of Central Maluku. This study seeks to address this gap by investigating the spontaneous mastery of Indonesian vocabulary among students at State Senior High School 45 in Central Maluku, analyzing gender disparities and their correlation with psycholinguistic factors. This study employs a quantitative-comparative methodology supplemented by observational data and psychological assessments to deliver a comprehensive analysis of students' vocabulary performance.

This research demonstrates novelty in three significant aspects: firstly, it employs a more authentic spontaneous method for evaluating students' vocabulary skills; secondly, it incorporates linguistic and psychological analysis to investigate language performance by gender; and thirdly, it concentrates on students from island regions with varied native languages and distinct socio-cultural attributes. This research enhances the theoretical framework in applied linguistics and psycholinguistics while offering practical contributions to the advancement of more inclusive and contextually relevant Indonesian language learning methodologies.

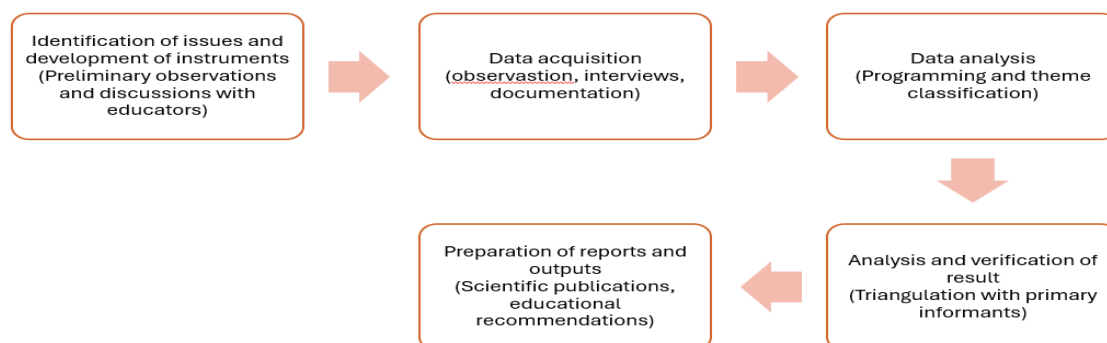
II. RESEARCH METHODS

In an effort to conduct a comprehensive examination of the phenomenon of spontaneous Indonesian vocabulary mastery based on gender among students at State Senior High School 45 Central Maluku, this study employs a qualitative approach with a case study design. A qualitative technique was used for its ability to reveal the meanings, perceptions, and thought processes of persons within a natural context, particularly about the intricate and situational dimensions of language use (Creswell, 2016). The case study design enables researchers to concentrate on a specific unit of analysis, specifically male and female students inside a particular school environment, to attain a comprehensive comprehension of the distinctions and commonalities in their linguistic patterns (Yin, 2018).

This design acknowledges that vocabulary is shaped not just by the learning environment but also by psychological characteristics, like motivation, self-confidence, and expressive tendencies, which frequently vary between genders (Holmes, 2013). This approach enables researchers to delineate the relationship between linguistic elements (structure and word selection, communicative function) and psychological factors (language acquisition motivation, speaking apprehension, and self-assurance) about spontaneous vocabulary utilization. The data collection procedure was conducted through participant observation, in-depth interviews, and documenting of students' linguistic activities in both classroom and casual settings.

This approach yields descriptive and narrative data, which is thematically evaluated to discern patterns of meaning, trends in word usage, and variations in language strategies by gender. This project aims to offer both theoretical insights and practical contributions to education, specifically in Indonesian language acquisition at the secondary school level.

A flowchart was developed to depict the methodical and chronological progression of the research process, highlighting the principal steps of this investigation. This flowchart delineates the process commencing with problem identification, followed by goal development, data gathering, analysis, and the compilation of research results. This visualization aids in comprehending the study implementation plan and functions as a guide for ensuring consistency and coherence in the undertaken activities. This study flowchart succinctly and systematically depicts the comprehensive process of the activities.



III. RESULTS AND DISCUSSION

Vocabulary mastery is the cornerstone of language abilities, influencing a person's ability to grasp and express meaning through numerous means of communication. According to Nation (2001), a large vocabulary is very important for reading, writing, speaking, and listening skills, as vocabulary is key to developing and constructing meaning in language. In the realm of education, especially at the high school level, solid language skills are one of the major factors in judging students' academic advancement, including their knowledge of Indonesian as the national language. One strategy that can be used to test students' vocabulary capacity is the spontaneous method, which challenges students to respond swiftly to stimuli without prior preparation, thus showing their natural language competency (Thornbury, 2002).

From a psycholinguistic standpoint, gender is believed to play a role in influencing language use patterns. Some studies compared to men (Halpern, 2012). This distinction can be influenced by biological, cognitive, and socio-cultural factors that shape the development of language skills from an early age. Based on this backdrop, this research intends to analyze the disparities in Indonesian vocabulary acquisition using the spontaneous technique between male and female students at SMA Negeri 45 Maluku Tengah. This study was conducted through a linguistic and psychological strategy to acquire a greater knowledge of the interaction between linguistic and psychological elements in vocabulary learning based on gender.

The results of this study reflect the spontaneous mastery of the Indonesian language by students in grades X, XI, and XII at SMA Negeri 45 Maluku Tengah, taking into consideration variances based on gender. Based on data from 62 respondents, consisting of 43 male students and 19 female students, a variation in the quantity of words stated spontaneously in communicative circumstances was established.

No	Gender	Number of Respondents	Average Vocabulary Score
1	Male	43	19,33
2	Female	18	20,26
Total		62	

In general, the number of words memorized by students ranged from 4 to 35. Female students had higher and more consistent average vocabulary competence compared to male pupils. Some female students recorded vocabulary counts exceeding 30, such as R7 and R55 (33 words each) and R49 (30 words). Conversely, some male pupils recorded vocabulary counts below 10, such as R1 and R5, with only 4 words apiece. However, there were also male students with high vocabulary, such as R31 (35 words) and R42 (34 words), demonstrating that vocabulary mastery is also influenced by individual characteristics.

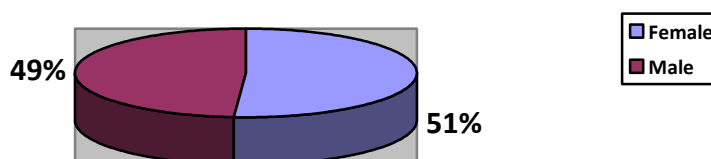
This research reveals a pattern of vocabulary mastery disparities based on gender, where women are more likely to have consistent, structured, and expressive mastery. This fits with Holmes' (2013) opinion that women in various communication circumstances tend to be more talkative and diversified in their language use. Meanwhile, men tend to employ more direct and less expressive language. Ellis (2008) also adds that social, cognitive, and affective elements play a role in second language acquisition, including Indonesian as the language of instruction in schools.

Furthermore, elements such as reading interest, social context, and language habits also have a crucial impact on vocabulary acquisition. Vygotsky (1978) stressed the role of social contact and environmental support in language development. In the context of pupils in Central Maluku, issues such as the diversity of local languages, access to literacy materials, and peer interaction are variables that should be addressed when assessing their language ability.

1. Variations in Indonesian Vocabulary Proficiency

Lexical knowledge (vocabulary mastery) is intricately linked to an individual's capacity to comprehend and generate the phonological structures of a language, which encompass syllable structure, in the field of linguistics. The data indicates variability in the amount of vocabulary terms acquired by each respondent, spanning from low to high levels of mastery. This can be interpreted as a sign of variations in the complexity level of syllable structure proficiency among the respondents. The data is illustrated in the subsequent chart.

Indonesian Vocabulary Mastery Based on Gender



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The pie chart indicates that female students have acquired 51% of the Indonesian language, whilst male students have mastered 49%. This disparity suggests that female students exhibit a little higher proficiency in vocabulary mastery compared to male students, however the difference is deemed minor. This phenomena can be elucidated by an examination of mutually supportive theory and field situations.

Numerous research in cognitive psychology and psycholinguistics suggest that women typically possess a linguistic advantage. Halpern (2000) asserts that language ability is a cognitive domain in which women routinely exhibit superiority. Hyde and Linn (1988), through their meta-analysis, discovered that women generally excel in language-related tasks, including vocabulary, but this disparity is rather minor. Clark & Clark (1977) elucidate within the psycholinguistic paradigm that vocabulary development is profoundly affected by social interaction and quotidian language utilization. In this context, women are generally more engaged in interpersonal communication activities, such as discussing, reading, and writing, so enhancing their vocabulary.

The circumstances on the ground further corroborate this conclusion. In the realm of academic learning, female students generally exhibit greater passion for language acquisition, engage in reading with more diligence, and participate more actively in literacy activities than their male counterparts. Moreover, women are generally more verbally expressive, resulting in a greater frequency of utilizing and exploring new vocabulary in everyday speech. Concurrently, male students frequently engage in non-verbal or physical activities, so restricting their exposure to novel terminology.

The disparity in Indonesian vocabulary proficiency across genders arises from a confluence of biological, psychological, and environmental learning factors. Despite the minimal difference, this tendency underscores the necessity of incorporating gender aspects into language learning methodologies. This differentiated teaching can enhance vocabulary proficiency for all kids more equitably.

This phenomenon can be examined from linguistic and psycholinguistic viewpoints. Vocabulary mastery (lexical knowledge) is intrinsically linked to an individual's capacity to construct diverse syllabic and syntactic patterns (Nation, 2001). Students possessing advanced vocabulary proficiency typically demonstrate the ability to generate speech featuring intricate phonological and morphological constructs, like CCV syllables, CVCVCC formations, or the incorporation of idiomatic expressions. This was observed to be more prevalent among female students, who exhibited skill in formulating spontaneous sentences with varied vocabulary and logical grammatical structures.

Yule (2010) asserts that vocabulary development signifies not merely an increase in word count but also an enhancement in the capacity to handle intricate phonological structures, including the utilization of compound syllables and variations in syllable patterns (e.g., CVC, CCVC, CVCC). An individual's vocabulary breadth correlates positively with their ability to master words featuring diverse and intricate syllable structures. Individuals with a limited vocabulary are more inclined to have acquired vocabulary comprising words with uncomplicated syllable structures, such as the CV (Consonant-Vowel) or CVC (Consonant-Vowel-Consonant) patterns. This concurs with the assertion of Fromkin, Rodman, and Hyams (2011) that during the initial phases of language learning, individuals predominantly generate simple syllables due to their greater articulatory ease.

In contrast, participants with an extensive vocabulary were more inclined to have acquired mastery over words featuring intricate syllable configurations, such as:

- Syllables containing consonant clusters (CCV, CCVC)
- Extended syllables (words with three or more syllables)
- Unconventional syllable structures indicative of phonological adaptability.

This phenomenon suggests that vocabulary expansion also signifies the enhancement of an individual's phonological and articulatory abilities. A greater mastery of complicated vocabulary correlates with an expanded capacity for producing or comprehending diverse syllable forms.

Moreover, the psycholinguistic perspective highlights the close connection between syllable structure proficiency and phonological processing in verbal working memory (Baddeley, 2007). Individuals with an extensive vocabulary generally possess superior phonetic manipulation abilities, facilitating the formation, alteration, and amalgamation of syllables in the production and comprehension of novel words.

2. The Correlation Between Linguistic and Psychological Dimensions

The research findings demonstrate that the unprompted acquisition of Indonesian vocabulary arises from a language elements and individual psychological characteristics. A person's capacity to swiftly and accurately generate vocabulary relies not alone on their lexical knowledge but also on the processing, access, and utilization of those words in spontaneous communication contexts. Spontaneous mastery requires immediate and effective linguistic answers, rendering this skill a genuine measure of pupils' true language proficiency.

Within psycholinguistics, linguistic proficiency is not merely a fixed cognitive function; it is significantly shaped by psychological and social factors. Consequently, to comprehend the disparities in language proficiency among individuals—particularly between male and female students—a multifaceted approach is essential. This study examines the correlation between

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linguistic and psychological factors through four primary dimensions: (1) phonological and morphological complexity, (2) verbal working memory capacity, (3) motivation and self-confidence, and (4) the impact of social and emotional factors on language performance.

1) Complexity of Phonology and Morphology

Managing the phonological form and morphological structure of words is the primary linguistic component of vocabulary mastery. Fromkin, Rodman, and Hyams (2011) assert that pupils with advanced vocabulary proficiency possess a greater lexicon and exhibit adaptability in processing intricate syllable structures, such as CCVC or CVCC. Observational studies indicate that female pupils employ a greater number of words characterized by compound structures and extended syllable lengths, suggesting enhanced and refined articulation skills. Conversely, male pupils more often employ simplistic forms, such as single-syllable CV or CVC structures. This indicates that they are likely in a rudimentary stage of phonological development or have constraints in the spontaneous retrieval of complicated morphological structures.

2) Verbal Working Memory

Verbal working memory capacity, or the brain's short-term capability to retain and process linguistic information, is intimately linked to vocabulary creation in psycholinguistics (Baddeley, 2007). Individuals possessing elevated working memory capacity exhibit superior retention and generation of pertinent words in spontaneous contexts.

This study's findings demonstrate that female pupils exhibit a greater speed in word association. This signifies their enhanced efficiency in accessing the lexical network within long-term memory. This situation corresponds with Halpern's (2012) research, which indicates that women generally possess an edge in linguistic tasks necessitating rapid and precise verbal information processing. In contrast, certain male students appeared to require more time to initiate verbal expression, potentially linked to restricted verbal working memory capacity or anxiety impacting spontaneous performance.

3) Motivation, Self-Efficacy, and Linguistic Anxiety

A further psychological factor that influences behavior is drive and self-assurance. Gardner and Lambert (1985) posited in their theory of instrumental and integrative motivation that pupils exhibiting strong motivation, especially integrative motivation (i.e., the aspiration to belong to a particular language community), typically exhibit superior language performance. During the interview, female students exhibited a more favorable disposition towards Indonesian language lessons and expressed confidence in executing spontaneous tasks. Simultaneously, male students acknowledged experiencing anxiety when required to talk or write without prior preparation, apprehensive about making errors or inadequately articulating their thoughts. This worry impedes the fluency of verbal cognition and directly affects the quantity and diversity of language generated. This elucidation is corroborated by Krashen's (1982) Affective Filter Hypothesis, which posits that affective elements, including anxiety, motivation, and emotional security, can function as a filter that either obstructs or enhances the language acquisition process. Students that are relaxed and motivated will exhibit a low filter, facilitating their ability to process and output words.

4) The Impact of Social and Emotional Variables on Linguistic Performance

Emotional and social interaction factors also influence vocabulary performance. Women typically exhibit greater openness in verbal and social expression due to cultural norms that permit or promote enhanced communicativeness (Cameron, 2007). In specific local cultures, such as those in Central Maluku, men are frequently taught that "silence" signifies maturity or boldness. These beliefs cultivate a more minimalist communication style among guys.

This condition signifies that sociocultural frameworks can influence an individual's linguistic abilities. Within the educational environment, female students engage more often in impromptu dialogues with peers, literacy endeavors, and open-ended verbal assignments, whereas male students exhibit greater dominance in activities that lack substantial verbal interaction. The relationship between linguistic and psychological factors in the spontaneous acquisition of Indonesian vocabulary is intricate and reciprocal. The phonological and morphological structures acquired by pupils are influenced not just by language exposure but also by verbal memory ability, personal motivation, self-confidence, and societal factors that shape linguistic identity. Consequently, the advancement of Indonesian language education must incorporate this difference-sensitive psychopedagogical method to maximize each student's linguistic potential.

CONCLUSIONS

This study demonstrates that spontaneous proficiency in the Indonesian language exhibits notable gender disparities. The observation and analysis indicate that female pupils possess a superior capacity for spontaneous vocabulary production compared to their male counterparts. On average, women's vocabulary learning attains 20,875 words every minute, whereas men achieve just 11.2 words. The disparity arises not only from the quantity of vocabulary acquired but also from phonological proficiency, verbal working memory capacity, and psychological elements such as motivation, self-assurance, and language anxiety. From a linguistic standpoint, female students generally generate words characterized by more intricate syllable structures and greater diversity. This signifies enhanced phonological and morphological development. From a psychological standpoint, female

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pupils exhibit greater confidence and motivation, along with a more favorable reaction to spontaneous tasks. In contrast, male students often encounter emotional and affective obstacles in spontaneous language production, adversely affecting their verbal performance.

The relationship between language and psychological elements demonstrates that vocabulary proficiency is not solely a linguistic occurrence but rather the outcome of intricate cognitive and emotional processes. Consequently, vocabulary education must comprehensively account for pupils' psycholinguistic circumstances.

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