

## Analysis of Japanese Antonym Vocabulary Proficiency in a Private University in Bandung

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**Abstract.** Acquiring a strong understanding of antonym vocabulary in Japanese is an essential component of language acquisition, especially for those pursuing a degree in Japanese Studies. This study seeks to explore the proficiency level of Japanese antonym vocabulary among fourth-semester students in the Japanese Literature Program at Universitas Komputer Indonesia during the 2024-2025 academic year. A descriptive quantitative approach was utilized, employing an online survey designed with Google Forms to collect data. Thirty individuals took part in vocabulary tests focused on antonyms, specifically at the N5 to N3 proficiency levels. The findings reveal that although some students faced challenges with antonym vocabulary, especially with word pairs that possess similar nuances yet do not qualify as true antonyms, a considerable majority exhibited a robust understanding in this domain. Further analysis indicated that students demonstrate a more profound comprehension of antonyms within the keiyoushi (adjective) category when contrasted with doushi (verb) and meishi (noun). The results underscore the importance of developing more effective teaching strategies that are specifically designed to meet the unique challenges students encounter when learning antonym vocabulary. This research highlights the significance of improving teaching methods to boost vocabulary learning, which in turn plays a vital role in enhancing students' language skills.

**Keywords:** Antonym, Japanese, Language, Learning, Vocabulary.

### 1. Introduction

Expanding vocabulary is a crucial component of learning Japanese, serving as a fundamental building block for improving communication skills. Understanding antonym vocabulary is crucial, as it enhances one's language skills and helps learners appreciate the subtle differences in meaning. Pongilatan, Sambeka, and Lensun (2022) highlight the importance of vocabulary mastery in achieving proficiency in Japanese [1]. This statement resonates with Pratama's (2024) observation that possessing a substantial vocabulary is crucial for achieving strong language proficiency [2]. A strong vocabulary allows individuals to express their ideas and feelings with greater clarity and impact. Nonetheless, the process of acquiring a second language diverges significantly from that of learning one's native language, as the former is usually approached through organized techniques such as formal classroom

instruction [3]. As a result, the mastery of vocabulary continues to be a significant challenge in the process of acquiring a second language [4].

While it is often assumed that vocabulary acquisition is straightforward, numerous learners of foreign languages encounter significant difficulties in mastering new words. The intricacy of vocabulary learning stems from its diverse aspects, which involve not just the memorization of words but also the comprehension of their interconnections, including synonyms, collocations, and antonyms. Berne and Blachowicz (2008), as cited in Alqahtani (2015), suggest that effective vocabulary instruction requires a more nuanced approach than merely introducing new words [5,6]. Setiana et al. (2024) discovered that students frequently encounter difficulties in various aspects of learning Japanese, particularly in grasping vocabulary and its subtleties [7]. Moreover, Musyaafa and Setiana (2024) highlight the significance of motivational factors in influencing students' vocabulary mastery [8].

Within the context of language studies, antonymy refers to the relationship between pairs of words that express opposing meanings. The complexities of antonym pairs in Japanese are truly fascinating, as certain pairs can appear across different parts of speech. For instance, -i adjectives such as "ii" (good) and "warui" (bad), along with -na adjectives like "kirei" (clean) and "kitanai" (dirty), exemplify this phenomenon. Moreover, examples such as "toshitotta" (old) and "wakai" (young) demonstrate the intriguing ways in which antonyms can traverse various grammatical categories. Here, "toshitotta" serves dual roles as both a noun and a verb, whereas "wakai" is classified as an adjective. Because of this intricacy, learning Japanese antonyms requires more than just expanding one's vocabulary; one must also study the language's intricate structures and functions. Recent studies have highlighted the mental processes that play a role in comprehending antonyms. Olechowska et al. (2025) suggest that recognizing antonym pairs is associated with semantic memory and cognitive flexibility, both of which play a crucial role in language processing. Furthermore, Tanaka (2023) points out that learners frequently encounter difficulties with antonyms because of the subtle distinctions that can arise between words that appear to be opposites. This indicates that effective teaching should emphasize the importance of contextual usage and the intricacies of meaning [10]. This is consistent with the work of Rahmawati *et al.* (2025), who emphasize that using contextualized examples to teach antonyms can greatly improve students' understanding and memory of vocabulary [11].

Previously studies, such as those conducted by Muehleisen and Isono (2009), have explored antonyms in the Japanese language. Nevertheless, they have not addressed the order of antonyms or the fundamental reasons that determine why one member of a pair is prioritized in a sentence [12]. This study aims to explore the significance of antonym vocabulary proficiency in improving Japanese language comprehension among students, thereby addressing an important gap in existing research. This study will utilize a structured quantitative method to collect data through an online questionnaire, with the goal of evaluating the level of antonym vocabulary proficiency among students in their fourth semester. Furthermore, this study will explore the ways in which personal attributes, including executive function and vocabulary knowledge, may impact performance in a second language. The ability to manage attention, process information, and resist distractions collectively known as executive functions has been demonstrated to influence performance in one's first language [13]. This research aims to deepen our comprehension of how these variables interact within the framework of acquiring antonym vocabulary in a second language.

This study seeks to offer new insights into improving vocabulary teaching methods to support the acquisition of the Japanese language in Indonesia. The findings are expected to

play a crucial role in shaping the Japanese language curriculum and teaching strategies within private institutions, providing valuable insights for educators aimed at enhancing the effectiveness of vocabulary instruction. This study aims to tackle the unique challenges encountered by learners through a concentrated effort on mastering antonym vocabulary, ultimately offering insights that may enhance language instruction effectiveness.

## **2. Literature Review**

In Japanese language acquisition, mastery of vocabulary is essential, particularly antonyms. Several studies have found that vocabulary mastering is an important part of the language learning process, and that comprehending the links between words, especially antonyms, can help students improve their communication abilities. Vocabulary mastery is one of the main indicators of success in language learning. According to Pongilatan, Sambeka, and Lensun (2022), a good mastery of vocabulary allows students to express their ideas and feelings more accurately [1]. This is in line with the research by Dwiyanti et al. (2022) This demonstrates that students with a larger vocabulary likely to have stronger language skills [14]. This study underlines the value of good vocabulary instruction in the context of Japanese language learning.

Although vocabulary is frequently thought to be easy to learn, many foreign language learners struggle to master new terminology. This is related to the complexity of vocabulary, which is the most significant aspect in language learning. According to Alqahtani (2015), this challenge is typically caused by teachers' lack of understanding of effective methods in vocabulary instruction [6]. Berne and Blachowicz (2008) also stated that insufficient vocabulary training may affect students' ability to comprehend and apply language effectively [5]. Antonymy is a term used in linguistics to describe the relationship between opposite meanings in pairs of words. Hsu (2021) stated that comprehending antonyms can assist students extend their vocabulary and improve their language skills. Hsu spotted that students who understand antonym relationships are more likely to use vocabulary in the right setting [16]. Furthermore, Tanaka's (2023) research emphasizes that teaching antonym vocabulary might improve students' understanding of nuances in meaning, which is essential in second language acquisition [10].

Notwithstanding previous research on antonyms in Japanese, especially those by Muehleisen and Isono (2009), the sequence of antonyms and the variables carrying how they are employed in sentences require further investigation [12]. According to Yamamoto (2022), understanding how antonym pairings interact within sentence contexts can provide novel views into vocabulary development. The research described here indicates how the social and cultural context can influence how antonyms are employed in Japanese [16]. Language performance has been demonstrated to be influenced by executive functions, which include the capacity to control attention, process information, and handle distractions. Language proficiency is typically higher among those with superior executive function, according to research by [17]. Recent studies by Miyake et al. (2023) show a strong correlation between cognitive talents and linguistic competency by confirming that executive function also contributes to vocabulary mastering, including antonym vocabulary [18]. Existing research shows that understanding the connections between words, as well as cognitive variables such as executive function, might influence student's capacity in acquiring vocabulary. As a result, the purpose of this study is to investigate the proficiency of antonym vocabulary among students enrolled in the Japanese Literature Study Program at Universitas Komputer Indonesia, as well as to make recommendations for more effective instruction.

### 3. Method

This research uses a descriptive quantitative approach to analyze the antonym vocabulary proficiency among fourth-semester students of the Japanese Literature Study Program at the Universitas Komputer Indonesia. Data were collected through an online questionnaire designed to measure the students' mastery of antonym vocabulary. The research was conducted over a period of one month in March 2025, at Universitas Komputer Indonesia in Bandung, Indonesia. A total of 30 fourth-semester students enrolled in the Japanese Literature Program participated in the study. This group was selected due to their intermediate level of language proficiency, making them ideal candidates for assessing antonym vocabulary mastery, as they possess a foundational understanding of the language that allows for a more nuanced evaluation of their comprehension of antonyms. Data were collected through an online questionnaire designed using Google Forms. This questionnaire contains questions that measure the mastery of antonym vocabulary in three categories. The research factors and the indicators used to evaluate students' abilities are displayed in the following **Table 1**.

**Table 1.** The Research and Indicators Problems.

Variable	Description
Keiyoushi (Adjective)	Measuring students' ability to understand and use antonyms that fall under the category of adjectives.
Doushi (Verb)	Measuring students' ability to understand and use antonyms that fall under the category of verbs.
Meishi (Noun)	Measuring students' ability to understand and use antonyms that fall into the category of nouns.

The objectives and techniques used at each level of the analysis are designed to guarantee that the information gathered can offer precise and pertinent insights into students' proficiency with antonym vocabulary. The following Table 2 lists the research factors and the indicators used to evaluate students' abilities.

**Table 2.** Stages of Data Analysis.

Stages of Data Analysis
1. Information Processing
2. Descriptive statistics
3. Analysis of the Findings

In order to ensure that only genuine data is processed, data processing is done first to find respondents who fit the research criteria. The study will then determine the proportion of students in each category who exhibit strong antonym vocabulary proficiency at the Descriptive Statistics stage. Lastly, the results of the investigation will be interpreted to shed light on the difficulties students encounter while comprehending antonym language.

### 4. Results and Discussion

According to the study's findings, fourth-semester Japanese Literature Study Program students at the Indonesian Computer University exhibit intriguing differences in their command of antonym vocabulary across both the vocabulary categories examined and the respondent demographics.

Based on the data collected, it seems that 36.7% of the respondents are women and 63.3% of the respondents are men. Given the potential influence of gender characteristics on language competency and learning strategies, this gender difference can offer further insights into the findings analysis.

The results of a more thorough examination of antonym vocabulary competence in the adjective (keiyoushi) category are noteworthy. An overview of the proportion of antonym vocabulary mastery based on the tested adjective pairs can be seen in the following Table 4.

According to the above data, 93.3% of respondents correctly answered the antonym pair 高い (takai) - 低い (hikui), indicating the highest level of expertise. This suggests that students are well-versed in the lexicon of antonyms that are frequently employed in everyday situations. With 86.7% of respondents correctly answering, the antonym pair 速い (hayai) - 遅い (osoi) likewise demonstrated strong performance, suggesting that students can differentiate between speed and delay.

**Table 3.** Demographics.

Gender	Percentage (%)
Male	63.3
Female	36.7

**Table 4.** Proficiency in Keiyoushi Words.

Adjective/ Keiyoushi Pair	True (%)	False (%)
高い (takai) - 低い (hikui)	93.3	6.7
速い (hayai) - 遅い (osoi)	86.7	13.3
暖かい (atatakai) - 冷たい (tsumetai)	73.3	26.7
楽しい (tanoshii) - 忙しい (isogashii)	76.7	23.3
強い (tsuyoi) - 重い (omoi)	76.7	23.3

However, only 73.3% of respondents correctly answered the antonym pair 暖かい (atatakai) - 冷たい (tsumetai), indicating a considerable reduction. It's possible that this is because students may find the more nuanced meanings of such phrases unclear. As seen by the 76.7% of respondents who correctly answered the antonym pairs 楽しい (tanoshii) - 忙しい (isogashii) and 強い (tsuyoi) - 重い (omoi), students still struggle to discern between words with distinct usage contexts, while having a high level of comprehension.

Important outcomes are shown when one masters the antonym vocabulary in the verb category (doushi). An overview of the proportion of antonym vocabulary mastery based on the tested adjective pairs can be seen in the following Table 5.

**Table 5.** Proficiency in Doushi Words.

Verb/ Doushi Pair	True (%)	False (%)
開ける (akeru) - 閉める (shimeru)	73.3	26.7
増える (fueru) - 減る (heru)	83.3	16.7
入る (hairu) - 出る (deru)	83.3	16.7
勉強する (benkyou suru) - 遊ぶ (asobu)	76.7	23.3



開く (hiraku) - 閉める (shimeru)	70.0	30.0
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The findings also demonstrate that the students s possess a strong mastery of the verb vocabulary (doushi) category. Antonym pairings with accuracy levels of 73.3% and 83.3%, respectively, include 開ける (akeru) - 閉める (shimeru) and 増える (fueru) - 減る (heru). This demonstrates that students can comprehend and apply antonyms in action contexts, which is crucial for proficient communication.

On the other hand, antonym pairs with a higher difficulty level of 70.0% include 開く (hiraku) - 閉める (shimeru). Students require further experience and contextual understanding to separate their usage because this could be the result of them confusing words with extremely similar meanings.

Considerable outcomes are shown by mastering the antonym vocabulary in the noun category (meishi). Based on the adjective pairs assessed, the proportion of antonym vocabulary competence is summarized in the following Table 6.

Pairs like 昼 (hiru) - 夜 (yoru) and 男 (otoko) - 女 (onna) have a very high competence level in the noun/meishi category, each achieving 96.7%. This demonstrates how well the students comprehend fundamental words that are frequently used in everyday situations. But combinations like 勇氣 (yuuki) - 臆病 (okubyou) have a lower mastery level (66.7%), suggesting that students s may have trouble grasping more sophisticated ideas.

**Table 6.** Proficiency in *Meishi* Words.

Noun/ <i>Meishi</i> Pair	True (%)	False (%)
昼 (hiru) - 夜 (yoru)	96.7	3.3
勇氣 (yuuki) - 臆病 (okubyou)	66.7	33.3
善 (zen) - 悪 (aku)	73.3	26.7
男 (otoko) - 女 (onna)	96.7	3.3
勝ち (kachi) - 負け (make)	83.3	16.7

Based on the vocabulary categories in the Table 7 below, the analysis of antonym vocabulary revealed that students' levels of knowledge varied;

**Table 7.** Total Value.

Total Value	True (%)	False (%)
Adjective/ <i>Keiyoushi</i>	81.34	18.66
Verb/ <i>Doushi</i>	77.32	22.68
Noun/ <i>Meishi</i>	83.34	16.66

In the Adjective/*Keiyoushi* category, 18.66% of respondents reported difficulty, while the mastery level was 81.34%. Antonym pairings with 93.3% and 86.7% accuracy, respectively, were exhibited by 高い (takai) - 低い (hikui) and 速い (hayai) - 遅い (osoi). This suggests that students s are well-versed in the language of antonyms in this category.

The verb/*doushi* category has a significantly lower competence level (77.32%), with 22.68% of respondents reporting difficulty. Antonym pairings with 83.3% right answers were 増える (fueru) - 減る (heru) and 入る (hairu) - 出る (deru). But pairs like 開く (hiraku) - 閉める (shimeru) have a higher difficulty, with 70.0% right, suggesting that students s would require additional practice comprehending antonyms in verb contexts.

In the Noun/Meishi category, 16.66% of respondents reported problems, while the mastery level was 83.34%. Antonym couples that performed exceptionally well, with 96.7% accuracy, were 昼 (hiru) - 夜 (yoru) and 男 (otoko) - 女 (onna). This demonstrates that the students comprehend the noun category's antonym vocabulary quite well.

In general, the findings of this research offer significant understanding of the difficulties students encounter when acquiring antonymic vocabulary. Some pairs of antonyms still provide challenges, particularly those containing more intricate nuances of meaning, even though the majority of students showed good mastery. Students encounter many difficulties throughout this learning process, despite the fact that the research findings indicate a comparatively high degree of proficiency in antonym vocabulary.

#### **4.1. Difficulty Interpreting Meaning's Nuances**

Sometimes It can be particularly difficult for students who are learning Japanese to comprehend the nuanced aspects of meaning in antonym vocabulary. This challenge is frequently intensified by the nuanced distinctions between terms that, while not direct opposites, possess related meanings. For instance, the adjective pair "楽しい (tanoshii)," which translates to "fun," and "忙しい (isogashii)," meaning "busy," exemplifies this challenge. While these terms may not be direct opposites, learners frequently find it challenging to understand their appropriate application and connection because of their unique connotations. The findings of this study bring to light an important observation. Although students typically demonstrate a strong grasp of antonym vocabulary, they encounter notable difficulties with pairs that carry more intricate shades of meaning. Teaching antonym vocabulary can improve students' comprehension of these subtleties, which is crucial for the acquisition of a second language.

#### **4.2. Diverse Categories of Vocabulary**

The results show that students exhibit diverse levels of skill in various vocabulary categories. In the noun/meishi category, students demonstrate the highest competence proficiency, with an accuracy rate of 83.34%. This is in contrast to the 81.34% competence rate in the adjective/keiyoushi category and the 77.32% competence rate in the verb/doushi category. This indicates that students tend to have a better grasp with vocabulary related to nouns, likely due to its more common appearance in daily language conversations. Students' dropped proficiency in verbs and adjectives suggests that they require more concentrated lessons in these domains to improve their understanding and implementation of action- and description-related vocabulary, which are essential for communicating effectively in Japanese. This is inline with the findings of Pongilatan, Sambeka, and Lensun (2022), who highlight that a strong vocabulary allows individuals to articulate their thoughts and emotions better and with greater clarity [1].

#### **4.3. Limitations on Resources**

The accessibility of resources significantly impacts the ability of students for interacting with and comprehend antonym vocabulary. Analysis points out that limited access to additional resources, including books, online materials, and interactive activities, may significantly affect students' learning experiences. The data reveals that 73.3% of students show strong agreement on the importance of implementing media to enhance their comprehension of antonyms. This highlights how important it is for diverse and accessible resources that can help students in dealing with the difficulties of understanding antonym vocabulary. This aligns

with the findings of Alqahtani (2015), who emphasised that effective vocabulary instruction necessitates a more sophisticated approach compared to simply memorising words [6].

According to the data, the following Table 8 shows the degree of difficulty students encounter when trying to learn antonym terminology.

The question was rated as very tough by 20% of the 30 respondents, difficult by 43.3%, and easy by 33.3%. Only 3.3 percent said it was extremely easy. This task demonstrates that while most students struggle with antonym terminology, some students are able to grasp it effectively. This could be the result of a number of previously mentioned circumstances.

Interestingly, the Table 9 below demonstrates that the survey findings also point to a large demand for learning media in Japanese antonym vocabulary.

From the 30 respondents, 73.3% agreed and 20% strongly agreed that learning mediums are essential. Just 6.7% said they disagreed or strongly disapproved. This demonstrates that students comprehend the value of learning tools, which can assist them in overcoming difficulties with antonym vocabulary comprehension.

**Table 8.** Difficulty in Understanding Antonym Vocabulary.

Difficulty Level	Percentage (%)
Very Difficult	20.0
Difficult	43.3
Easy	33.3
Very Easy	3.3

**Table 9.** Media Needs for Learning.

Response	Percentage (%)
Strongly Agreed	73.3
Agreed	20.0
Disagreed	6.7
Strongly Disagreed	-

#### 4. Conclusion

The study's findings indicate that fourth-semester students in the Japanese Literature Study Program at Universitas Komputer Indonesia demonstrate differing levels of proficiency in antonym vocabulary, depending on the specific type of vocabulary assessed. The students demonstrated a noteworthy understanding of antonyms, especially in the noun/ meishi category, achieving an impressive understanding level of 83.34%. This level of proficiency suggests that students have acquired a familiarity with the identification and utilization of nouns in their language acquisition. Their consistent exposure to noun-related vocabulary in both academic and accepted contexts is likely an explanation of this. Following this, the verb/ doushi category showed a proficiency level of 77.32%, while the adjective/ keiyoushi category displayed a slightly higher proficiency at 81.34%. The students show a substantial comprehension by precisely identifying and following antonym pairs, including 昼 (hiru) - 夜 (yoru), which are synonyms for "day" and "night," and 男 (otoko) - 女 (onna), which are similar to "man" and "woman." These pairs demonstrate clear and recognized variances, allowing understanding for students. However, the study revealed that antonym pairs with more nuanced meanings, such as 楽しい (tanoshii) - 忙しい (isogashii), which translates to "fun" and "busy," as well as 開く (hiraku) - 閉める (shimeru), meaning "to open" and "to close," present considerable difficulties. This problem highlights the complexities of language learning, as students struggle



to grasp the complex semantic and situational meanings of antonyms that are more than just straight opposites. Although the majority of students exhibit a strong understanding of antonym vocabulary, the findings emphasise the reason that a substantial number of students are still facing significant challenges in comprehending more complex concepts and nuanced interpretations. This highlights the need for specific teaching approaches related at improving students' understanding of complex vocabulary, particularly adjectives and verbs, which are essential for adept Japanese communication. Additionally, the results show that vocabulary proficiency may be influenced by gender-related factors and learning sources. The lack of exposure to various and engaging resources may hinder students' ability to practise and comprehend antonym vocabulary proficiently. A wide variety of learning resources, including interactive tasks and multimedia resources, are therefore essential for instructors to provide in order to help students overcome these obstacles. Furthermore, the consideration of gender differences in language acquisition could offer valuable insights for how to develop of specific teaching strategies that could enhance the results of vocabulary learning.

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