



# The Effects of Input Processing Instruction on The Acquisition of Expression of Giving and Receiving (Juju Hyougen) by the Indonesian Learners of Japanese

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## Abstract

*This study examines the effectiveness of learning the Japanese expression of giving and receiving by applying input processing instruction to Japanese learners of Indonesia at the intermediate level. This study was quantitative research using data obtained from four tests, namely pre-test (first test), post-test (second test), test after two weeks (third test), and test after five weeks (fourth test). The study's respondents are university students of Al Azhar in their third year at the Japanese language and culture department. Based on the results of the first and the second test, it can be said that learning the expression of giving and receiving the Japanese language that applies input processing instruction is effective. However, the comparison results of the first and second tests, second and third tests, and second and fourth tests show that the input exercise does not affect the respondents' ability after two weeks and five weeks after receiving treatment. The average score of respondents tends to decrease in the test after two and five weeks, so it can be said that the input processing instruction does not affect the acquisition of Japanese expressions of receiving and giving. This can be caused by the lack of opportunities to use Japanese expressions of receiving and giving and the lack of exposure to an input of these expressions in subsequent class activities and students' daily lives.*

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## INTRODUCTION

External and internal factors affect language proficiency (Ellis, 1997). According to Ellis (1997), one of the external factors of language acquisition is input received by learners. Input is the example of written and spoken language that is read and heard by learners when learning or interacting using their second language (Ellis, 1997). Language learning is not possible without input. In other words, input is pivotal in language acquisition.

Krashen (1982) hypothesizes that language acquisition is obtained merely from input rather than grammar explanation or output/communication practice. Input is comprehensible input with the formula  $i + 1$ , where  $i$  denotes input following current skills and  $+1$  denotes input slightly higher than current skills.

Krashen (1982) further explains that individuals can understand input slightly higher than their actual skills ( $i + 1$ ) since they use not only their linguistic knowledge when understanding the input but also the context and knowledge they have previously learned. In addition, Krashen (1982) suggests that speaking skills are unteachable and can only be obtained by providing comprehensive input until the skills develop themselves when the learners are ready. Thus, it is not necessary to teach grammar explicitly.

The hypothesis of Krashen regarding input obtains widespread criticism from researchers, including that of the formula  $i + 1$ . Neither  $i$  nor  $+ 1$  refers to knowledge of the language. Furthermore, the relationship between "(receiving) input," which is a passive process, and "acquisition," which is an active process, is unclear (Sakoda, 2001). Despite the criticism, however, no researchers deny the importance of input in language acquisition (Ozeki, 2010).

Another criticism of the input hypothesis is that learners cannot completely process the language information obtained through input. Learners usually only focus on meaning instead of structure. For example, when listening to the English statement "Yesterday I studied

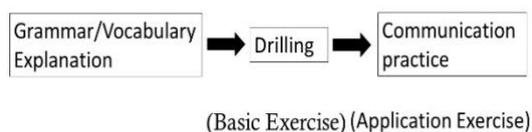
Japanese.", learners conclude that it has happened in the past from the word "yesterday" instead of the function of -ed in the word "studied" (Ozeki, 2010). Therefore, it is not easy to acquire language skills by merely focusing on input obtained without paying attention to the structure of the language. In addition to a variety of inputs, it is necessary to provide learners with explicit knowledge of the structure of the language.

VanPatten (2004) describes linking the meaning/function with the language structure in input as input processing. Learners use strategies to understand the input they receive, one of which is interpreting the first noun of a sentence as the actor/subject of the sentence (VanPatten, 2002). For example, students who have never learned Japanese causative sentences will interpret the first noun of the sentence 「父は母に電話させました。」/"Chichi wa haha ni denwa sasemashita" (Father asks the mother to call), namely Chichi (father), as the actor/subject doing the activity (calling) (Nakaue, 2012).

To avoid such misunderstanding, learners should pay attention not only to meaning. It is necessary to provide an explicit grammar explanation as well as input in the form of examples. Furthermore, prior to assigning output exercises (drilling and communication practices such as tasks, roleplay, etc.), it is necessary to provide input processing instruction as VanPatten (2004) proposed to link the meaning/function with the structure of the second language studied.

Current Japanese learning is mainly carried out in the following manner (Kodama & Kida, 2010):

Figure 1. Traditional Japanese Learning Model (Kodama & Kida, 2010)



The first stage is grammar/vocabulary explanation, which proceeds with output exercises such as drilling for word formation, sentence making, etc., to

communication practice in conversational exercises or tasks. Thus, it is deduced that most of the exercises performed by Japanese students focus more on output activities and less on input. It causes the learners to be unable to understand the link between the meaning/function and the structure of the language learned. They are more likely to find difficulty in completing output exercises as their wrong strategy renders them incapable of understanding the structure of the language or properly linking the language's meaning and structure.

According to Kodama & Kida (2010), learners must be aware of the relationship between the meaning/function and the language structure. Learners will interpret a word or sentence they hear or read in their way, resulting in interlanguage. Implementing Input Processing Instruction, or, to borrow the phrase from Kodama & Kida (2010), offering numerous questions with thorough input, is crucial for ensuring accurate interlanguage. The process of learning that includes instruction in input processing looks like this: (Kodama & Kida, 2010).

Figure 2 Input Processing Instruction Learning Model by Kodama & Kida (2010)



The learning models start with teachers explaining grammar and vocabulary and continue by assigning input exercises, followed by drilling and communication practice. The learning procedure of this study will refer to the input processing instruction model by Kodama & Kida (2010).

Studies by Nakaue (2009), Nakaue (2010), Nakaue (2012), Liu (2009), Sevikul (2013), Shimada (2017), and (Benati & Angelovska) have all demonstrated the value of input processing instruction (2015). According to these studies, input processing training should come after a lesson on grammar and before drills and communication exercises. Therefore, input processing instruction is effective, especially for

complex grammar (Sevikul, 2013). As an expression of giving and receiving both objects and services, (juju hyougen) is therefore included as a challenging grammar for Indonesian students learning Japanese.

As stated in the preceding sentence, studies on input processing instruction were conducted outside of Indonesia with respondents who were not specifically Indonesian students. Sevikul (2013) was the only researcher to study the Japanese expression "juju hyougen" using input processing instructions, and his study's participants were Thai Japanese language learners. As a result, it is impossible to conduct a study on input processing instruction for Indonesian students learning basic-level Japanese to learn the Japanese expression (Juju Hyougen).

Therefore, this study was conducted to observe the effectiveness of learning Japanese expression (juju hyougen) that includes input processing instruction for Indonesian students learning intermediate-level Japanese using the following formulation:

Is learning the expressions of giving and receiving Japanese (juju hyougen), which applies input comprehension instruction, effective?

Do the positive effects of learning expressions of giving and receiving Japanese (juju hyougen), which applies input comprehension instruction, be retained over the second and fifth weeks after the activity?

## RESEARCH METHOD

This study applied a quantitative approach. The data were collected from the initial test (first test) prior to the treatment, the final test (second test) following the treatment, and tests two weeks (third test) and five weeks (fourth test) following the treatment. Statistical tests will assess the results of tests (SPSS 26).

The instrument used in this study was a test with 35 multiple-choice questions. The questions compiled by the authors were tested for reliability using statistical tests (SPSS 26) and validity through expert judgment before being distributed to respondents.

The respondents in this study are 12 students in the third year (5th semester) of the

Japanese Language and Culture Department, Al Azhar University of Indonesia, with intermediate-level Japanese language skills.

**RESULTS AND DISCUSSION**

**The Effectiveness of Learning by Incorporating Input Processing Instruction.**

**The result of the Nonparametric Test on the First and Second Tests**

A normality test is conducted to discover whether parametric or nonparametric tests should test the data.

The normality test on the first and second tests reveals data groups that are not normally distributed in the second test. As the data do not meet the requirements of the parametric test, a nonparametric test is implemented instead. The nonparametric test used in this regard is the Wilcoxon test. This test can determine the differences in the mean of two paired samples. The results of the Wilcoxon test are presented in the following table.

Table 1. The result of Wilcoxon Nonparametric Test on the First and Second Tests

		N	Mean Rank	Total Rank
First Test – Second Test	Negative Ranks	1 <sup>a</sup>	3.00	3.00
	Positive Ranks	11 <sup>b</sup>	6.82	75.00
	Ties	0 <sup>c</sup>		
	Total	12		

a. Second Test < First Test, b. Second Test > First Test, c. Second Test = First Test

The value of one (N) in the negative ranks indicates one student experiencing a decline in the score, with an equal mean rank and total rank of 3.00. On the other hand, eleven students experience an increase in value, with a mean rank of 6.82 and a total rank of 75.00.

Table 2. The Result of Statistical Test on the First and Second Tests

First - Second Tests	
Z	-2.846 <sup>b</sup>
Asymp. Sig. (2-tailed)	.004

a. Wilcoxon Signed Ranks Test, b. Based on negative ranks

The statistical test shows the value of Asymp. Sig. (2-tailed) of 0.004. The value is less than 0.05, meaning Ha is accepted. In other words, there are differences in scores following the implementation of input processing instructions. Thus, it can be concluded that learning with input processing instruction is effective.

**The Acquisition of Japanese Expressions of Giving and Receiving 授受表現 (Juju Hyougen)**

**A. The Result of Nonparametric Test on the Second and Third Tests**

The normality test on the third test reveals a normal distribution. However, since the result of the second test, as a comparison, is not normally distributed, a nonparametric test is then used to see the differences in scores.

Table 3. The result of Wilcoxon Nonparametric Test on the Second and Third Tests

		N	Mean Rank	Total Rank
Third Test - Second Test	Negative Ranks	6 <sup>a</sup>	7.67	46.00
	Positive Ranks	6 <sup>b</sup>	5.33	32.00
	Ties	0 <sup>c</sup>		
	Total	12		

a. Second Test < Third Test, b. Second Test > Third Test, c. Second Test = Third Test

Referring to Table 3, the negative and positive ranks of the nonparametric test present the same value, namely 6, indicating six students experienced a decline, and six students experienced an increase in score. The mean rank and total rank of the negative ranks are 7.67 and

46.00, respectively, while the mean rank and total rank of the positive ranks are 5.33 and 32.00, respectively.

Table 4. The Result of Statistical Test on the Second and Third Tests

Third Test - Second Test	
Z	-.550 <sup>b</sup>
Asymp. Sig. (2-tailed)	.582

a. Wilcoxon Signed Ranks Test, b. Based on positive ranks.

Observed from the result of the statistical test, the value of Asymp. Sig. (2-tailed) is 0.582, which is greater than 0.05. Therefore,  $H_a$  is rejected, meaning that input processing instruction does not affect increasing scores after two weeks.

**B. The Result of Nonparametric Test on the Second and Fourth Tests**

The result of the normality test on the fourth test is normally distributed. However, since the second test is not normally distributed, a nonparametric test is performed to observe a significant change in score between the fourth and the second test.

Table 5. The result of the Wilcoxon Nonparametric Test on the Second and Fourth Tests

		N	Mean Rank	Total Rank
Fourth Test - Second Test	Negative Ranks	5 <sup>a</sup>	7.00	35.00
	Positive Ranks	4 <sup>b</sup>	2.50	10.00
	Ties	3 <sup>c</sup>		
	Total	12		

a. Fourth Test <Second Test, b. Fourth Test >Second Test, c. Fourth Test = Second Test

Table 5 shows the values of negative and positive ranks obtained from the test on the second and fourth tests, namely 5 and 4, respectively. Unlike previous tests, ties obtain a value of 3. It means that five students experienced a decline in their scores, four experienced an

increase in scores, and three obtained the same score. The mean and total ranks of negative ranks are 7.00 and 35.00, respectively, while positive ranks show the mean and total ranks of 2.50 and 10.00, respectively.

Table 6. The Result of Statistical Test on the Second and Fourth Tests

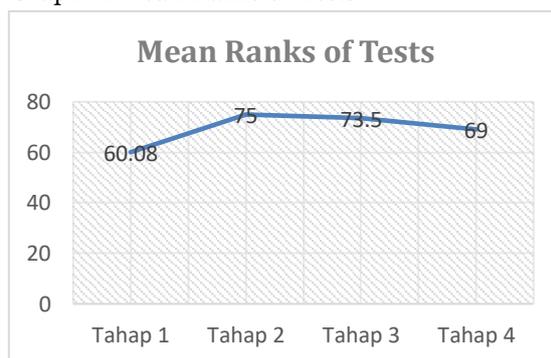
Fourth Test - Second Test	
Z	-1.482 <sup>b</sup>
Asymp. Sig. (2-tailed)	.138

a. Wilcoxon Signed Ranks Test, b. Based on positive ranks.

The value of Asymp. Sig. (2-tailed), as presented in Table 6, is 0.138 ( $p > 0.05$ ). It is then concluded that  $H_a$  is rejected and  $H_0$  is accepted. In other words, the results of the second and fourth tests do not show significant changes. Thus, input processing instruction does not affect the students' skills five weeks following the treatment.

Comparing the values of the statistical tests on the first and second tests, the second and third tests, and the second and fourth tests, it is revealed that input processing instruction does not affect students' skills two weeks and five weeks after the treatment. The comparison of the mean ranks of the first to fourth tests is presented in the following graph.

Graph 1. Mean Ranks of Tests



The respondents' scores improved in the second test, as seen from the mean rank of each test, demonstrating the value of input processing instruction. However, the third and fourth tests show a decline in the score, confirming the

respondents' tendency to see their skills decline over time.

## CONCLUSION

Based on the results of statistical tests, it is concluded that there are differences in scores between the first test prior to applying input processing instruction and the second test following the implementation of input processing instruction. Thus, learning the Japanese expression of giving and receiving by applying input processing instruction is effective.

Based on the results of the pre and post-test, statistics showed effective results. However, it did not survive the second and fifth weeks of testing after the activity. So it can be said that the learner does not acquire/acquire this expression. Because after the activity, students do not get exposure to input related to many more expressions. It is in line with Nakaue (2010), Nakaue (2012), Liu (2009), Shimada (2017), and Benati & Angelovska (2015).

However, comparing the scores between the first and second tests, the second and third tests, and the second and fourth tests prove that the respondents' scores decreased two weeks and five weeks after receiving treatment. So that it can be said that input processing instructions are only effective a few moments after the activity takes place but does not last until two or even five weeks after the activity. This shows that the input processing instruction cannot make the learner acquire the expressions of giving and receiving Japanese.

This result is not in line with Nakaue (2012), where the respondents experienced an increase in scores 60 days following the treatment, and in contrast, Field Shimada (2017) showed stable scores on the test given a month after the treatment. This difference in findings is presumably caused by the lack of opportunities for Indonesian students to actively and passively use these expressions and the need for continuous input after learning/treatment.

The frequent problems faced by students studying Japanese outside Japan or Japanese as Foreign Language (JFL) are the limited opportunity to use the language studied and the

lack of language input sources. Therefore, teachers must provide continuous learning by assigning application tasks using the grammar learned and encouraging students to add language input through learning materials available on the internet.

This study does not compare learning outcomes with classes focusing on output exercises without input processing instruction. Therefore, to further discover the effectiveness of learning with input-processing instruction, comparing classes that apply input-processing instruction with those that do not is necessary. In addition, this case study examines only one class.

As the findings may differ in other classes with other conditions, it is also necessary to examine several classes to observe the effectiveness of learning using input processing instruction. Finally, according to DeKeyser & Sokalski (2001) in Nakaue (2010), the effectiveness of input processing varies depending on the level of complexity of the grammatical structure studied. Therefore, to ensure the feasible implementation of the findings of this study, it is crucial to identify which grammar is effective or ineffective to be taught using the input processing instruction (Nakaue, 2010).

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