

Students' Motivation, Concentration and Vocabulary Mastery on Listening Skill Performance towards the Sustainable Development Goals (SDGs)

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ABSTRACT

The purpose of this research is to investigate whether there is a direct correlation between learning motivation, concentration and vocabulary variables and listening comprehension skill in the Japanese language. Research was conducted at Riau University to students majoring in the Japanese language. The research makes use of path analysis. Data collection was carried out by using three instruments and one Japanese listening comprehension test; (1) test instrument of learning motivation, (2) test instrument of learning concentration, and (3) test instrument of vocabulary acquisition or mastery and Japanese listening comprehension test. As the sampling technique used was total sampling, the population in this study was the whole 52 fourth semester students at Riau University. The hypothesis test shows -0.311 for correlation coefficient between learning motivation and listening comprehension skill, 0.309 for correlation coefficient between concentrations and listening comprehension skill, 0.281 for correlation coefficient between vocabulary mastery and listening comprehension skill, 0.287 for correlation coefficient between learning motivation and vocabulary mastery. Whereas the correlation coefficient between concentration and vocabulary is 0.410 and the correlation coefficient between motivation and concentration is 0.451. The findings can be used as a theoretical basis to do other research at the Japanese Language Department throughout Indonesia in order to achieve the Sustainable Development Goals. The findings can also be used as a reference to develop similar research in another place, especially when it has similar problems and conditions in order to achieve the Sustainable Development Goals.

Key words : Concentration, Learning motivation, Listening skill, Vocabulary mastery.

Introduction

In Indonesia, teaching Japanese is more complex than teaching another foreign language. This is espe-

cially because students have to deal with Kanji writing system, which is completely different from Latin alphabet adapted by Indonesian people. Like other languages, listening is the very basic language skill

as it is frequently integrated with other skills, such as speaking, reading and writing skills (Nasr, 1995). Apparently, most communication requires human interaction involving listening, and this also takes place in a classroom. When a teacher writes on the board, she must explain it to her students, and the students have to listen carefully to understand the explanation, and then the students may speak or ask for clarification.

Learning is one of classroom activities requiring motivation, which can be an internal factor in teach (Pinner, 2019). A teacher needs to motivate students, so that they will be interested in their learning (Middleton and Perks, 2016). Unfortunately, motivating student does not always succeed. Instead of listening carefully, students do not show their interest or enthusiasm, and they become lazy. This was an example of a situation that happened to students majoring in Japanese Language of Teacher's Training Program at Riau University. The students at Riau University was lack of motivation in learning Japanese. Students did not pay attention to their teacher and could not maximize their learning because the teacher herself was unable to motivate them although she had tried hard.

Ideally, during classroom practices, in order to comprehend what the students hear, students must be able to concentrate, so that their focus is on the information needed to answer questions. It is highly likely that students need more vocabulary too. It is because vocabulary size is the strongest predictor on language proficiency and vocabulary depth proved to be a more powerful predictor of listening comprehension score (Farvardin and Valipouri, 2017). In learning Japanese, vocabulary is called *goi*, which is a collection of words related to certain topics discussed in a chapter. It is true that mastering vocabulary is essential. Based on the observation of 4th semester students from Japanese Language major at Riau University, it was obvious that students did not have enough motivation and concentration in their learning. In addition, they were not able to acquire the vocabulary.

A finding from a journal published by Rafiul Islam Shazu in 2014 "Use of Literature in Language Teaching and Learning: A Critical Assessment" suggests that for some people, vocabulary is a reference for language learning. However, for some students, vocabulary acquisition is a key to improve their motivation while learning English. The difference between the research in this article and the research

at Riau University is because Japanese literature is used as medium of instruction during learning process, but it is similar with the current research in Riau because there are variables X3 and X1 about vocabulary acquisition and motivation in foreign language learning.

From a journal published by Yo Hamada in 2011 "Improvement of Listening Comprehension Skills through Shadowing with Difficult Materials" can be concluded that a text that is one level above students' ability helps students to improve listening comprehension skill, and tackle students' problems during short term listening comprehension practice. The research in this article uses training and comprehension variables. This article is similar to the current research in Riau because Y variable in this article is about teaching listening comprehension skill.

Research through path analysis on listening comprehension in Japanese language related to learning motivation, concentration, and vocabulary mastery or acquisition has not been conducted thoroughly before. For this reason, the current study is presented. The researcher is concerned about students' low motivation and lack of effort to improve their language without relying heavily on the language program run by Riau University. Apparently, inability to acquire vocabulary could be troublesome. With limited vocabulary and lack of concentration, students were unable to comprehend a conversation they heard. Low motivation made students unable to do listening comprehension practices successfully too. As a result, they could not understand anything when they thought a conversation they heard was too fast. Moreover, it was difficult for them to comprehend a long passage. Furthermore, students were unable to identify the right meaning when it came to listening to high and low intonation during conversation.

Research Methods

The subject in this research was the whole 52 students from semester 4 taking Japanese language major at Riau university. The research made use of path analysis, and the data collection was done by using 3 instruments and a listening comprehension test: (1) test instrument of learning motivation, (2) test instrument of learning concentration, and (3) test instrument of vocabulary mastery and Japanese listening comprehension test. A test booklet was distributed to each student to measure Japanese listen-

ing comprehension skill, and students' progress sheet was used to see their ability. Data collection was done through research instruments as follow: (a) organizing variable indicators in this research, (b) organizing description of instrument, (c) testing the instruments, (d) doing validity test and reliability test of instruments. As types of variable have been selected according to the research being carried out, data was collected and analyzed by using instruments: (1) Japanese listening comprehension test (Y) students' progress sheet to see their listening comprehension skill, (2) learning motivation instrument (X1) sheets of questionnaire, and Likert scale to organize the questionnaires (3) measuring concentration (X2) using sheets of questionnaire, and organize them into Likert scale (4) measuring vocabulary acquisition (X3) using sheets of questionnaire, and organize them into Likert scale.

Results

The description of the results in this research is intended to give general pictures of data distribution, including the frequency. The data is analyzed by using descriptive statistic method, such as minimum and maximum scores, range, average, standard deviation, and variants. The data about students' results in the research is summarized in Table 1. Based on the results from the Japanese listening comprehension skill (Y), the minimum score is 30, the maximum score is 100, and the score range is 70. After the data has been statistically processed, it turns out that the average score is 79.23, the standard deviation is 17.360 and the variant is 301.357. Results from

total sampling of 52 students based on listening comprehension skill in Japanese language (Y) within the group above the average is 21 students (82.69%), the group below average is 4 students (7.69%), and 5 students (9.62%) is the group with average scores.

Students' motivation (X1)

The results of learning motivation (X1) show that the lowest score is 85, and the highest score is 120, so the score range is 35. After the data has been statistically processed, the average score is 105.08, the standard deviation is 10.299 and the variant is 106.072. Results from total sampling of 52 students based on learning motivation (X1) within the group above average scores is 29 students (55.77%), the group below average is 6 students (11.54%), and 17 students (32.69%) belong to average group.

Concentration (X2)

The results on students' concentration (X2) indicate that the lowest scores are 45, and the highest scores is 90, so the range is 45. After the data has been statistically processed, the average score is 71.98, the standard deviation is 9.803 and the variant is 96.098. Results from total sampling of 52 students based on concentration (X2) within the group above average scores is 31 students (59.62%), the group below average is 14 students (26.92%), and 7 students (13.46%) belong to average group.

Vocabulary Acquisition (X3)

The results on students' vocabulary (X3) indicate that the lowest scores is 85, and the highest scores is 150, so the range is 65. After the data has been statis-

Table 1. Students' results summary

Statistic	Variable			
	X ₁	X ₂	X ₃	Y
Number of Samples (n)	52	52	52	52
Maximum scores	120	90	150	100
Minimum scores	85	45	85	30
Range	35	45	65	70
Average (X)	105.08	71.98	120.58	79.23
Standard deviation (s)	10.299	9.803	15.689	17.360
Variant (s ²)	106.072	96.098	246.131	301.357

Notes:

X₁: Learning motivation

X₂: Concentration

X₃: Vocabulary mastery or acquisition

Y: Japanese listening comprehension skill (Y)

tically processed, the average score is 120.58, the standard deviation is 15,689 and the variant is 246.131. Results from total sampling of 52 students based on vocabulary (X3) within the group above average scores is 37 students (71.16%), the group below average is 8 students (15.38%), and 7 students (13.46%) belong to average group.

Tests requirement before doing analysis

In order to see whether the data obtained in each variable is normal or not, a normality test must be carried out by using liliefors test. If the value of (L_0) is higher than the value of variables in a group (L_t), the data is considered as the one with normal distribution. On the other hand, (L_0) is the gap between the highest absolute value with the probability from the whole proportion of raw data. The result of normality test can be presented conveniently after being processed by liliefors with significance $\alpha = 0.05$.

Normality test of X_1

Based on results of liliefors normality test, the value of L_0 is 0.0823. The critical value of L_0 in the liliefors table for sampling (n) =52 with $\alpha=0.05$ results in value of 0.122. When it is compared with L_0 after calculation, in fact it is lower than L_0 in the table, so that it can be concluded that X_1 normality test results in normal distribution.

Normality test of X_2

Based on results of liliefors normality test, the value of L_0 is 0.1002. The critical value of L_0 in the liliefors table for sampling (n) =52 with $\alpha=0.05$ results in value of 0.122. When it is compared with L_0 after calculation, in fact it is lower than L_0 in the table, so that it can be concluded that X_2 normality test results in normal distribution.

Normality test of X_3

Based on results of liliefors normality test, the value of L_0 is 0.0754. The critical value of L_0 in the liliefors table for sampling (n) =52 with $\alpha=0.05$ results in value of 0.122. When it is compared with L_0 after calculation, in fact it is lower than L_0 in the table, so that it can be concluded that X_3 normality test results in normal distribution.

Normality test of Y

Based on results of liliefors normality test, the value of L_0 is 0.1171. The critical value of L_0 in the liliefors table for sampling (n) =52 with $\alpha=0.05$ results in

value of 0.122. When it is compared with L_0 after calculation, in fact it is lower than L_0 in the table, so that it can be concluded that Y normality test results in normal distribution.

Linearity of regression test significance of regression test

The requirement of linearity is met if F value calculated < F value table. However, significance of regression meets the requirement if F value calculated > F value table. Correlation coefficient value is the calculation of scores stating how strong the degree of correlation is. A correlation is considered strong enough if the degree of significance from t value > t Table.

Test of (X_1) to (Y)

Based on the result of linear regression test, F value is 0.981, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_1 to Y indicates normal distribution. Whereas from significance of regression test, F value is 4.03. If we compare F value calculated with F value table, the F value calculated is higher than with F value table. It can be concluded that significance of regression test X_1 to Y shows normal distribution.

Test of (X_2) to (Y)

Based on the result of linear regression test, F value is -13.158, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_2 to Y indicates normal distribution. Whereas from significance of regression test, F value is 5.2668. If we compare F value calculated with F value table 4.03, the F value calculated is higher than with F value Table. It can be concluded that significance of regression test X_2 to Y shows normal distribution.

Test of (X_3) to (Y)

Based on the result of linear regression test, F value is -0.525, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_3 to Y indicates normal distribution. Whereas from significance of regression test, F value is 4.2867. If we compare F value calculated with F value table 4.03, the F value calculated is higher than

with F value table. It can be concluded that significance of regression test X_3 to Y shows normal distribution.

Test of (X_1) to (X_3)

Based on the result of linear regression test, F value is -15.904, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_1 to X_3 indicates normal distribution. Whereas from significance of regression test, F value is 4.4743. If we compare F value calculated with F value table 4.03, the F value calculated is higher than with F value table. It can be concluded that significance of regression test X_1 to X_3 shows normal distribution.

Test of (X_2) to (X_3)

Based on the result of linear regression test, F value is -15.928, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_2 to X_3 indicates normal distribution. Whereas from significance of regression test, F value is 10.1014. If we compare F value calculated with F value table 4.03, the F value calculated is higher than with F value table. It can be concluded that significance of regression test X_2 to X_3 shows normal distribution.

Test of (X_2) to (X_3)

Based on the result of linear regression test, F value is -15.928, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_2 to X_3 indicates normal distribution. Whereas from significance of regression test, F value is 10.1014. If we compare F value calculated with F value table 4.03, the F value calculated is higher than with F value table. It can be concluded that significance of regression test X_2 to X_3 shows normal distribution.

Test of (X_1) to (X_2)

Based on the result of linear regression test, F value is -15.893, by which the value from the table is 2.8024. Compared with F value calculated, in fact it is lower than F table, so it can be concluded that linear regression test of X_1 to X_2 indicates normal distribution. Whereas from significance of regression test, F value is 12.7510. If we compare F value calculated

with F value Table 4.03, the F value calculated is higher than with F value Table. It can be concluded that significance of regression test X_1 to X_2 shows normal distribution.

Discussion

The hypothesis indicates significant correlation between learning motivation, concentration and vocabulary acquisition. This is based on hypothesis tests, that the variables are proven simultaneously or individually correlates with Japanese listening comprehension skill. Structural equation of path analysis between learning motivation, concentration, vocabulary acquisition and Japanese listening comprehension skill is $X_3 = 0,039 X_1 + 0.003 X_2 + 0.819 [\hat{.}]$. The degree of contribution from learning motivation and concentration to vocabulary acquisition is 18.10%. Whereas 81.90% is residual of other variables apart from variables of learning motivation and concentration.

Indirect contribution of learning motivation variable (X_1) to vocabulary acquisition (X_3) is $0.287^2 \times 100\% = 8.24\%$. Variable of concentration (X_2) indirectly contributes as much as $0.451^2 \times 100\% = 20.34\%$. The indirect correlation between concentration and vocabulary acquisition is $0.410 \times 100\% = 16.81\%$. Learning motivation and concentration correlates with vocabulary acquisition as much as $(0.287 \times 0.451 \times 0.181) \times 100\% = 2.34\%$. Total correlation (both directly and indirectly) between learning motivation and vocabulary acquisition is $8.24\% + 2.34\% = 10.58\%$. Concentration directly contributes to vocabulary acquisition as much as $20.34\% + 2.34\% = 22.68\%$. Whereas learning motivation directly and indirectly contributes to concentration as much as $16.81\% + 2.34\% = 19.15\%$.

The findings show that firstly, in order to improve vocabulary acquisition, students majoring in Japanese language should have good learning motivation and concentration, which contribute 18,10% to increase vocabulary acquisition. It was the research result conducted by MacWhinnie and Mitchell (2017) stated the motivation was a strong indicator of motivation in foreign languages. Secondly, it confirms the hypothesis test that there are significant and simultaneous correlations between learning motivation, concentration, vocabulary acquisition and Japanese listening comprehension skill. The results of hypothesis are significant, for both simultaneously and individually. Learning

motivation, concentration and vocabulary acquisition significantly correlate with Japanese listening comprehension skill. The structural equation of path analysis of learning motivation, concentration and vocabulary acquisition to Japanese listening comprehension skill is $Y = 0.025 X_1 + 0.026 X_2 + 0.044 X_3 + 0.595 \varepsilon_1$

The simultaneous contribution degree of learning motivation, concentration and vocabulary acquisition to Japanese listening comprehension skill is 40.50%. While 59.50% is residual resulting from other variables apart from learning motivation, concentration and vocabulary acquisition. Other variables which can correlate with Japanese listening comprehension skill are some factors influencing the process of effective and efficient teaching, such as: physical and physiological factors, experience, attitudes, and environment. Indirect contribution of learning motivation (X_1) to Japanese listening comprehension skill (Y) is $-0.311^2 \times 100\% = 9.67\%$. Variable of concentration (X_2) directly contributes $0.309^2 \times 100\% = 9.55\%$. On the other hand, variable of vocabulary acquisition (X_3) directly contributes $0.281^2 \times 100\% = 78.9\%$. The correlations between motivation, concentration, vocabulary acquisition and Japanese listening comprehension is $(-0.311 \times 0.309 \times 0.405) \times 100\% = -3.89\%$.

The findings show that in order to improve Japanese listening comprehension skill, students should have learning motivation, concentration and vocabulary acquisition as the three of them contribute 40.50% to increase Japanese listening comprehension skill in order to achieve the Sustainable Development Goals.

Conclusion

Comprehension skill (Y). It can be concluded that: (1) There is positive correlation between learning motivation (X_1) and Japanese listening comprehension skill (Y) (2). There is positive correlation between concentration (X_2) and Japanese listening comprehension skill (Y). (3). There is positive correlation between vocabulary acquisition (X_3) and Japa-

nese listening comprehension skill (Y). (4). There is positive correlation between learning motivation (X_1) and concentration (X_2). (5). There is positive correlation between learning motivation (X_1) and vocabulary acquisition (X_3). (6). There is positive correlation between learning motivation concentration (X_2) and vocabulary acquisition (X_3). In summary, Japanese listening comprehension skill can be improved through learning in order to achieve the Sustainable Development Goals.

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References

- Djiwandono, S. 2011. *Tes Bahasa Pegangan Bagi Pengajar Bahasa*. Bandung: Alfabeta.
- Farvardin, M. and Valipouri, L. 2017. Probing the Relationship between Vocabulary Knowledge and Listening Comprehension of Iranian Lower-Intermediate EFL Learners. *International Journal of Applied Linguistics and English Literature* 6(5): 273-278.
- Frederick J. Mc. Donald. 1959. *Education Psychology*. Tokyo: Overseas Publications Ltd.
- Hamada, Y. 2011. Improvement of Listening Comprehension Skills through Shadowing with Difficult Materials. *The Journal of Asia Tefl*. 8(1): 139-162.
- Mac Whinnie, S. G. and Mitchell, C. 2017. English classroom reforms in Japan: A study of Japanese university EFL student anxiety and motivation. *Asian. J. Second. Foreign. Lang. Educ.* 2 : 7.
- Middleton, M. and Perks, K. 2016. *Motivation to Learn*. Thousand Oaks, California: Corwin.
- Nasr, R. 1995. *Whole Education*. Lanham: University Press of America
- Pinner, R. 2019. *Authenticity and teacher-student motivational synergy: A narrative of language teaching*. Abingdon, Oxon: Routledge
- Riduwan, E. A. K. 2013. *Cara Menggunakan dan Memaknai Analysis Path (Path Analysis)*, Bandung: Alfabeta.
- Shazu, R. I. 2014. Use of Literature in Language Teaching and Learning: A Critical Assessment. *Journal of Education and Practice*. 5 (7): 29-35