The affecting factors of willingness to communicate of inside classroom, outside classroom, and digital setting on Japanese language students

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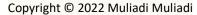| Article History	Abstract
	The present study investigates the variables believed to relate to and affect Japanese language students' willingness to communicate in Japanese in online learning situations. This study was a quantitative study that used questionnaire data as the main data distributed through the Google Form platform. A total of 81 Japanese language students from three universities participated. The findings showed that anxiety negatively correlated with willingness to communicate inside the classroom. Meanwhile, self-rating and virtual intercultural experiences positively correlated with willingness to communicate inside the classroom, outside the classroom, and in digital settings. The regression analysis showed that language anxiety, self-rating, and virtual intercultural experiences variables had a minor effect on willingness to communicate inside the classroom (19%) and digital setting (22.5 %). The results of this study indicate that besides the factors of anxiety, self-rating, and virtual intercultural experience, other variables are considered to be more contributing to how Japanese language students have the will to communicate in the target language.

	Abstrak
	Faktor-faktor yang mempengaruhi kesediaan berkomunikasi pada pemelajar bahasa Jepang Penelitian ini bertujuan untuk mencari variabel yang dianggap berhubungan dan mempengaruhi kesediaan berkomunikasi dalam bahasa Jepang pembelajar bahasa Jepang dalam situasi pembelajaran daring. Penelitian ini adalah penelitian kuantitatif dengan kuisioner sebagai data utama yang didistribusikan melalui Google Form. Sebanyak 81 mahasiswa bahasa Jepang dari tiga universitas berpartisipasi dalam penelitian ini. Hasil penelitian menunjukkan bahwa kecemasan berkorelasi negatif dengan kesediaan berkomunikasi di dalam kelas. Sementara itu, penilaian diri dan pengalaman lintas budaya virtual berkorelasi positif dengan kesediaan berkomunikasi di dalam kelas, di luar kelas, maupun dalam konteks digital. Hasil analisis regresi menunjukkan bahwa kecemasan, penilaian diri, dan pengalaman lintas budaya virtual memberikan efek yang kecil untuk kesediaan berkomunikasi di dalam kelas (19%) dan pada konteks digital (22.5 %). Hasil penelitian ini mengindikasikan bahwa selain faktor kecemasan bahasa, penilaian diri, dan pengalaman lintas budaya virtual, ada variabel lain yang dianggap lebih berkontribusi bagaimana pemelajar bahasa Jepang bersedia berkomunikasi dalam bahasa target.

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1   Introduction

In second or foreign language learning, making students competent to communicate is one of the main goals that teacher strives to achieve. However, achieving communication skills is a complex process that involves dynamic interactions between the learning context and student's psychology (Macintyre et al., 2011). Speaking or producing the target language verbally in the classroom is one of the activities considered to train communication skills. As emphasized in the output hypothesis (Swain, 2005), producing language is as important as input that can explain success in learning a second language. However, getting the students to speak or produce the target language is one of the difficulties experienced by the teachers. The teachers try and struggle to get their students to speak in the target language being studied. But still, it is not an easy thing to make the students speak. In second language research, the readiness or willingness of learners to communicate is referred to as willingness to communicate (WTC) which according to Denies et al. (2015) is a concept that follows 'Swain's output hypothesis.

Macintyre et al. (1998) use the term WTC to define the readiness to come into discourse at a certain time with one or more specific people. They further said that the WTC is a stable tendency to speak in various situations and is considered a personality trait. Ellis (2004) also argues that WTC depends on the personality and intrinsic motivation of the learner. The construction of WTC in a second or foreign language involves many linguistic and psychological factors, such as linguistic confidence, desire to be associated with someone, interpersonal motivation, intergroup attitudes, motivation and scene, parameters of social situation, communication skill and experience, and various personality traits (Dörnyei, 2001).

In second language learning, WTC is a variable that is considered an important factor influencing second language communication behavior (Lee & Lee, 2020) and can be said to be the main goal or the most central goal of second language learning (Dörnyei, 2001). It is also considered that WTC has a positive effect on the process of acquiring a second language. As Ellis (2004) stated, learners with a high level of willingness to communicate tend to benefit more from the learning process through a communicative approach. Students who have high willingness to communicate also tend to interact more often in a second language (Clément et al., 2003) and tend to take advantage of opportunities to practice communication using the target language (Peng & Woodrow, 2010). Several studies related to WTC in foreign language learning will be described below.

- *WTC and Language Anxiety*

Anxiety is considered as one of the affective factors that interfere with and hinder the learning and performance of a second language (Horwitz, 2010). MacIntyre and Gregersen (in (Bosmans & Hurd, 2016) state that language anxiety includes a variety of negative emotions such as worry and fear and is triggered by students having to perform in a second language. One element of language anxiety is communication fear. According to Brown (2008), communication fear arises due to the inability of language learners to adequately express thoughts and ideas (in the target language). Zheng (2008) states that anxiety reduces the quality of communication of students who feel anxious and tend to avoid communicating activities.

Lee and Lee (2020) reported that students having high motivation and low levels of anxiety have a high WTC inside the classroom. Meanwhile, Denies et al. (2015) reported that language anxiety negatively correlated with WTC. It means that learners who have high level of anxiety tend to have

low level of WTC or vice versa. Furthermore, they state that the more anxious students are, the more likely they underestimate their communicative competence.

- *WTC and self-rating*

Self-rating or self-assessment generally refers to the perception of how we see our abilities, attitudes, attributes, beliefs, and expectations (Woolfolk, 2016). Academic self-concept includes perceived abilities (e.g. I am good at science and others) and feelings or attitudes (e.g. I like math and so on). Furthermore, according to Woolfolk, there is a relationship between specific self-concept and achievement in learning. Cristina Lahuerta (2014) found that there was a positive relationship between self-assessment of communication skills and WTC. It means that the higher the learner judges himself to be able to communicate, the higher its WTC.

- *WTC and virtual intercultural experience*

The advances in information and communication technology allow everyone to have broad opportunities to interact with foreigners or other countries with different cultural backgrounds. Through social media, such as *Facebook*, *Twitter*, *Instagram*, and other social media, intercultural experiences become very easy to do. These media affect people's understanding in the process of human communication, especially people from different cultural and ethnic groups (Chen, 2012). This form of influence is also experienced by foreign language learners who study foreign language and culture of the language.

Regarding virtual intercultural experience, Reinders and Wattana (2015) studied how online games affect the communication of Thai English learners. They found that playing online games was able to increase 'learners' WTC. Chen and Yang (2014) studied how language learning is carried out with intercultural experiences supported by technology. They found that learners felt their intercultural understanding increased, thus improving their language skills. Lee and Lee (2020) identified that Korean English learners who have the intensity of virtual intercultural interaction also have a high WTC.

- *Present Study*

Several studies on WTC show that the majority of the studies are face-to-face learning situations and carried out on English learners. However, the study of WTC in the online learning context, particularly on Japanese language students, is still limited. Therefore, the study of WTC in an online learning context is relevant to conduct. This study aims to investigate: 1) the relationship of language anxiety, self-rating, and virtual intercultural experiences with WTC of online Japanese students; and 2) the effect of language anxiety, self-rating, and virtual intercultural experiences on online Japanese language 'learners' WTC in Japanese context.

2   Methods

2.1   Participants

The participants were 81 Japanese language students from 3 universities. University A: 43, University B: 24, University C: 14) with the age range of 18-28 years (mean: 20.65) consisting of 27 males and 54 females. The 'participants' Japanese language skills were seen from the JLPT (Japanese Language Proficiency Test) ranging from N1 (the highest proficiency level) and N5 (the lowest level one). The participants were Japanese language students who carried out fully online Japanese language learning from the odd semester of 2020 to the even semester of 2021 or since the

outbreak of Covid-19 in Indonesia. The learning was carried out using supporting platforms such as *Zoom* and *Google Meet*.

2.2 The Instruments

The instruments in this study were divided into 4 parts. Part 1 was a classroom language anxiety scale adopted from the Japanese Language Anxiety Scale (JLAS) developed by Motoda (2000). The scale consisted of 9 items focusing on speaking anxiety in the classroom which was then modified for online classroom situations. For example, the word ''in 'class' was changed to ''in online 'class' and so on. Each item was scored on a 5-point Likert scale, ranging from 5 points (Strongly Agree) to 1 point (Strongly Disagree). Part 2 was a scale for self-rating of Japanese speaking ability which was adopted from the Can-do Scale developed by Kitano (2001). This scale consisted of 14 items to measure the ability to speak Japanese from basic level to advanced level. Each item of these 14 items was scored on a 5-point Likert scale ranging from 1 for ''Very 'Difficult' to 5 for ''Very 'Easy'.

Part 3 was a scale for virtual intercultural experiences adopted from Lee and Lee (2019). The scale consisted of 7 items. Each item was scored on 5-point Likert scale ranging from 1 for '''Never' to 5 for ''Fairly 'Often'. Part 4 was the willingness to communicate (WTC) scale which was also adopted from Lee and Lee (2020). This scale consisted of 3 parts. Part 1 focused on WTC inside the classroom which consisted of 4 items. Part 2 was the WTC outside the classroom which consisted of 3 items. Part 3 was WTC in digital settings consisting of 4 items. The total items of WTC were 11 items. All items of WTC scale were modified in the Japanese context. The measurement of this scale used 5 levels from a score of 1 for ''Definitely Not 'Willing' to a score of 5 for ''Definitely 'Willing'. The total items for all variables were 41 items.

Before distributing the questionnaires to the participants, the validity and reliability of the instrument had been conducted. The validity test used the *Pearson correlation product-moment* with the probability of 0.05 ($p < 0.05$). Based on the results of the validity test, 9 items of the language anxiety variable were valid with sig. (2-tailed) was less than 0.05. Meanwhile, the self-rating variable consisting of 14 items, 2 items, namely the item ''I can pronounce the current date (month, day, year) in 'Japanese' (sig. 2-tailed: 0.07 > 0.05) and the item ''I can introduce themselves in social situations, and using appropriate greetings and expressions of 'reciprocity' (sig. 2-tailed: 0.62 >0.05) was declared invalid. Therefore, the self-rating items used were only 12 items. Then, the virtual intercultural experience variable consisting of 7 items were all valid (sig. 2-tailed < 0.05). For the variable of WTC, which consisted of 3 categories; all of them were valid (sig. 2-tailed < 0.05). Based on the results of the validity test, the number of items used in this study was 39 items.

Table 1 The reliability test results

No	Variabel	Reliabilitas (*Cronbach`s Alpha*)
1	Language anxiety	0.859
2	Self-rating	0.889
3	Virtual intercultural experiences	0.778
4	Willingness to communicate:	
	a. Inside the classroom	0.776
	b. Outside the classroom	0.730
	c. Digital settings	0.855

The consistency reliability of the items in language anxiety, self-rating, virtual intercultural experience, and WTC as measured by Cronbach's alpha were 0.859 for language anxiety, 0.889 for self-rating, 0.778 for virtual intercultural experience, 0.776 for WTC inside the classroom, 0.730 for WTC outside the classroom, and 0.855 for WTC digital settings.

George and Mallery (2020) suggested that the reliability coefficient > 0.70 was acceptable. Therefore, based on this suggestion, the reliability coefficient of all variables in this study was fairly reliable.

2.3   Data Collection and Analysis Techniques

Due to the pandemic situation, all data collection was conducted online using *Google Forms*. Before the questionnaires had been distributed to respondents, the researcher explained the purpose of the study and the procedures for filling out the questionnaire. To avoid unanswered items, all items in the questionnaire were set to 'required' mode. By setting this mode, the respondents were not able to submit or send a questionnaire until all items were filled in completely.

Correlation analysis was used to find the relationship between variables. Meanwhile, regression analysis was used to determine the effect of the independent variable on the dependent variable. Regression analysis was also used to determine the variables that were predictors for the dependent variable. Correlation and regression analysis were carried out using SPSS (Statistical Package for the Social Sciences) version 26. To see the strength of the relationship between variables, this study used the correlation coefficient category proposed by Salkind (2017).

Table 2 Correlation coefficient category according to Salkind (2017)

Correlation Coefficient	Interpretation
0.8 - 1.0	Very strong relationship
0.6 – 0.8	Strong relationship
0.4 – 0.6	Medium relationship
0.2 – 0.4	Weak relationship
0.0 – 0.2	Very Weak relationship or no relationship

3   Results and Discussion

3.1   Correlation analysis

The results of the correlation analysis of among anxiety, self-rating, and virtual intercultural experience with WTC inside the classroom, WTC outside the classroom, and WTC digital settings are shown in Table 3.

Table 3 The results of correlation analyses

No	Variable	WTC inside	WTC outside	WTC digital
1	Anxiety	-0.433**	-0.210	-0.115
2	Self-rating	0.319**	0.267*	0.349**
3	Virtual intercultural experiences	0.412**	0.295**	0.482**

*$p < 0.05$, ** $p < 0.01$*

Table 3 shows that anxiety is significantly correlated with the WTC inside the classroom, but not significantly with WTC outside the classroom and WTC in digital settings. It means that if anxiety increases, WTC inside the classroom will decrease or vice versa. Meanwhile, the self-rating variable is positively correlated with all of WTC scales, WTC inside the classroom, WTC outside the classroom, and WTC digital settings. It means that if self-rating increases, the WTC also increases. If the value of the correlation coefficient between self-rating and the three scales of WTC are below 0.3, it can be identified that the relationship was weak. The correlation analyses also show that virtual intercultural experience is positively correlated with WTC inside the classroom, WTC outside the classroom, and WTC digital settings. It means that if the value of the virtual intercultural experiences increases, the WTC will also increase. Correlation strength varies from weak to moderate. It is 0.412 for virtual intercultural experience and WTC inside the classroom, and 0.482 for virtual intercultural experiences and WTC digital settings. These values are categorized in the medium category. Meanwhile, virtual intercultural experiences and WTC outside the classroom are the lowest, whose score reaches 0.295 (weak).

3.2 Regression Analysis

First, regression analysis is conducted for anxiety, perception, and virtual intercultural experience with WTC inside the classroom. Based on the results of the regression analysis in Table 4, it obtains sig. $0.00 < 0.05$ (significant) with *Adjusted R Square* = 0.190. As shown in Table 4, *Adjusted R Square coefficient* is 0.190. It indicates that the model is not good or very unstable to predict independent variable because the percentage of the influence of the three variables on WTC inside the classroom is only 19%.

Table 4 The results of regression analysis of anxiety, self-rating, and virtual intercultural experience on WTC inside the classroom

No.	Independent variable	Unstandardized coefficients B
1	Anxiety	-0.146*
2	Self-rating	-0.053
3	Virtual intercultural experience	0.113
4	Sig.	0.000
5	*Adjusted R Square*	0.190

*p < 0.05

Table 5 The results of regression analysis of anxiety, self-rating, and virtual intercultural experience on WTC outside the classroom

No.	Independent variable	Unstandardized coefficients B
1	Anxiety	-0.006
2	Self-rating	0.004
3	Virtual intercultural experience	0.067
4	Sig.	0.093
5	*Adjusted R Square*	0.044

Another regression analysis (Table 5) shows that anxiety, self-rating, and virtual intercultural experiences simultaneously do not affect WTC outside the classroom (sig. 0.093 > 0.05). Thus, it is suggested that anxiety, self-rating, and virtual intercultural experiences are not predictors for WTC outside the classroom.

The results of regression analyses of anxiety, self-rating, and virtual intercultural experience on WTC digital settings obtain a significance of 0.00 < 0.05 (significant) with *Adjusted R Square* = 0.225. It means that percentage of the influence of the three variables on the WTC digital settings is 22.5 %. This indicates that the model is not good to predict WTC digital setting variable.

Table 6 The results of regression analyses of anxiety, self-rating, and virtual intercultural experiences on WTC digital settings

No.	Independent variable	*Unstandardized coefficients B*
1	Anxiety	0.030
2	Self-rating	0.066
3	Virtual intercultural experience	0.202**
4	Sig.	0.000
5	*Adjusted R Square*	0.225

***p < 0.01*

In this study, the results regarding the negative correlation between anxiety and WTC inside the classroom corroborate previous findings (Denies et al., 2015). One element of language anxiety is fear of communication. The fear of communication cannot be interpreted that the learners are not willing to communicate. However, it is considered that the fear appeared will make language learners reluctant and avoid communicating. In other words, it can be interpreted that anxiety is associated with the 'learner's WTC. In the present study, there is a relationship between anxiety and WTC inside the classroom. It means that learners who experience anxiety may be more reluctant to communicate in the classroom using the target language. Therefore, it suggests that anxiety has an unfavorable impact on the willingness of learners to use the target language in the classroom. These results corroborate the statement from Zheng (2008) that students who feel anxious tend to avoid communicating, especially in the context of online learning, where many interactions are carried out using conference applications such as *Zoom* and *Google Meet*. When using these applications while studying, student who talks during class activities seem to get the full attention of teachers and other students, so it is considered to create a sense of reluctance to speak in the online classroom.

Meanwhile, WTC outside the classroom and WTC in the digital settings are not associated with anxiety. This result suggests that learners who experience anxiety in language learning do not make them avoid speaking activities outside the classroom either in a face-to-face context or in the virtual setting. We argue that the different environment inside and outside the classroom is considered to affect how learners try to use the target language. In the classroom, besides the other learners, some teachers may be considered monitoring the correctness of the target language that the learners use. In other words, learners are afraid of negative evaluations from peers or teachers. Learners who are afraid of negative evaluations usually withdraw from classroom activities. Therefore, the WTC tends to be weak. In the environment outside the classroom (and digital setting too), there are no other learners or teachers, so the learners feel they will not be evaluated when

using the target language. Student can be free to communicate both oral or written with others without fear of being evaluated.

In second language learning, self-rating or self-assessment is considered an important variable. In this study, self-rating is positively correlated for all categories of WTC. It means that the students who assess their ability of target language have WTC. This finding supports Cristina Lahuerta's findings (2014). Self-rating of speaking ability is related to their confidence in assessing the extent to which they assess their ability. Students who consider or judge themselves to be capable in the target language are considered to have good confidence in their target language abilities.

Virtual intercultural experiences positively correlate with all of WTC categories. it suggests that learners who are intensely engaged in intercultural interactions virtually have a better level of WTC in all situations, inside the classroom, outside the classroom, and in digital settings. The result supports Reinders and Wattana's findings (2015). They found that virtual interaction, using games interaction, was able to increase 'learners' WTC using the target language. The finding of this study also corroborates what Lee and Lee (2020) found that students who are intensely engaged in virtual intercultural interaction have high WTC. In this study, although the interview is not conducted, it is considered that the COVID-19 pandemic conditions, which unfortunately limit people from doing activities outside, reduce their intensity to communicate with speakers of the target language (Japanese people) or with colleagues who can use the Japanese language. It is considered to make students aware that one of the efforts that could help them communicate is to interact virtually. When they have the awareness to interact virtually, it means that they are ready to communicate using the target language. The results of the analysis also show that virtual interaction experience is more strongly correlated with willingness to communicate in a virtual setting than in the context of inside and outside the classroom. It means that the more often the learner interacts virtually, the higher his or her willingness to communicate in the virtual setting. It indicates that during the COVID-19 pandemic, virtual interaction is one strategy that can be used to help increase the willingness or intensity of communication using Japanese language.

The use of technology to interact using the target language is considered important to improve the target language skills of learners in addition to increasing their understanding of the target language culture (Chen & Yang, 2014). During the current COVID-19 pandemic, the use of information technology is expected to be able to help improve 'learners' language skills, even though face-to-face interaction is difficult to conduct. It is argued that social interaction using the target language carried out using virtual social media may have a good role in increasing the willingness to communicate among Japanese language learners who perform online learning.

Based on the results of the regression analysis, it is obvious that the independent variables (anxiety, self-rating, and virtual intercultural experience) contribute WTC inside the classroom and WTC outside the classroom simultaneously only about 19% and 20%. Even though this measurement is statistically significant, we argue that with this small percentage, it is difficult to conclude that the independent variables (anxiety, self-rating, and virtual intercultural experience) can predict the WTC inside and outside the classroom. Regarding the WTC outside the classroom, the three independent variables do not affect WTC outside the classroom significantly. It means that anxiety, self-rating, and virtual intercultural experiences do not affect the willingness of learners to communicate using the target language outside the classroom. It can be considered that the willingness of learners to speak or to communicate outside the classroom may be influenced by other variables, such as motivation as Lee and Lee (2020) found that motivation is the dominant

predictor of willingness to communicate outside the classroom. In addition, the difference between the environment in the classroom and outside the classroom may affect their level of anxiety. In this study, the anxiety scale that was used is anxiety in the classroom or during online learning activities. It is assumed that learners who feel anxious in classes do not feel anxious outside the classroom. Therefore, the anxiety they feel in class does not affect their willingness to use the target language outside the classroom.

4 Conclusion

Based on the analysis, the main findings in this study are that anxiety negatively correlated with WTC in the classroom. Meanwhile, self-rating and virtual intercultural experience positively correlated with WTC in all contexts. Anxiety is the dominant predictor for WTC in the classroom, while virtual intercultural experiences is the dominant predictor for WTC digital settings.

The findings indicate that affective factors, such as anxiety and self-assessment or self-rating, have a role in the WTC of Japanese language students who carry out online learning. Besides these factors, from regression analysis results, it is considered that there are other factors are considered to be more contributing on student`s WTC. Besides affective factors, virtual interactions also play a role on how Japanese language students are willing to communicate. These findings provide recommendations to language teachers, particularly Japanese language teachers, regarding the importance of reducing or avoiding anxiety among students, especially in online learning situations.

In addition, increasing 'learners' self-confidence is also considered important to help increase their intensity to communicate using the target language, in either *face-to-face* or in virtual situations. Encouraging and directing learners to use communication technology as a medium of intercultural communication are also considered important, because it can improve target language skills and cultural understanding (Chen & Yang, 2014).

We presume that student`s learning outcomes, gender differences, and language competences may have the role how student willing to communicate using the target language. Therefore, further studies need to be conducted to prove and verify this hypothesis.

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