



European Journal of Educational Research

Volume 11, Issue 3, 1327 - 1336.

ISSN: 2165-8714

<https://www.eu-jer.com/>

Relationship Between Japanese Language Anxiety, Beliefs About Learning, and Language Use in Japanese Language Classes

Rika Inagaki* 
Nagoya University, JAPAN

Motoyuki Nakaya
Nagoya University, JAPAN

Received: January 13, 2021 • Revised: March 10, 2022 • Accepted: April 13, 2022

Abstract: This study examined the relationship between Japanese language (JL) anxiety, beliefs about JL learning, and the amount of JL used in JL classes. The participants in this study were 670 undergraduate students studying JL at the Institute of Technology in Bangkok, Thailand, as compulsory subjects. A questionnaire survey was conducted, and a stepwise multiple regression analysis found that the amount of JL used by learners had a negative relationship with JL anxiety and a positive relationship with beliefs about JL learning and the amount of JL used by both native Thai and Japanese teachers. In addition, JL anxiety interacted with the amount of JL used by native Japanese teachers and beliefs about JL learning. JL teachers, especially native Japanese teachers, should attempt to reduce their learners' JL anxiety in order to maximize the effect of teachers' JL use and learners' beliefs and to support them in using JL more in classes.

Keywords: *Beliefs about Japanese language learning, foreign language environment, Japanese language anxiety, Japanese language learning, Japanese language use.*

To cite this article: Inagaki, R., & Nakaya, M. (2022). Relationship between Japanese language anxiety, beliefs about Japanese learning, and Japanese language use in Japanese language classes. *European Journal of Educational Research*, 11(3), 1327-1336. <https://doi.org/10.12973/eu-jer.11.3.1327>

Introduction

Psychological factors play an important role in foreign language learning and performance. Krashen (1981) suggested that learners' psychological factors determine the strength of their affective filter, which works as help or obstacle to learners' intake of the target language input. On the other hand, learners' output of the target language is also important for mastering foreign languages (Swain, 1993). In the area where the target language is not used commonly, the foreign language learners rarely have an opportunity to practice the target language outside the classrooms. Therefore, it is crucial to use the target language in classrooms for these foreign language learners. Previously, numerous research examined the effects of foreign language anxiety and beliefs about foreign language learning on foreign language learning process and outcomes. However, few studies investigate these psychological factors concerning the target language use in foreign language classes. This study focuses on Japanese language (JL) learning as a foreign language in Thailand and investigates the relationship between the use of JL by learners and other factors such as JL anxiety, learners' beliefs about JL learning, and use of JL by teachers.

Literature Review

Learning languages other than the first language is termed second language learning or foreign language learning based on different learning environments. While second language learning takes place in a situation where the target language is spoken geographically and/or socially, foreign language learning includes learning the target language where it is not spoken geographically and/or socially (Gries, 2008). Examples of second language learning are English learning in the USA and JL learning in Japan, whereas examples of foreign language learning are English learning in Japan and JL learning in Thailand. Learners in a foreign language environment, unlike in a second language environment, have very few opportunities to see or talk with native speakers of their target language outside of the classes (Gass & Selinker, 2008). Therefore, the use of the target language in the classroom is the main oral practice for them. Consequently, it is more important for learners in a foreign language environment to increase their target language use than learners in a second language environment.

* **Corresponding author:**

Rika Inagaki, Nagoya University, Graduate School of Education and Human Development, Nagoya, Japan. ✉ inagaki.rika.w0@s.mail.nagoya-u.ac.jp

Target Language Use in a Foreign Language Class

Teachers' use of the target language, a learner's external factor, is considered a factor that relates to learners' use of the target language. Levine (2003), who researched target language use in the context of a classroom using a questionnaire, reported that learners changed the amount of target language use depending on the interlocutors and that the learners used more target language with their instructors than with their classmates. Polio and Duff (1994), who conducted observations for language classes to research teachers' use of the target language, indicated that teachers' choices regarding which languages to use were affected by the learners' language choices. However, they studied qualitative data collected by observations and did not examine learners' target language use. Accordingly, it is necessary to investigate the relationship between the target language uses of teachers and learners with quantitative data to understand the target language use precisely and objectively.

The Effect of Foreign Language Anxiety on the Target Language Use of Learners

In addition to external factors, learners' internal factors, such as foreign language anxiety, can be regarded as factors related to the use of the target language by foreign language learners. Foreign language anxiety is composed of three factors: communication apprehension, test anxiety, and fear of negative evaluation (Horwitz et al., 1986). Moreover, according to the learning process, foreign language anxiety can be categorized as input, proceed, and output (Abu-Rabia et al., 2014). As shown above, foreign language anxiety includes anxiety about communicating and speaking in the target language.

In addition to general foreign language anxiety, the scale of foreign language anxiety for a specific language has been developed. Motoda (2000), who noticed the difference between second language learning and foreign language learning, created scales of JL anxiety for JL learners in a second language environment. The scales she developed comprise two measures, which are the scales for JL anxiety inside and outside classrooms, because the second language environment can give learners opportunities to utilize JL both in and out of classes. The factors constructing JL anxiety inside classrooms are tension at speaking activities, anxiety about the insecure grasp of the situation, and anxiety about low Japanese proficiency. Meanwhile, the factors constructing JL anxiety outside classrooms are anxiety about communication with Japanese people, anxiety about low JL proficiency, and tension in a public situation. Thus, anxiety at communicating and speaking in the target language consists of both foreign language anxiety and JL anxiety.

As mentioned above, foreign language anxiety includes anxiety during communication and speaking foreign languages. Therefore, it is possible for foreign language anxiety to be associated with learners' communication and speaking in the target language. Levine (2003) investigated foreign language anxiety of the students learning several foreign languages at universities in North America and reported that foreign language learners with high foreign language anxiety use the target language less in their class than those with low foreign language anxiety. The negative relationship between foreign language anxiety and target language use was also supported by MacIntyre (2017) in his summary of anxiety studies. Kitano (2001) presented the relationship between JL anxiety and learners' perception of their ability to speak JL in the United States. The JL learners who perceive their JL speaking ability low felt more anxious. Foreign language anxiety is also indicated as a factor that predicts learners' willingness to communicate by Dewaele (2019), who studied English language learners in Spain. Furthermore, foreign language anxiety affects foreign language learning not only by itself but also by combinations of foreign language anxiety and other kinds of anxiety, such as state anxiety, trait anxiety, and test anxiety. In addition to the direct effect of foreign language anxiety and trait anxiety, trait anxiety mediated by foreign language anxiety negatively affects the performance of the speaking test (Huang, 2018). Thus, it is confirmed that learners with high foreign language anxiety tend to use the target language less and that they also control their target language use with the influence of a combination of foreign language anxiety and other factors such as willingness to communicate and trait anxiety.

Beliefs About the Target Language Use at Foreign Language Learning

Another learner's internal factors, such as their belief about foreign language learning, could affect learners' use of the target language. Beliefs about foreign language learning are one of the individual differences and a factor that affects the process and achievement of language learning (Ellis, 2008; Horwitz, 1999). It includes their thoughts about themselves as foreign language learners, the environment in which they are learning, the group, culture, and society that use the target language, and so on (Wesely, 2012). In addition to learners' general thoughts about foreign language learning, learners' beliefs include specific aspects of foreign language learning, such as teachers' attributions (Hertel & Sunderman, 2009) and technologies used for foreign language classes (Mandell, 2002).

Within the learners' beliefs, focusing on a specific aspect of foreign language learning such as the use of the target language is one of the main research facets. Dincer (2017) investigated the beliefs of Turkmenistan university students learning English as a foreign language by using metaphor analysis. The learners' images of English-speaking skills are effortfulness in acquiring and anxiety-arousing as well as pleasure and enjoyment. Macaro et al. (2020), conducting a literature review, summarized the beliefs of learners about language use. The learners thought that it was necessary to increase access to the target language, but that it was unnecessary to eliminate their first language from learning. Thus,

the learners have both negative and positive feelings about speaking the target language and recognize the necessity of using the target language more.

As shown in the previous paragraph, the content of beliefs about foreign language learning has been examined in many studies. Aslan and Thompson (2021), who conducted a survey of English learners at Turkish universities, found the relationship between their beliefs about foreign language learning and foreign language anxiety. For example, the learners having beliefs in the importance of language accuracy tended to feel more anxious about their performance and ambiguousness. Mori (1999) investigate JL learners' beliefs about general learning and language learning. She concluded that the two beliefs were separate dimensions and both beliefs had a correlation with their achievement. It has also been suggested that teachers' beliefs about foreign language learning and teaching affect their language choices in foreign language classes (Hall & Cook, 2012; Macaro et al., 2020). However, the relationship between learners' beliefs about foreign language learning and their target language use has rarely been considered. Though the relationship between teachers' beliefs and language use has already been confirmed, the relationship between learners' beliefs about foreign language learning and learners' language use should also be examined.

The previous research examined foreign language anxiety and beliefs about foreign language learning as the factors related to foreign language learning. However, when focusing on learners' target language use out of foreign language learning, few pieces of research have investigated its relations with beliefs about foreign language learning and the target language use, unlike foreign language anxiety. Additionally, foreign language anxiety, beliefs about foreign language learning, and the use of the target language by teachers could be associated with the use of the target language by learners interactively as well as independently.

Methodology

Research Goals

This study aims to examine (1) whether the amount of JL used by teachers, which is a learners' external factor, and JL anxiety and beliefs about JL learning, which are learners' internal factors, are independently related to the amount of JL used by learners, and (2) whether the amount of JL used by teachers, which is a learners' external factor, and JL anxiety and beliefs about JL learning, which are learners' internal factors, are related to the amount of JL used by learners with interacting with each factor.

Sample

The participants in this study were 670 undergraduate students learning JL at a private institute of technology, whose student body was about 4000, in Bangkok, Thailand. This school has three faculties; engineering, information technology, and business administration. These are one of the most popular disciplines in whole Thailand; more than 60% of the university students in Thailand major in one of these disciplines (Office of the Permanent Secretary, 2016). Furthermore, according to the ranking web of universities, which is published by the Cybermetrics Lab (2022), this institute ranks in middle out of 194 universities in Thailand. Therefore, the participants could be regarded the students in a university with a general reputation.

The participants were studying JL as a compulsory subject. JL education is widely provided in Thai higher education. More than half of Thai universities teach JL in major and minor programs (The Japan Foundation, 2020). The students specializing in the Business Japanese program in the Faculty of Business Administration were required to take eight JL courses with 24 credits, and the students specializing in other programs and faculties were required five JL courses with 15 credits. A course in JL at this institute was taught by a native Thai teacher and a native Japanese teacher. Each teacher took charge of a part of the textbook to teach, such as the first half of a unit or the latter half of a unit, and instructed all language skills of the assigned part in turn. Consequently, all students taking part in this study had experienced all class activities instructed by both native Thai teachers and native Japanese teachers. This college did not assign any specific pedagogical methods for their foreign language education. Accordingly, each teacher taught JL in their methods. Although the teachers' instructing language in the class, as well as teaching methods, was not specified by the school, Thai and Japanese teachers tended to teach in their native language.

Data Collection Procedure

A questionnaire survey was conducted at the end of August 2015 with the cooperation of the college. Since the academic year of the researched college started in June, the participants must be familiar with the new class after spending about 2 months at the time of the survey. They were explained that their response to the questionnaire including whether or not they would take part in this survey did not affect their academic record before the questionnaires were distributed. They received the questionnaire at the end of a Japanese class, answered it anonymously at home, and submitted it in the next class.

The Contents of the Questionnaire

This study used the Thai version of the questionnaire adopted from Levine (2003), which measured the variables focusing on the target language use of university students learning several foreign languages at American or Canadian universities. This questionnaire has been utilized by research conducted in several non-English-speaking countries such as Cambodia (Boun, 2017), China (Macaro et al., 2020), Malaysia (Alang & Idris, 2018), and Saudi Arabia (Almusharraf, 2021). This questionnaire can be regarded as a valid scale to measure the variables in second language acquisition.

The questionnaire was modified into a questionnaire for Thai university students who learn JL. Considering the situation that most Thai university students learn JL with two types of JL teachers, the section about the amount of JL use includes the items of three speakers: native Thai teachers, native Japanese teachers, and JL learners. The modified questionnaire was translated to Thai and then back-translated to validate the Thai version of the questionnaire by a few Thai expert translators. The questionnaire included (a) the amount of JL use when learning JL, (b) JL anxiety, (c) the beliefs about JL learning, (d) the advantages and disadvantages of using the Thai language and JL in the classes, and (e) basic information. Among the contents, (a), (b), and (c) were analyzed in this study.

- The amount of JL use when learning JL: This part was constructed of the amount of JL used inside and outside of the classrooms and in different learning situations. This part also dealt with other items about JL use in JL learning. All items asked the amount of JL used by native Thai teachers, native Japanese teachers, and students. The students answered the amount of JL with percentages.
- JL anxiety (Anxiety): This scale asked about anxiety when using JL in a general situation and different class activities. The class activities in this scale were the activities about Japan-related things such as culture, the activities to learn and practice grammar, the explanation and inquiry about tests and assignments, and the explanation and inquiry about class administration such as office hours and upcoming events.
- The beliefs about JL learning (Beliefs): This scale asked whether each teacher and student should use JL in a general learning situation and various situations. The situations in the classroom were the situation when learning and practicing grammar, when explaining and inquiring about tests and assignments, and when explaining and inquiring about class administration such as office hours and upcoming events.

Data Analyzing

In order to examine the relationship between JL anxiety, the beliefs about JL learning, and JL use, multiple regression analysis was administered. The independent variables are the amount of JL used by teachers, learners' JL anxiety, and learners' beliefs about JL learning, and the dependent variable is the amount of JL used by learners. Multiple regression analysis was selected because it enables the determination of the relationship between a dependent variable and plural independent variables. After multiple regression analysis, simple slope tests were conducted to assess interaction effects. All statistical analyses in this study were conducted with R version 3.6.3.

Findings / Results*Sample Description*

The data of the students whose native language was Japanese or unknown was eliminated from the total data of 670 undergraduate students, and then the data of 662 students (297 females; 365 males) was analyzed. These participants were composed of 302 freshmen, 261 sophomores, and 99 juniors, and their ages ranged from 15 to 25 ($M = 19.10$; $SD = 1.05$). The native language of 650 students was Thai, two were English native, four were natives of other languages, three were bilingual in Thai and English, one is bilingual in Thai and other languages, and the other one was trilingual in Thai, English, and other languages.

Variables of Anxiety, Beliefs, and the Amount of JL Use

Since the detailed constructs of the scales were ambiguous in the study of Levine (2003), exploratory factor analyses with the principal component method and promax rotation were selected to identify the constructs of Anxiety and Beliefs. After deleting the samples with missing variables in each scale using list-wise deletion, data of 648 students for Anxiety and data of 644 students for Beliefs were used to perform factor analyses. By considering the eigenvalues and deleting the items with lesser factor loading than 4.0, the analyses identified one factor for both Anxiety and Beliefs. Cronbach's alpha coefficients were .89 for Anxiety and .90 for Beliefs, which indicated the scales' reliability enough. The result of the factor analyses of Anxiety and Beliefs are shown in Table 1 and Table 2 respectively.

Table 1. Results of Exploratory Factor Analysis of Anxiety (N = 648, Promax rotation)

No.	Items	M	SD	Factor loading	h ²
36	I feel uncomfortable or anxious using Japanese when working on, discussing, or asking questions about tests, quizzes, and other assignments.	2.98	0.97	.85	.73
35	I feel uncomfortable or anxious using Japanese when working on, discussing, or asking questions about grammar and usage.	3.05	1.03	.83	.69
34	I feel uncomfortable or anxious speaking Japanese during activities about Japanese topics.	2.89	0.99	.79	.63
37	I feel uncomfortable or anxious using Japanese when discussing and asking questions about administrative information.	3.10	0.94	.73	.54
31	I generally feel anxious using Japanese.	3.16	1.06	.68	.47
32	I generally find trying to communicate in Japanese frustrating.	2.65	1.02	.64	.41
Sum of squares of loadings		3.46			
The proportion of variance explained		57.60			

Table 2. Results of Exploratory Factor Analysis of Beliefs (N = 644, Promax rotation)

No.	Items	M	SD	Factor loading	h ²
42	When discussing tests, quizzes, and other assignments, I believe the students learning Japanese should use only Japanese.	3.12	0.86	.77	.59
40	When giving directions for activities, I believe that the instructor teaching Japanese should use only Japanese.	3.00	0.90	.76	.58
41	When discussing tests, quizzes, and other assignments, I believe the instructor teaching Japanese should use only Japanese.	3.11	0.92	.76	.58
39	When discussing or working on grammar and usage, I believe that the students learning Japanese should use only Japanese.	3.01	0.90	.73	.54
43	When discussing course policies, attendance, and other administrative information, I believe that the instructor teaching Japanese should use only Japanese.	2.89	0.86	.72	.51
44	When discussing course policies, attendance, and other administrative information, I believe that the students learning Japanese should use only Japanese.	2.94	0.83	.70	.50
38	When discussing or working on grammar and usage, I believe the instructor teaching Japanese should use only Japanese.	3.01	0.91	.67	.45
47	I believe that the students learning Japanese should use only Japanese the entire time they are in the classroom with the instructor, even when not working on a specific activity.	3.19	0.92	.62	.38
48	I believe that the students learning Japanese should use only Japanese the entire time they are in the classroom with other students, even when not working on a specific activity.	3.08	0.85	.60	.36
49	I believe, regardless of how much Japanese the students choose to use, the instructor should use Japanese at all times in the classroom.	3.02	1.01	.56	.31
Sum of squares of loadings		4.79			
The proportion of variance explained		47.90			

The amount of JL use was divided by the utterers (learners, native Thai teachers, and native Japanese teachers) to make three variables: the amount of JL used by learners (JL Use-Learner), the amount of JL used by native Thai teachers (JL Use-TH), the amount of JL used by native Japanese teachers (JL Use-JP). The sum of these three variables and Anxiety and Beliefs, the two variables identified by factor analyses above, were used in the following analyses. The descriptive statistics and correlations of each variable are shown in Table 3.

Table 3. Descriptive Statistics and Correlations of Each Variable

Variables	No. of items	N	α	M	SD	Min	Max	Correlation					
								(1)	(2)	(3)	(4)		
JL Use-Learner	(1)	13	618	0.86	530.34	212.49	5	1300	—				
JL Use-TH	(2)	6	642	0.85	302.29	115.45	20	600	.63 ***	—			
JL Use-JP	(3)	6	643	0.86	461.39	117.83	47	600	.45 ***	.47 ***	—		
Anxiety	(4)	6	648	0.89	17.76	4.8	6	30	-.17 ***	-.01	-.06	—	
Beliefs	(5)	10	644	0.90	30.40	6.5	10	50	.16 ***	.12 ***	.10 *	-.08 *	—

* $p < .05$, *** $p < .00$

Note. JL Use-Learner = the amount of JL used by learners, JL Use-TH = the amount of JL used by native Thai teachers, JL Use-JP = the amount of JL used by native Japanese teachers, Anxiety = JL anxiety, Beliefs = beliefs about JL learning

Effects of the Variables on JL Use-Learner

In order to examine the relationship between JL Use-Learner and other variables, multiple regression analysis with a stepwise method was performed on the standardized scores of the potential variables and interactions between each variable. The result of the multiple regression analysis is shown in Table 4.

Table 4. The Result of Multiple Regression Analysis (Stepwise Method)

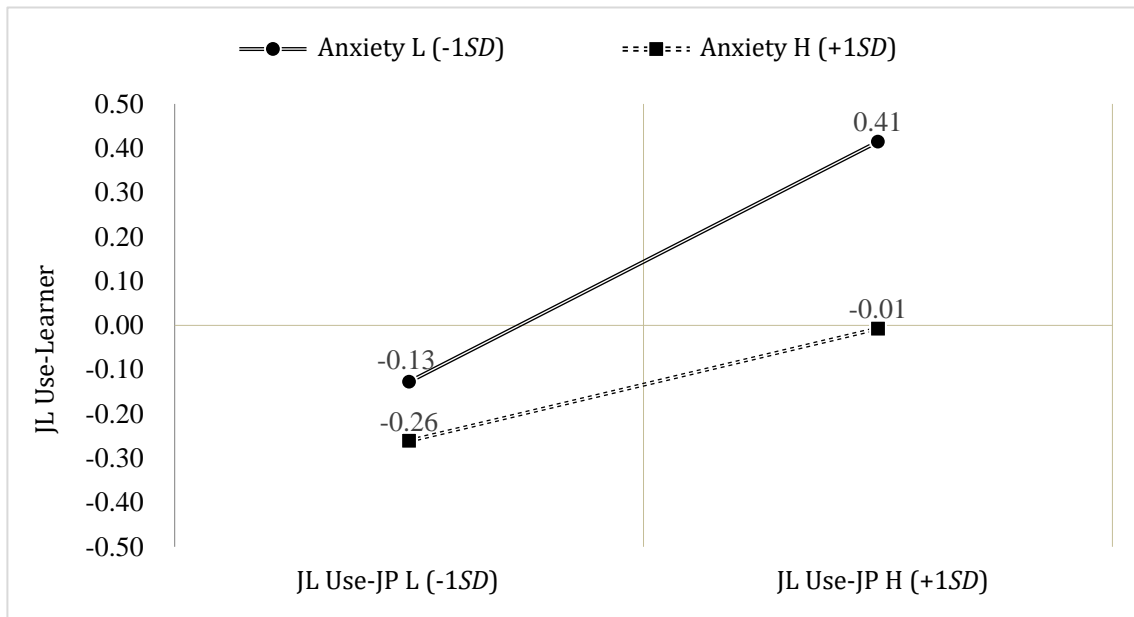
Variables	VIF	t	β	
intercept		-.06	.95	
JL Use-TH	1.30	15.50	.53	***
JL Use-JP	1.30	5.74	.20	***
Anxiety	1.03	-4.44	-.14	***
Beliefs	1.03	1.95	.06	†
Anxiety × JL Use-JP	1.06	-2.35	-.07	*
Anxiety × Beliefs	1.04	1.99	.06	*
Adjusted R^2		.46		

† $p < .10$, * $p < .05$, *** $p < .00$

Note. JL Use-TH = the amount of JL used by native Thai teachers, JL Use-JP = the amount of JL used by native Japanese teachers, Anxiety = JL anxiety, Beliefs = beliefs about JL learning

Multiple regression analysis found the main effects for three variables, which were JL Use-TH, JL Use-JP, and Anxiety, and two interactions between JL Use-JP and Anxiety and between Anxiety and Beliefs at the level of $p < .05$ ($F_{(6, 589)} = 86.29$, $p < .05$). The main effect for Beliefs was significant at the level of $p < .10$. Each variance inflation factor (VIF) was less than two, which indicated no multicollinearity. JL Use-TH obtained the biggest standardized regression coefficients, followed by JL Use-JP, Anxiety, and Beliefs. In terms of teachers' JL use, both JL Use-TH and JL Use-JP were associated with JL Use-Learner. However, comparing the standardized regression coefficients, it is confirmed that JL Use-TH has stronger relations with JL Use-Learner than JL Use-JP.

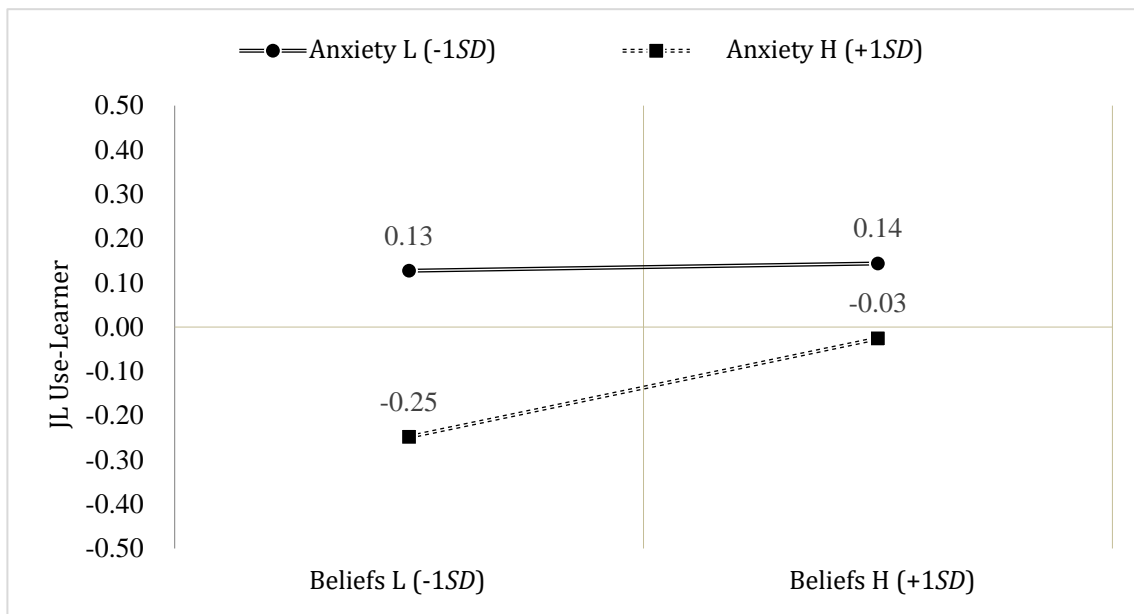
Simple slope tests revealed that the association between Anxiety and JL Use-JP was significantly positive in both groups with low and high levels of Anxiety (the learners with low anxiety: $\beta = .13$, $t = 2.79$, $p < .01$, the learners with high anxiety: $\beta = .28$, $t = 5.76$, $p < .00$). Both learners with high and low anxiety use more JL when native Japanese teachers used more JL; however, the amount of JL used by the learners with low anxiety increased more than that by the learners with high anxiety. Therefore, the effect of JL Use-JP would have more impact on the learners with low anxiety. The difference of JL Use-Learner depending on Anxiety and JL Use-JP is shown in Figure 1.



Note. JL Use-Learner = the amount of JL used by learners, JL Use-JP = the amount of JL used by native Japanese teachers, Anxiety = JL anxiety

Figure 1. Interaction Effect of Anxiety and JL Use-JP on JL Use-Learner

On the other hand, the association between Anxiety and Beliefs was positive and significant for the group with a high level of Anxiety ($\beta = .11, t = 2.79, p < .01$) but the association was not significant for the group with a low level of Anxiety ($\beta = .01, t = 0.20, n.s.$). In other words, the amount of JL used by the learners with low anxiety did not show a significant increase depending on their beliefs. While Anxiety would inhibit the learners' JL use overall, the belief that JL learners should speak JL seems to help the learners with high Anxiety speak Japanese more. The difference of JL Use-Learner depending on Anxiety and Beliefs is shown in Figure 2.



Note. JL Use-Learner = the amount of JL used by learners, Anxiety = JL anxiety, Beliefs = beliefs about JL learning

Figure 2. Interaction Effects of Anxiety and Beliefs on JL Use-Learner

Discussion

This study, which focused on Thai undergraduate students belonging to the Institute of Technology, examined the relationship between learners' use of JL and factors such as JL anxiety, beliefs about JL learning, and use of JL by different ethnic teachers. As a result of the multiple regression analysis, the amount of JL used by native Thai and

Japanese teachers and learners' beliefs about JL learning had a positive relationship, while JL anxiety had a negative relationship with learners' JL use. In addition, JL anxiety had interaction effects with native Japanese teachers' JL use and learners' beliefs about JL learning.

Regarding JL use by teachers, an external factor, the more JL both native Thai and Japanese teachers use, the more JL the learners also use in the classrooms. A previous study showed that foreign language teachers chose languages to teach according to their learners' use of their first language or target language (Polio & Duff, 1994). This study suggests that teachers' language choices would also influence learners' language choices.

Although JL used by both native Thai and Japanese teachers has a relationship with JL use by learners, JL use by native Thai teachers and JL use by native Japanese teachers have a different trend. First, JL use by native Thai teachers has a stronger relationship than JL use by native Japanese teachers. An earlier study which investigated learners' attitudes with questionnaires, interviews, and focus groups suggested that most learners have a positive attitude toward English classes with the medium of instruction being only English and that they point out improvement of conversation skills as the advantage of English-only classes (Shvidko, 2017). JL is a foreign language for native Thai teachers as well as learners; therefore, JL use by native Thai teachers would encourage their learners to speak more JL with the expectation of enhancing their conversation skills.

On the other hand, JL use by native Japanese teachers have not only a simple relationship but also an interacting effect with JL anxiety, a learner's internal factor. Both learners with high JL anxiety and low JL anxiety speak more JL when native Japanese teachers use more JL. However, learners with high JL anxiety increased their JL use less than learners with low JL anxiety. Anxiety about facing the native speaker of the target language is a possible reason for the interaction between JL use by native Japanese teachers and JL anxiety. It has been reported that learners feel more anxious when they talk with native speakers of the target language in earlier studies (Kitano, 2001; Kurahachi, 1993). In addition, previous research that was conducted using a questionnaire with open questions described that the learners feel anxious or tense about facing the native speakers because they feel the limitation of their conversation skills and because cultural differences might lead to misunderstanding each other (Walkinshaw & Oanh, 2014). Learners with high JL anxiety would have anxiety about facing native Japanese speakers as well, which would make them avoid speaking JL with their native Japanese teacher.

In addition to JL use by native Japanese teachers, which is one of the learners' external factors, JL anxiety also interacted with learners' beliefs about JL learners, one of the learners' internal factors. While the amount of JL used by learners with low anxiety did not differ depending on their beliefs, learners with high anxiety spoke more Japanese when they had the belief that JL learners should use JL than when they did not have such beliefs. Yoshida (2013) examined beliefs about JL learning and learning behavior among JL learners attending an Australian university using qualitative data on learners' diaries, interviews, and class observations. It is shown that the learners' "beliefs about the importance of accuracy" (Yoshida, 2013, p. 376) lead them to avoid speaking JL and that their avoidance of using JL was contrary to "their other belief in the importance of participation" (Yoshida, 2013, p. 376), which causes negative emotions such as anxiety and discontent. Although this study does not clarify the detailed process unlike Yoshida (2013), the intricate relationship among anxiety, beliefs, and learning behavior might cause a different trend in the amount of JL use according to the learners' beliefs and the degree of anxiety.

Conclusion

This study found that JL anxiety lessens the amount of JL used by learners and has interacting effects with the amount of JL used by native Japanese teachers and learners' beliefs about JL learning. Comparing the learners with low JL anxiety, the highly anxious learners use less JL in the classroom when native Japanese teachers use a larger amount of JL. Moreover, only the learners with high anxiety showed an increase or decrease according to the difference in the learners' beliefs. Thus, JL anxiety seems to suppress the increase in the amount of JL used by learners. Foreign language learning restricts the opportunities for learners to interact with native speakers of their target language. Therefore, easing the learners' JL anxiety as well as providing more JL input is crucial for teachers to assist the learners in increasing JL use.

Recommendations

As previously discussed, teachers' use of JL contributes to the increase of their learners' JL use, but JL anxiety would reduce the effect of teachers' use of JL, especially that of native Japanese teachers. Therefore, teachers should relieve their learners' JL anxiety to increase the amount of JL used by learners. Toyama and Yamazaki (2021) conducted a systematic review of educational interventions to alleviate foreign language anxiety, categorizing the types of educational interventions and examining their educational effects. The methods to alleviate foreign language anxiety were sorted into two types: individual and interactional. Examples of individual methods are instruction in affective strategies and support for the improvement of learners' moods. On the other hand, examples of interactional methods are interaction among learners and interaction between learners and teachers. In particular, the interaction between learners and teachers, such as evaluation by portfolio, is important to ease learners' anxiety and encourage communication with teachers. In order to enhance the effects of teachers' JL use and learners' beliefs on learners'

Japanese use, particularly native Japanese teachers should attempt the interventions mentioned above to reduce their learners' foreign language anxiety.

This study investigated JL learners in Thailand. Since Thailand has the fourth-largest Japanese population in the world (Consular Policy Division, 2021), there are many shops for Japanese people, such as Japanese restaurants, supermarkets dealing with Japanese products, entertainment facilities like Karaoke and Manga Cafe, and so forth. These shops are open not only to Japanese people but also to Thai people. Therefore, the JL learners in Thailand have some access to Japanese people, language, and culture, although they are learning JL in a foreign language environment. This Thai environment surrounding the JL learners might lead to the unique result in this study. Therefore, research about other target languages in other areas and countries would be necessary to examine the relationship between the target language use and psychological factors in more detail.

Limitations

This study indicated that JL use by teachers, JL anxiety, and beliefs about JL learning are related to learners' JL use and that the strength of the relationships of JL use by native Japanese teachers and learners' beliefs about JL learning with learners' JL use vary depending on the degree of JL anxiety. However, it does not clarify how JL anxiety relates to learners' JL use, interacting with the use of JL by native Japanese teachers and learners' beliefs by this quantitative study. Future studies are expected to investigate the detailed process of interaction between JL anxiety and other factors using multiple data from interviews, class observations, and experiments in addition to quantitative data.

Authorship Contribution Statement

Inagaki: Conceptualization, design, analysis, writing. Nakaya: Editing/reviewing, supervision.

References

- Abu-Rabia, S., Beleg, Y., & Shakkour, W. (2014). The relation between linguistic skills, personality traits, and language anxiety. *Open Journal of Modern Linguistics*, 4(1), 118–141. <https://doi.org/10.4236/ojml.2014.41011>
- Alang, N., & Idris, S. (2018). Students' perception towards the use of code-switching in teaching and learning. *Journal of Education and Social Sciences*, 11(1), 1-9. <https://bit.ly/3JEwbz1>
- Almusharraf, A. M. (2021). Bridging the gap: Saudi Arabian faculty and learners' attitudes towards first language use in EFL classes. *Educational Research*, 31(3), 679-698. <https://bit.ly/3Jxihys>
- Aslan, E., & Thompson, A. S. (2021). The interplay between learner beliefs and foreign language anxiety: Insights from the Turkish EFL context. *Language Learning Journal*, 49(2), 189-202. <https://doi.org/10.1080/09571736.2018.1540649>
- Boun, S. (2017). Social psychological impacts on language use: Anxiety among Cambodian university students. *TESOL International Journal*, 12(2), 16-31. <https://bit.ly/3viL1Ww>
- The Cybermetrics Lab. (2022, January 3). Thailand. Ranking web of universities. <https://bit.ly/3EdDrAz>
- Dewaele, J. M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology*, 38(4), 523-535. <https://doi.org/10.1177/0261927X19864996>
- Dincer, A. (2017). EFL learners' beliefs about speaking English and being a good speaker: A metaphor analysis. *Universal Journal of Educational Research*, 5(1), 104-112. <https://doi.org/10.13189/ujer.2017.050113>
- Ellis, R. (2008). Lerner beliefs and language learning. *Asian EFL Journal Quarterly*, 10(4), 7-25. <https://bit.ly/3jx0rB6>
- Gass, S. M., & Selinker, L. (2008). *Second language acquisition: An introductory course* (3rd ed.). Routledge. <https://doi.org/10.4324/9780203932841>
- Gries, S. T. (2008). Corpus-based methods in analyses of second language acquisition data. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 406-431). Routledge. <https://doi.org/10.4324/9780203938560>
- Hall, G., & Cook, G. (2012). Own-language use in language teaching and learning. *Language Teaching*, 45(3), 271-308. <https://doi.org/10.1017/S0261444812000067>
- Hertel, T. J., & Sunderman, G. (2009). Student attitudes toward native and non-native language instructors. *Foreign Language Annals*, 42(3), 468–482. <https://doi.org/10.1111/j.1944-9720.2009.01031.x>
- Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners' beliefs about language learning: a review of BALLI studies. *System*, 27(4), 557-576. [https://doi.org/10.1016/S0346-251X\(99\)00050-0](https://doi.org/10.1016/S0346-251X(99)00050-0)

- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.2307/327317>
- Huang, H. T. D. (2018). Modeling the relationships between anxieties and performance in second/foreign language speaking assessment. *Learning and Individual Differences*, 63, 44-56. <https://doi.org/10.1016/j.lindif.2018.03.002>
- The Japan Foundation. (2020). *Survey on Japanese-language education abroad 2018*. <https://bit.ly/3JEHyH9>
- Kitano, K. (2001). Anxiety in the college Japanese language classroom. *The Modern Language Journal*, 85(4), 549-566. <https://doi.org/10.1111/0026-7902.00125>
- Krashen, S. (1981). The "fundamental pedagogical principle" in second language teaching. *Studia Linguistica*, 35(1-2), 50-70. <https://doi.org/10.1111/j.1467-9582.1981.tb00701.x>
- Kurahachi, J. (1993). Comyunicathibu apuro-chi oyobi gaikokujin koshi to thi-mu thi-chingu ga gakushu seika to gakushu iyoku ni oyobosu koka [Effect of the communicative approach and team teaching with an assistant English teacher on learning and motivation to learn]. *Japanese Journal of Educational Psychology/ Kyoiku Shinrigaku Kenkyu*, 41(2), 209-220. https://doi.org/10.5926/jjep1953.41.2_209
- Levine, G. (2003). Student and instructor beliefs and attitudes about target language use, first language use, and anxiety: Report of a questionnaire study. *The Modern Language Journal*, 87(3), 343-364. <https://doi.org/10.1111/1540-4781.00194>
- Macaro, E., Tian, L., & Chu, L. (2020). First and second language use in English medium instruction contexts. *Language Teaching Research*, 24(3), 382-402. <https://doi.org/10.1177/1362168818783231>
- MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In C. Gkonou, M. Daubney, & J. M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 11-30). Multilingual Matters. <https://doi.org/10.21832/9781783097722>
- Mandell, P. B. (2002). On the background and motivation of students in a beginning Spanish program. *Foreign Language Annals*, 35(5), 530-542. <https://doi.org/10.1111/j.1944-9720.2002.tb02721.x>
- Consular Policy Division. (2021). *Annual report of statistics on Japanese nationals overseas*. Ministry of Foreign Affairs of Japan. <https://bit.ly/3ObDj9e>
- Mori, Y. (1999). Epistemological beliefs and language learning beliefs: What do language learners believe about their learning? *Language Learning*, 49(3), 377-415. <https://doi.org/10.1111/0023-8333.00094>
- Motoda, S. (2000). Nihongo fuan shakudo no sakusei to sono kento: Mokuhyo gengo shiyo kankyo ni okeru daini gengo fuan no sokutei [Measurement of second language anxiety in the target language environment: The Japanese language anxiety scale-test construction, reliability, and validity]. *Japanese Journal of Educational Psychology/ Kyoiku Shinrigaku Kenkyu*, 48(4), 422-432. https://doi.org/10.5926/jjep1953.48.4_422
- Office of the Permanent Secretary. (2016). *2016 Educational statistics*. Ministry of Education. <https://bit.ly/3KFoSZ4>
- Polio, G., & Duff, A. (1994). Teachers' language use in university foreign language classrooms; A qualitative analysis of English and target language alternation. *Modern Language Journal*, 78(3), 313-326. <https://doi.org/10.1111/j.1540-4781.1994.tb02045.x>
- Shvidko, E. (2017). Learners' attitudes toward "English-only" institutional policies: Language use outside the classroom. *TESL Canada Journal*, 34(2), 25-48. <https://doi.org/10.18806/tesl.v34i2.1265>
- Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review*, 50(1), 158-164. <https://doi.org/10.3138/cmlr.50.1.158>
- Toyama, M., & Yamazaki, Y. (2021). Classroom interventions and foreign language anxiety: A systematic review with narrative approach. *Frontiers in Psychology*, 12, 1-15. <https://doi.org/10.3389/fpsyg.2021.614184>
- Walkinshaw, I., & Oanh, D. H. (2014). Native and non-native English language teachers: Student perceptions in Vietnam and Japan. *SAGE Open*, 4(2), 1-9. <https://doi.org/10.1177/2158244014534451>
- Wesely, P. M. (2012). Learner attitudes, perceptions, and beliefs in language learning. *Foreign Language Annals*, 45(s1), S98-S117. <https://doi.org/10.1111/j.1944-9720.2012.01181.x>
- Yoshida, R. (2013). Conflict between learners' beliefs and actions: Speaking in the classroom. *Language Awareness*, 22(4), 371-388. <https://doi.org/10.1080/09658416.2012.758129>