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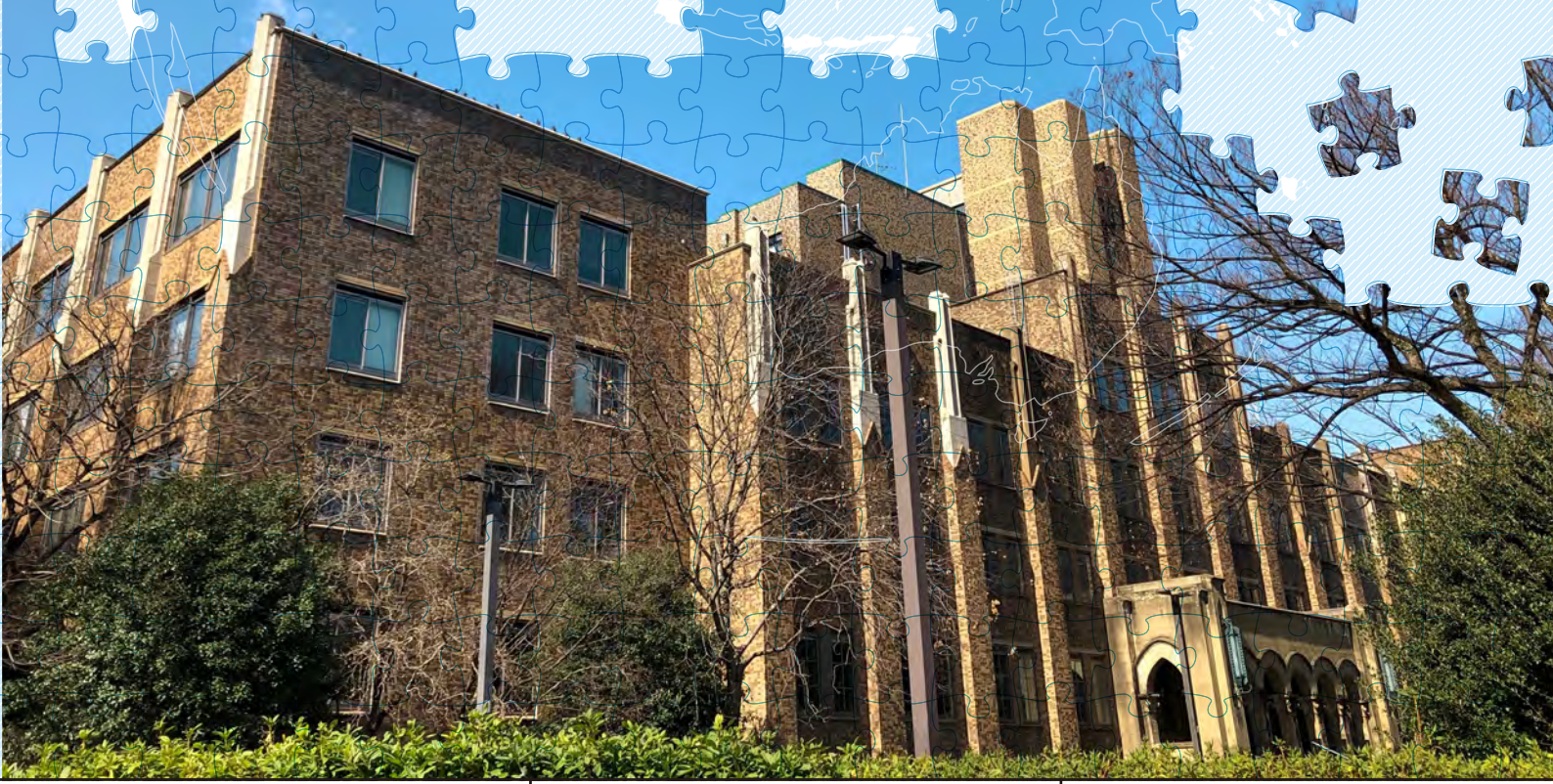
Predictors of Self-Perceived English Proficiency among Adults in Japan



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Predictors of Self-Perceived English Proficiency among Adults in Japan

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Abstract

This study investigates the predictive associations between sociodemographic, cognitive-behavioral, and experiential factors as independent variables and *self-perceived English proficiency*—encompassing reading, speaking, and writing skills—as the dependent variable. Data were extracted from the Japanese General Social Survey (JGSS) 2017–2018 and used for analysis. All variables were converted into binary form and analyzed through bivariate and subsequent multivariate analyses. Binary logistic regression analysis identified a model with eight key predictors: (1) *age*, (2) *marital status*, (3) *education*, (4) *self-perceived social class*, (5) *difficulty concentrating on a single project over a few months*, (6) *diligence*, (7) *training overseas*, and (8) *frequent discussion of international issues (at least once a week)*. The results are discussed in relation to relevant prior studies and theoretical concepts. The results suggest that, unlike in the distant past, several predictors of English proficiency in contemporary Japan have become more controllable—assuming sufficient motivation to acquire the language.

Introduction

It has been over four centuries since the English language first entered Japan (Mizuno et al., 2020). According to history, William Adams, the captain of a Dutch ship named *De Liefde*, was the first English speaker to arrive in the country in 1600 (Mizuno, 2020; Saito, 2003). After getting lost in the sea due to mechanical problems and the turbulent weather, Adams and his crew arrived in Kyushu; after his arrival, Adams eventually became an advisor of foreign affairs to the Tokugawa Shogunate (Saito, 2003; Cryns, 2024). It is not difficult to surmise that access to the English language in Japan was highly limited at the time.

Interestingly, Adams recounted in a letter to his wife that Tokugawa Ieyasu—the founder of Japan's last shogunate or *bakufu* in Japan—used gestures to communicate with

Adams (Saito, 2003). It is likely that Tokugawa Ieyasu—the man who unified and ruled Japan at the time—was among the first Japanese to attempt communication in English, although we cannot determine how effectively he conveyed his thoughts in this newly encountered Indo-European language, which is not genealogically related to Japanese. Given such circumstances, it would have been natural for Tokugawa Ieyasu to rely on gestures at the time. In the early days, it was likely that ordinary Japanese people had little to no exposure to the English language, let alone the opportunity to learn it. Although English language education in its early stage existed in the Edo era (1603-1868), particularly in its later years, only a few people had the chance to encounter and learn English (see Okuma, 2002, for more details).

Considering the historical exclusivity of the English language in Japan for an extended period, one might inquire, "When did English language education become compulsory in Japan?" Certainly, the Meiji era (1868–1912) was a time when English language education quickly spread throughout the country, propelled by the Japanese government's policies of Westernization and modernization (see Saito, 2007, for more details). Nonetheless, it was after the end of World War II (1939-1945) that English language education was disseminated more extensively and thoroughly. For instance, in the 1950s, nearly 100 percent of first-year junior high school students in Japan received some form of English instruction; furthermore, the 1960s saw the establishment of a *de facto* compulsory three-year English language education in junior high schools (Terasawa, 2012). Although nearly all junior high school students in Japan studied English in the latter part of the twentieth century—generating a false impression of the language being an educational requirement since the 1950s—English officially remained an elective subject at the junior high school level until 2002 (Terasawa, 2012), which may come as a surprise to many people. In 2002, foreign language study was formally integrated into the mandatory part of junior and senior high school curricula (Ministry of Education, Culture, Sports, Science, and Technology, 2002). Moreover, nearly two decades later, in 2020, English education was officially incorporated into elementary school curricula, beginning in the third grade (Department of Elementary and Secondary Education, 2019).

As of 2025, most Japanese people have had at least three years of English language education in junior high school, with most continuing for an additional three or more years of instruction on the language in senior high school and university. Beyond formal education, many individuals living in Japan today, particularly those in metropolitan areas of such cities as Tokyo, Osaka, and Kyoto, are exposed to English almost daily. In 2023 alone, the number of foreign visitors to Japan exceeded 25 million (Japan Tourism Agency, 2024). Furthermore, the number of inbound visitors from

overseas reached an unprecedented scale in November 2024: it was 3.187 million (Japan National Tourism Organization, 2024). Major cities in Japan are more heterogeneous today than they had ever been, and the English language can be heard, seen, or read in many places.

Moreover, in metropolitan areas, it is not surprising to see Japanese adults studying English after work at private language schools, which are commonly and conveniently located near major train stations. Meanwhile, people living anywhere in Japan today can access numerous English-language materials online, provided they are sufficiently interested and motivated. In other words, English learning resources are widely accessible to most people. Over time, the contexts in which people encounter or engage with English in Japan have changed dramatically compared to the distant past. English has become less exclusive in contemporary Japan, and its acquisition or mastery is no longer as heavily dependent on one's social standing or exceptional circumstances as inferred to have been in the distant past.

1.1 Present Study

Even though one's place in the socio-political hierarchy may not play a considerable role in encountering and learning the English language in Japan today, various factors facilitate or hamper one's access and acquisition. Given the potential diversity of factors influencing one's relationship with the English language in contemporary Japan, what variables contribute to the acquisition or mastery of English today? This study partly addresses that question by analyzing sociodemographic, cognitive-behavioral, and experiential factors and their relationships with *self-perceived English proficiency* in a Japanese sample. In so doing, this study aims to contribute, if applicable, to accumulating knowledge in this area.

1.2 Prior Studies

There are many illuminating studies that examine factors that influence English proficiency and performance (Ishida et al., 2024; Kondo, 2019; Nishida & Yashima, 2017; Takeno & Takatsuka, 2007; Tanaka & Ellis, 2003; and Terasawa, 2009, 2011). These studies contribute much to our understanding of the subject under discussion. Most of these studies deal with student populations rather than the general population of Japan, including adults, the latter of which is the scope of the present study.

Terasawa's work (2009) is particularly relevant to the present research as it employs empirical methods to highlight the socio-environmental factors associated with English proficiency, which aligns in part with the present study's objectives. Utilizing

data from the Japanese General Social Survey (JGSS) 2002-2003, Terasawa used odds ratios and multiple regressions to elucidate social patterns in English language proficiency across Japan. The results indicate that the parent's educational background, the father's occupation, household income, and childhood residence are significant factors influencing English proficiency. Moreover, he notes that social and family environments influence females more strongly than males (Terasawa, 2009). These outcomes provide valuable insights into the social tendencies that influence English skills in Japan.

2. Methods

2.1 Sample Descriptions

The present study examines statistical associations between sociodemographic, cognitive-behavioral, and experiential factors as independent variables, and *self-perceived English proficiency* as the dependent variable. The data sets employed in this study are the Japanese General Social Survey (JGSS) 2017-2018, provided by the JGSS Data Download System (JGSS Research Center, 2021). From the JGSS data, relevant segments are extracted and first tested using bivariate analyses, followed by multivariate analyses. The statistical analyses in this study are performed with the IBM® SPSS®.

The data analyzed in this study were collected in November and December of 2017 and 2018. The target sample consisted of adults in Japan aged between 20 and 89. The data from 1,358 individuals (748 or 48.6 % male; 790 or 51.4 % female) were collected using a two-stage stratified random sampling method based on the basic resident registration system. The mean age of the sample was 54. Some variables had missing or invalid answers; as a result, the number of respondents included in calculations is indicated where applicable throughout the study.

2.2 Independent Variables

This study employs sociodemographic factors, cognitive-behavioral traits, and experiential variables as independent variables. It assesses their associations with the dependent variable, *self-perceived English proficiency* (in reading, speaking, and writing). The sociodemographic category includes *age* (younger than 54 years or 54 years and older), *gender* (female or male), and *marital status* (unmarried or married). Moreover, this category encompasses *education* (up to high school completion, or more than a high school education), *industry classification* (11 categories), *self-perceived social class* (up to average or higher than average), and *annual household income* (lower than average, or

average and higher). The cognitive-behavioral traits, such as *difficulty concentrating on a single project over a few months*, *persistence*, *susceptibility to disengagement*, *vulnerability to goal inconsistency*, and *diligence*, were derived from several questions in the questionnaire and applied as independent variables. Furthermore, the respondents' experiential and habitual factors, including *visiting another country*, *training overseas,* and *having acquaintances from another country*, are utilized as independent variables.

2.3 Dependent Variable

The dependent variable in this study is *self-perceived English proficiency*. It is a composite variable derived from three variables representing self-appraised English skill levels in reading, speaking, and writing. The original questions ask the respondent how well he or she can (A) read short newspaper articles, (B) chat in English, and (C) write letters in English. Each question has five options from which the respondent can select one choice (see Table 1).

Table 1 *The Answer Choices of English-related Questions in the Original Survey*

Number	Answer Choice
1	I can do it very well.
2	I can do it well.
3	I can do it a little.
4	I cannot do it much.
5	I can hardly do it, or I cannot do it at all.

Note: The answer choices have been translated from Japanese into English by the writers of this paper.

For each of the three variables—reading, speaking, and writing—the first three response options numbered 1 through 3 in Table 1 have been grouped for re-coding to represent the higher proficiency level in reading, speaking, or writing, respectively. The last two options—numbered 4 and 5 in Table 1—have similarly been combined to represent a low proficiency group for each skill area. Consequently, three binary variables have been created—*self-perceived English proficiency* in (1) *reading*, (2) *speaking*, and (3) *writing*—each consisting of a higher and a lower proficiency group. The original variables have been transformed into three binary variables in this manner.

The three binary variables were then integrated to create a new comprehensive one approximating the overall self-assessment of English skill levels encompassing reading, speaking, and writing. This new variable—termed *self-perceived English proficiency*—has two categories: (1) respondents classified into a higher group in at least

one of the skill areas (reading, speaking, or writing), and (2) respondents who selected either "I cannot do it much," or "I can hardly do it, or I cannot do it at all" for all three skill areas and are thus classified into the lower proficiency groups across all areas. See Table 2 for the frequency distribution of the variable, *self-perceived English proficiency*.

Table 2 *Frequency Distribution of the Dependent Variable (N = 1537)*

Self-perceived English Proficiency (Speaking, Writing, and Reading)	Frequency Distribution	Percentage
Lower Self-perceived English Proficiency	1248	81.2
Higher Self-perceived English Proficiency	289	18.8
Total	1537	100.0

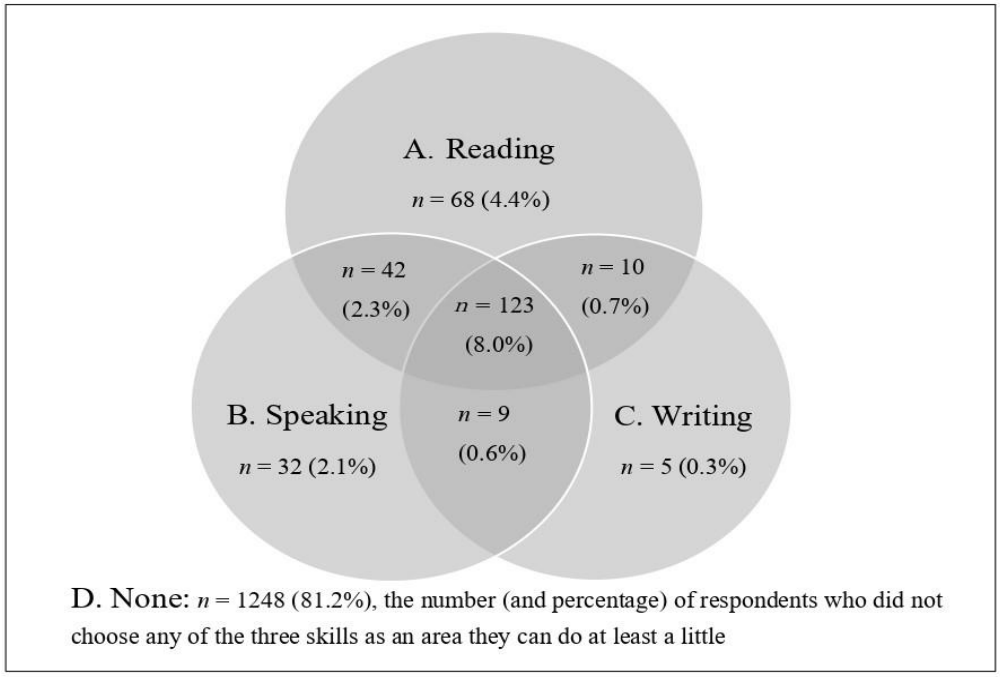
The dependent variable in this study, s*elf-perceived English proficiency*, is binary, and the sample is dichotomized into two categories: the lower and the higher proficiency groups, as seen above. Due to data availability, *self-perceived English proficiency* covers reading, speaking, and writing but does not include listening skills.

One may wonder about the validity of self-assessed English skills. In 1998, Ross conducted a meta-analysis to examine the validity of such self-assessments. His systematic review scrutinized 60 studies that had reported correlations between self-assessments and outcome measures in English as a second language testing (Ross, 1998). He concluded that, despite some variability in results, self-assessments typically demonstrate robust validity (Ross, 1998). Although it is understood that self-appraisal is neither a perfect nor precise measure of actual skills and that its interpretation may vary, this study employs *self-perceived English proficiency* as a dependent variable approximating the respondent's general English skill levels in reading, speaking, and writing.

The components of the dependent variable in this study—*self-perceived English proficiency*—are displayed in Figure 1 on the following page. All shaded regions—both darker and lighter areas—within the three circles in the figure represent the higher *self-perceived English proficiency* group (n = 289). In contrast, the rest of the regions outside the circles correspond to the group with the lower *self-perceived English proficiency* group (n = 1248). In other words, in the Venn diagram, the two groups in the dependent variable are expressed by the following mathematical formulae:

The higher *self-perceived English proficiency* group (n = 289): $(A \cup B \cup C)$
The lower *self-perceived English proficiency* group (n = 1248): D

Figure 1 *Venn Diagram of the Dependent Variable Self-Perceived English Proficiency (N = 1537)*



2.4 Analytical Phases

Statistical analyses conducted in this study comprise two phases: (1) the bivariate phase and (2) the multivariate phase. In the bivariate phase, associations between the independent and dependent variables are examined individually using chi-square tests of independence and Phi coefficients. This phase is a preliminary stage, providing valuable information for the subsequent multivariate analysis. In the multivariate phase, several binary logistic regression models are constructed using the insights from the preceding bivariate analysis. The results of the multivariate analyses are subsequently appraised and verified as to whether they fulfill a set of assumptions of binary logistic regression, including independent observations, no perfect collinearity, and binary dependent variable(s) (see Harris, 2021, for more details).

After completing the verification processes mentioned above, stratified bootstrapping is implemented to deal with the dependent variable's imbalanced distribution, as seen in Table 2. Bootstrapping is a nonparametric approach to estimating variance and standard errors by repeating resampling with minimal assumptions about the population distributions (Vogt & Johnson, 2016). It is a more empirical and rigorous approach to making statistical inferences than the standard logistic regression. In this study, bootstrapping is used as an additional verification tool to appraise the validity, consistency, and stability of the results obtained from binary logistic regression analyses.

Following the bootstrapping procedures, the outcomes of several multivariate models are examined and compared to identify the most suitable and robust model.

Table 3 below shows the baseline characteristics of the sample population.

Table 3 *Sociodemographic Characteristics of the Respondents*

Baseline characteristic	Lower self-perceived English proficiency		Higher self-perceived English proficiency		Full sample	
	N	%	*n*	%	*n*	%
Gender (*N*= 1538)						
Female	643	51.5	147	50.7	790	51.4
Male	605	48.5	143	49.3	748	48.6
Marital status (*N* =1538)						
Unmarried	352	28.4	115	40.1	467	30.6
Married	889	71.6	172	59.9	1061	69.4
Education (*N* = 1478)						
Up to high school completion	807	66.6	67	25.2	874	59.1
More than a high school education	405	33.4	199	74.8	604	40.9
Industry classification[a] (*N* = 1000)						
Natural resources	27	3.4	1	0.5	28	2.8
Construction	77	9.7	9	4.3	86	8.6
Manufacturing	133	16.8	25	12.0	158	15.8
Utilities and infrastructure	66	8.3	12	5.7	78	7.8
Commerce	120	15.2	19	9.1	139	13.9
Food services	39	4.9	11	5.3	50	5.0
Finance and real estate	38	4.8	16	7.7	54	5.4
Media and information services	34	4.3	33	15.8	67	6.7
Healthcare and education	142	18.0	49	23.4	191	19.1
Professional and other services	70	8.8	13	6.2	83	8.3
Public or government-related	45	5.7	21	10.0	66	6.6

Note: [a] For industry classification, the respondents who selected “others” in the original survey including those currently not employed or those who chose “others” but did not specify any industry type (n = 538) are not included in the figures.

The following section presents statistical summaries of the relevant results to demonstrate the suitability of the selected model.

3. Results

3.1 Bivariate Analysis

Table 4 presents the main results of the bivariate analysis between independent variables—sociodemographic factors, cognitive-behavioral traits, experiential indicators—and the dependent variable, *self-perceived English proficiency*.

Table 4 *Results of the Chi-Square Tests of Independence and Phi Coefficients*

Variable	χ^2	*df*	Phi coefficient	*p* value
Sociodemographic factors				
Age (<54 years vs. ≥54 years)	44.315	1	-0.170	<. 001
Gender	0.065	1	-0.007	0.798
Marital status	15.049	1	-0.099	<. 001
Education	154.679	1	0.324	<. 001
Self-perceived social class	27.728	1	0.135	<. 001
Annual household income	13.600	1	0.095	<. 001
Cognitive-behavioral traits				
Difficulty concentrating on a single project[a]	24.212	1	-0.126	<. 001
Persistence	14.839	1	0.099	<. 001
Susceptibility to disengagement	0.173	1	0.011	0.677
Goal inconsistency	0.056	1	-0.006	0.814
Diligence	38.238	1	0.158	<. 001
Experiential variables				
Have been to Europe	144.443	1	0.307	< .001
Have been to North America	83.658	1	0.233	< .001
Never been to another country	48.757	1	-0.178	< .001
Training overseas[b]	279.621	1	0.427	< .001
Have acquaintance(s) from another country	135.504	1	0.298	< .001
Frequent discussion of international issues (at least once a week)[c]	27.015	1	0.133	< .001

Note: Dependent variable = Self-perceived English proficiency. [a] Have difficulty concentrating on a single project over a few months; [b] Have received education or training in another country for more than 5 days; [c] Discuss international issues with family, friends, or acquaintances at least once a week.

As seen in Table 4, the chi-square tests were carried out to evaluate the presence of significant associations between the explanatory and outcome variables. Meanwhile, Phi coefficients were calculated to appraise the relationships' directions and the approximate strengths. Notably, *gender*, *susceptibility to disengagement*, and *goal inconsistency* did not show a statistically significant association with the dependent variable. In contrast, *education* in sociodemographic factors, *diligence* in cognitive-behavioral traits, and *training overseas* in experiential variables demonstrate the most potent effects within respective categories on the dependent variable, *self-perceived English proficiency*.

It is noteworthy that chi-square values indicate that experiential variables, on average, tend to have comparatively high effects on the outcome variable in the bivariate phase, which may suggest the importance of experience (i.e., nurture rather than nature, to put it simply) in general. In contrast, the category of cognitive-behavioral traits appears to have the lowest effects of the three variable categories on average as per their chi-square values. Nevertheless, when the comparison is limited to variables with statistical significance, their effects do not seem extraordinarily minimal.

3.2 Multivariate Analysis and Model Assessment

Table 5 *Collinearity Checks with Variance Inflation Factor (VIF)*

Variable	Collinearity statistics	
	Tolerance	VIF
Sociodemographic factors		
Age	0.879	1.138
Marital status	0.930	1.075
Education	0.836	1.196
Self-perceived social class	0.917	1.091
Cognitive-behavioral traits		
Difficulty concentrating on a single project[a]	0.933	1.072
Diligence	0.867	1.153
Experiential variables		
Training overseas[b]	0.895	1.118
Frequent discussion of international issues (at least once a week)[c]	0.947	1.056

Note: Dependent variable = Self-perceived English proficiency. [a] Have difficulty concentrating on a single project over a few months; [b] Have received education or training in another country for more than 5 days; [c] Discuss international issues with family, friends, or acquaintances at least once a week.

Based on the results of the bivariate analysis, several binary logistic regression models were implemented, and their outcomes were compared for the best-fit model. After a thorough comparison, the model with eight independent variables has been identified as possessing the most suitable and robust combination of predictors. The variables in the model are listed in Table 5 on the preceding page. In addition, Table 5 contains a list of collinearity and variance inflation factor (VIF) statistics demonstrating no perfect collinearity between the independent variables. This condition is one of the essential assumptions underlying binary logistic regression analysis (Harris, 2021).

Table 6 *Model Appraisal: Omnibus Tests of Model Coefficients*

		chi-square	*Df*	*p* value
Step 1	Step	354.080	8	< .001
	Block	354.080	8	< .001
	Model	354.080	8	< .001

Table 6 above lists the results of the omnibus tests of model coefficients. The enhanced effectiveness of the given model over the null model without any predictor is demonstrated by the significance value of the model ($p < .001$). Moreover, another set of indicators to appraise the model's suitability is the Hosmer and Lemeshow test. The results were as follows: χ^2 (8) = 8.329, $p < .402$. In this test, a non-significant p value indicates the model's suitability. The outcome thereby fulfills the condition.

Table 7 below enumerates a list of values, including pseudo R^2 values that approximate how much accountability the independent variables possess over the dependent variable. The listed values were the highest set of all tested models in this study. In particular, the Nagelkerke R Square value in the context of the binary logistic regression is relatively high: 0.357. The pseudo R^2 values demonstrate the extent to which the independent variables can expound the variance in the dependent variable, although they can be construed as approximations or crude estimates.

Table7 *Model Summary: Pseudo R Square Values*

Step	-2 Log Likelihood	Cox and Snell *R* Square	Nagelkerke R Square
1	1006.572[a]	0.219	0.357

[a] Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Another set of indicators to consider are sensitivity, specificity, and the

percentage of overall accuracy. In the context of this study, sensitivity refers to the model's capability to correctly classify individuals with a higher English language proficiency level. The sensitivity of the model was 35.2%. On the other hand, specificity refers to the model's accuracy in correctly identifying individuals with lower English proficiency levels. The specificity of this model was 97.4%. Finally, the percentage of overall accuracy amounted to 86.1%.

Bootstrapping was performed to ensure the reliability of the binary logistic regression results. This additional step was considered necessary because of the unbalanced distribution of the dependent variable, as seen in Table 2. The bootstrapping procedure confirmed the reliability and robustness of the results by maintaining substantial consistency. Only minimal differences were observed in the standard errors and confidence intervals. Table 8 presents the results of the binary logistic regression prior to bootstrapping.

Table 8 *Binary Logistic Regression Statistics*

Variable	*β*	SE	Wald	*df*	*p* value	Exp (β) (OR)	95% CI	
							LL	UL
Age	-0.635***	0.176	12.960	1	< .001	0.530	0.375	0.749
Marital status	-0.988***	0.180	30.217	1	< .001	0.372	0.262	0.530
Education	1.201***	0.177	46.229	1	< .001	3.325	2.352	4.701
Self-perceived social class	0.619***	0.175	12.502	1	< .001	1.858	1.318	2.618
Difficulty concentrating on a single project[a]	-0.552**	0.174	10.024	1	0.002	0.576	0.409	0.810
Diligence	0.586**	0.190	9.569	1	0.002	1.797	1.240	2.606
Training overseas[b]	2.199***	0.241	83.196	1	< .001	9.019	3.902	14.467
Frequent discussion of international issues (at least once a week)[c]	0.708***	0.167	18.062	1	< .001	2.029	1.464	2.813
Constant	-1.818***	0.511	12.646	1	< .001	0.162		

Note: Dependent variable = Self-perceived English proficiency; OR = odds ratio; CI = confidence interval; LL=lower limit; UL=upper limit. *p < .05. ** p < .01. *** p < .001. [a] Have difficulty concentrating on a single project over a few months; [b] Have received education or training in another country for more than 5 days; [c] Discuss international issues with family, friends, or acquaintances at least once a week.

3.3 Outcome Summary

Overall, several variables across sociodemographic, cognitive-behavioral, and experiential categories serve as significant predictors of *self-perceived English proficiency* in the reported model. Among the sociodemographic factors, *age* (<54 years vs. ≥54 years), *marital status* (not married vs. married), *education* (up to high school completion vs. more than a high school education), and *self-perceived social class* (lower vs. higher) were identified as significant predictors. The association between *self-perceived social class* and *self-perceived English proficiency* is relatively modest ($\beta = .619$; $p < .001$). In contrast, *education* ($\beta = 1.201$; $p < .001$) and *training overseas* ($\beta = 2.199$; $p < .001$) demonstrate stronger and more pronounced effects. In particular, *education* exhibits the most decisive influence, with the higher education group significantly more likely to report higher *self-perceived English proficiency*.

Among the variables classified as cognitive-behavioral traits, *difficulty concentrating on a single project over a few months* and *diligence* were identified as significant predictors. As anticipated, *difficulty concentrating on a single project over a few months* was negatively associated with *self-perceived English proficiency*, with a beta coefficient of -0.552 ($p = .002$). Conversely, *diligence* demonstrated a positive association, with a beta coefficient of 0.586 ($p = .002$).

Within the category of experiential variables, *training overseas*—defined as receiving education or training abroad for more than five days—emerged as a significant and the strongest predictor among all of the independent variables in the model ($\beta = 2.199$; $p < .001$). Additionally, the variable, *frequent discussion of international issues (at least once a week)* as opposed to individuals who do not discuss such issues at all or less frequently than once a week, was also a significant predictor, with a beta coefficient of 0.708 ($p < .001$).

4. Discussions

4.1 Sociodemographic Factors

As indicated in the preceding section, *education* emerges as the most influential variable within the category of sociodemographic factors. In the analysis, the sample population was divided into two groups based on educational attainment: (1) those with up to high school completion and (2) those with more than a high school education, including college, university, and graduate degree holders. Specifically, according to the results, it is possible to construe that individuals with more than a high school education are 3.324 times more likely to belong to the group with the higher *self-perceived English*

proficiency compared to those with up to high school completion, with a statistical significance ($p < .001$). While the significance of educational attainment in relation to *self-perceived English proficiency* is consistent with expectations, the strength of its association is noteworthy. In summary, *education* plays a critical role in shaping *self-perceived English proficiency*. This observation is consistent with many social scientists' expectations, as higher degree holders tend to have more opportunities to use English.

Another noteworthy predictor among the sociodemographic independent variables is *self-perceived social class*. As discussed earlier, this variable yielded a positive beta coefficient ($\beta = .619$; $p < .001$) in the model, alongside *education* ($\beta = 1.201$; $p < .001$). While its influence is less pronounced than *education*'s, *self-perceived social class* still demonstrates a moderate but significant effect, suggesting that social standing or, more precisely, one's perception of one's place in social stratification plays a role in shaping *self-perceived English proficiency*, albeit to a lesser extent than educational attainment. It is probably reasonable to infer that this variable's influence on English skill levels has diminished over time, as access to English—once predominantly restricted to the elite—has likely been broadened and democratized, as highlighted in the introduction.

The coexistence of *self-perceived social class* and *education* among the independent variables in the final model is neither surprising nor unexpected in relation to *self-perceived English proficiency*. It is plausible and reasonable to hypothesize that belonging to a higher social stratum enhances educational opportunities, including English language education, which may improve English language proficiency to a degree. The inclusion of *self-perceived social class* and *education* as significant predictors in the present model supports the argument made by Terasawa (2009). He states that social background influences both educational opportunities and English proficiency based on the results of his quantitative analysis of the Japanese population. The outcomes of the present study align with his statement.

4.2 Cognitive-Behavioral Traits

The reported model includes two variables from the category of cognitive-behavioral traits. The first variable is *difficulty concentrating on a single project over a few months*. The results indicate that, as expected, respondents who reported having *difficulty concentrating on a single project over a few months* were negatively associated with *self-perceived English proficiency*. According to the odds ratio, these respondents are 0.576 times as likely to be classified into the higher category of *self-perceived English proficiency* ($p = .002$). In other words, because the odds ratio is below 1.000, they are less likely to be in the higher *self-perceived English proficiency* category than those who do

not report *difficulty concentrating on a single project over a few months*. Seen from another perspective, these respondents with *difficulty concentrating on a single project over a few months* are 1.736 times more likely to be in the lower *self-perceived English proficiency* group, as the inverse (or reciprocal) of 0.576 is 1.736.

Nonetheless, supplemental bivariate analyses yielded another intriguing set of results. Since *self-perceived English proficiency* is a composite variable integrating three skill areas—that is, (1) reading, (2) speaking, and (3) writing skills—in English, each of these skill areas was examined individually as a dependent variable in relation to the independent variable, *difficulty concentrating on a single project over a few months*. The outcomes revealed that *difficulty concentrating on a single project over a few months* was significantly associated with *self-perceived speaking skills* (OR = 0.648, 95% CI [0.482, 0.871], p = .004). In contrast, *self-perceived reading skills* (OR = 0.761, 95% CI [0.577, 1.003], p = .052) and *self-perceived writing skills* (OR = 0.738, 95% CI [0.524, 1.040], p = .082) were not significantly associated. In short, as a dependent variable, only *self-perceived speaking skills* was significantly associated with the independent variable, *difficulty concentrating on a single project over a few months.*

Moreover, upon closer examination, one may recognize that the variable—*difficulty concentrating on a single project over a few months*—encompasses multiple underlying concepts. For instance, it involves not only concentration but also persistence, focus, and possibly motivation—or, more specifically, a lack thereof—though it is neither synonymous nor identical with any of these terms. Nevertheless, these notions partially overlap, rendering quantitative research in the social sciences and humanities particularly intricate and challenging.

Notwithstanding the complications, some researchers have addressed the role of perseverance and consistent interest in academic achievements. Duckworth et al. (2007) have applied the concept of *grit*—succinctly defined as perseverance and passion for long-term goals—and identified it as one of the key factors in academic achievements. In recent years, *grit* and its relationship with second language acquisition (SLA) have garnered significant attention, particularly among social psychologists and psycholinguists. For instance, Zhao and Wang (2023) conducted a meta-analysis of empirical studies on *grit* and SLA published between 2017 and 2022. They analyzed 32 publications dealing with samples from various countries and found that, in 17 studies, *grit* was linked to *academic attainment*, *willingness to communicate* in English or the second language (Zhao & Wang, 2023). The results of the present study are congruent with their findings, while these studies mentioned above deal with samples from various countries, including Australia, China, Iran, Pakistan, Poland, Saudi Arabia, South Korea,

Thailand, and the United States (Zhao & Wang, 2023). These studies with international samples have found that *perseverance of effort* and *consistency of interest* have played a significant role in achieving proficiency in the SLA context, which is certainly noteworthy.

In the present study, *diligence* is another variable from the category of cognitive-behavioral traits, identified as a significant explanatory factor and closely related to *grit* (OR = 1.797, 95% CI [1.240, 2.606], p = .002). That *diligence* is a significant factor associated with *self-perceived English proficiency* is unsurprising and logically expected. The importance of *diligence* in achieving successful outcomes across various tasks, skills, and fields, including SLA, is well-supported internationally. For instance, in a quantitative study with a sample of Vietnamese students, Nguyen et al. (2021) report that "the study method and diligence are the keys to students' success while learning a second language" (p. 1785). Moreover, Saito (2000), in his descriptive and diachronic analysis, highlighted the personal histories of ten prominent Japanese individuals who excelled in their respective fields and were proficient in English. His accounts underscored how these individuals, such as Nitobe Inazo and Noguchi Hideyo, displayed exceptional diligence throughout their lives. It is hardly surprising that *diligence* plays a crucial role in acquiring English language skills, especially in SLA.

4.3 Experiential Variables

The last category of independent variables examined in this study is experiential variables, which relate to the respondents' experiences, habits, or lifestyles. The most prominent variable in the current model from this category is *training overseas*, which is defined as receiving education or training in another country for more than five days. The odds ratio for the variable (OR = 9.019, 95% CI [3.902, 14.467], p < .001) indicates a stronger association with the dependent variable—*self-perceived English proficiency*—than any other independent variable in the reported model. In effect, *training overseas* demonstrates the most prominent and remarkable association with the dependent variable in the given model.

In accordance with the outcome of the present research, many prior studies have demonstrated that short-term study-abroad programs can make a difference—or, more specifically, lead to improvements—in participants' English proficiency. For example, studies by Kobayashi (1999), Nonaka et al. (2001), Kimura (2006), Yoshida and Kodera (2009), Nonaka and Seki (2016), and Suzuki and Hayashi (2014) report either a slight or moderate improvement in terms of English proficiency of the participants. Kobayashi (1999) compared the TOEFL ITP scores of university sophomores and juniors in Hokkaido before and after a three- to four-week program and found that the average

scores rose from 459 to 488—an improvement of 29 points following the program. Moreover, Nonaka and Seki (2016) assessed the TOEIC scores of junior college students in Japan before and after they participated in a short-term homestay or study-abroad program. The researchers found that the participants with TOEIC scores below 320 before the program showed a statistically significant improvement in the overall score, listening, and reading sections.

In contrast, in the same study, the participants with scores above 450 did not show a statistically significant change (p. 96). Nonaka and Seki (2016) reported that the comparison of scores before and after the homestay or study-abroad program indicated a statistically significant improvement in the listening section; however, only a limited portion of the sample demonstrated a significant gain in the reading section (Nonaka & Seki, 2016). From these results, it would be sensible to conclude that some degree of the short-term program's effectiveness in improving the participants' English proficiency was observed in some skill areas among some participants.

In the present study, however, it should be noted that to interpret the association between *training overseas* and *self-perceived English proficiency* as solely and entirely reflecting the effects of training abroad on English skills or participants' self-assessments thereof would be to downplay the potential complexity of this variable, although the association likely captures some of those effects as well.

It should be noted, however, that in this study, *training overseas* is not limited to language training or homestay programs. The survey broadly defined it as having received training in another country for more than five days. As a result, respondents who answered affirmatively to this question may include those who participated in educational programs abroad to study English or another subject and individuals who received professional training as company employees. In such cases, their English skills may have predated the overseas training, making it challenging and arduous to distinguish proficiency acquired *prior to* the experience from that *gained afterward*. This possibility complicates the interpretation of the association between overseas training and self-perceived English proficiency. Nonetheless, the association remains significant.

Another significant predictor in the category of experiential factors is the variable *frequent discussion of international issues (at least once a week)* (OR = 2.029, 95% CI [1.464, 2.813], $p < .001$). Compared to the preceding variable *training overseas,* its coefficient value is modest ($\beta = .708$), indicating a subtle but significant effect on *self-perceived English proficiency*. This variable dichotomizes the sample into (1) those who discuss international issues with friends, family members, or acquaintances at least once a week and (2) those who do not. If one examines beneath the surface, one may realize

that this variable is profound and pertinent to a *global perspective*, as those who discuss international issues at least once a week would probably have a degree of *global perspective*. Furthermore, this variable is also related to the concept of *willingness to communicate*, which has been examined in numerous studies (Fang et al., 2029; McCroskey, 1992; McCrosky & Richmond, 1987; Yashima, 2002, 2009; Xiao & Qui, 2022).

It is conceivable as well as plausible and convincing that a person with a *global perspective* and a *willingness to communicate* is more likely to develop English proficiency than someone with neither. It is unequivocal that having an interest in international affairs, combined with the volition to communicate with people, can lead to more firsthand experiences using English, supporting language development. Despite the intuitive connection, relatively few studies have examined *global perspective* and *willingness to communicate* simultaneously. Among the studies mentioned above, Fang et al. (2020), Yashima (2009), Xiao and Qiu (2022), and Xiao and Zhan (2022) address both constructs in the context of English as a foreign language.

Fang et al. (2020), Xiao and Qiu (2022), and Xiao and Zhan (2022) analyzed the relationship between *global perspective* and *willingness to communicate* in English in samples of university students in China. Fang et al. found that *global perspective* and *willingness to communicate* in English were correlated and concluded that developing a *global perspective* would benefit learning English as a foreign language (p. 39). Likewise, Xiao and Qiu (2022) found that there was a modest correlation ($R^2 = 0.358$) between *global perspective* and *willingness to communicate* in English (p. 8). In addition, their interview with the participants revealed that "lack of confidence in accent, grammar, vocabulary . . ." was one of the primary factors hindering *willingness to communicate* (p. 9).

Xiao and Zhan's research (2022) illuminated a moderate positive correlation between a *global perspective* and *willingness to communicate*. In addition, it is intriguing to note that they found variations in *interest in foreign cultures* [which relate to the *global perspective*] even among students with high levels of *English proficiency*. In their study, there were individuals with high levels of *English proficiency* and a strong *interest in foreign cultures*. At the same time, there were also individuals with high *English proficiency* and a weak *interest in foreign cultures* (Xiao & Zhan, 2022). Notwithstanding the variations, these three studies indicate that *global perspective* and *willingness to communicate* in English are positively correlated, which is congruent with the present research outcomes.

Furthermore, the correlation between *global perspective* and *willingness to*

communicate in English is reflected upon and discussed by Yashima (2009) in the context of Japan. She analyzed the importance of *international posture*, which is closely related to the *global perspective* in the context of Japanese learners of English as a foreign language. In her scheme, *international posture* is synergistically linked with the *frequency of communication* and *English proficiency*, forming a triangular relationship (p. 11). In other words, the presence of *international posture* may lead to an enhanced *frequency of communication in English*, which, in turn, may bring about a higher level of *English proficiency* (Yashima, 2009). The relationship sounds not only reasonable but also consistent with the outcomes of the present study, in which *frequent discussion of international issues (at least once a week)*—which potentially necessitates a *global perspective*—was identified as one of the significant predictors for *self-perceived English proficiency*.

5. Conclusion

The results of this study highlight the statistical significance of *age*, *marital status*, *education*, *self-perceived social class*, *difficulty concentrating on a single project over a few months*, *diligence*, *overseas training*, and *frequent discussions of international issues (at least once a week)* as predictive factors of *self-perceived English proficiency*. Some of these variables—particularly those in the cognitive-behavioral and experiential categories—can be influenced by individual effort, suggesting that *self-perceived English proficiency* is at least partially within an individual's control. For example, concentration, diligence, studying abroad, and regularly engaging in discussions about international topics are not innate traits, nor are they exclusive to exceptional individuals; many people have the ability to develop or access them. However, the extent to which one can exercise control over these factors may differ by individual circumstances.

Furthermore, access to English language education in Japan has become increasingly democratized. Beyond formal schooling, people today can utilize a wide range of resources—including Internet-based materials and programs—to support their learning. When combined with the factors identified in this study, an individual's motivation, determination, and access to quality, evidence-based instruction can significantly enhance and accelerate English language acquisition. In this modern educational environment—unlike the conditions present when English was first introduced to Japan—individuals have greater agency over their language learning outcomes, provided they are motivated to pursue them.

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