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**INDIVIDUAL DIFFERENCES IN EARLY STAGE ENGLISH  
LEARNERS IN JAPAN**



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**Abstract**

This paper attempts to explore the individual differences in English Learning (EL) of early stage learners focusing on students' experiences relevant to EL, motivation for EL, and first language (L1) performance. In Japan, English education has been radically changing since 2011. To reveal how the change has affected Japanese students, their actual state needs to be investigated. There were 406 Japanese junior high school students as participants. They were asked to answer the questionnaire concerning their experience related to EL (e.g., the content of the activities, the starting age of EL) and motivation for EL. Also, their metalinguistic ability was measured as L1 performance. The metalinguistic ability test consisted of ambiguity detection tasks, grammatical relation tasks, and morphological awareness tasks. The results showed that over 70% of the students considered English classes as fun, though they did not necessarily have autonomy. Further, the group with lower autonomy tended to have taken writing and speaking classes. The number of English class hours and the starting age of EL showed no correlation with motivation. Also, metalinguistic ability did not correlate to the other variables. The findings imply that it is not easy to develop students' motivation. However, amended English education in Japanese elementary schools mostly has positive effects on students. Overall, the data contributes a clearer understanding that supports the contention that classroom activities are more influential than the starting age of EL and the number of English class hours.

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*Keywords:* English learning, individual differences

## **1. Introduction**

In Japan, English education was officially introduced to elementary schools in 2011. Officially, they have been categorized as “foreign language activities”. Initially, “foreign language activities” in elementary school were implemented for 5th and 6th graders. Although early English education has advantages, many problems have been identified when introducing English education to lower elementary school students in Japan. In particular, it has been argued that a major challenge is the lack of educators who can properly teach English to children (e.g., Nishizaki, 2009; Oikawa, 2017). In general, Teacher Education (TE) training in Japan does not require pre-service elementary school teachers to take foreign language or English-related credits in order to obtain their license. As such, many elementary school teachers lack the qualifications and English proficiency necessary to teach English to at the elementary level. In addition, Higuchi (2010) reported that the number of English class hours per year varied widely from a single one-hour class to over 71 hours in another class depending on the school. Although this data was collected over a decade ago in many cases English instruction at the lower elementary level is still an issue. On the extreme end, Otsu et al. (2013) strongly stated that English education in Japan would ‘collapse’ in the near future. In response, in addition to 5th and 6th grade English language curriculum, the Japanese government initiated earlier English language education curriculum for 3rd and 4th graders in 2020. This paper examines the impacts of these changes on students with a focus on their perception and motivation by investigating student experiences and the success of the most recent English language education curriculum in Japan.

## **2. Statement of the Problem**

English education in Japan has radically changing since 2011 (Oikawa, 2017). As a result, over the past decade, there are several avenues within the research literature that have attempted to investigate these changes in order to evaluate their effectiveness within English education in Japanese elementary schools. First, Hasegawa (2013) investigated the effects of teaching style on students’ English skill development and attitude towards English. Hasegawa (2013) also investigated the impact that initial grade of instruction had on student language learning. His data showed that English-exposure time was more influential to students’ English language skills than initial grade of instruction. He further highlighted that instructional deficiencies due to the lack of teacher training resulted in students developing a dislike for English. Additionally, the research literature also explores teachers’ perception of English education in elementary school. According to Yorozuya et al. (2013), junior high school teachers thought that English education in elementary school contributed to enhancement of students’ motivation, communicative attitude, and conversational skills. However, Sakui et al. (2017) reported that only a small number of teachers had a certain level of English proficiency or could teach natural organic English. It is clear that there are multifactorial issues within the English teaching field in Japanese elementary education.

### **2.1. Individual Differences**

Individual differences have been the subject of controversy in the research field of second language (L2) acquisition and foreign language learning (e.g., Gardner, 1979; Kurahachi, 1994). This has been a

significant issue because findings show that individual differences have no impact on communicative competence within native languages (L1); yet, findings show individual differences have significant impact on communicative competence in the L2. Kurahachi (1994) stated that factors predicting individual differences could be classified into two categories: (1) environmental factors and (2) learner factors. Skehan (1991) focused on four areas as important variables of individual differences. These comprise language aptitude, motivation, learner strategies, and learner styles. Moreover, Dörnyei and Skehan (2003) consider language aptitude and motivation as principal variables accounting for individual differences making these critical elements in the issue of individual differences.

### **2.1.1. Language Aptitude and Motivation**

Language aptitude can be defined as “the capability to handle new experiences in language learning” (Rezvani & Mansouri, 2013, p.67). Carroll (1965) proposed the conception of language aptitude consisting of four factors: phonetic coding ability, associative memory, grammatical sensitivity, and inductive language learning ability. Sparks (2012) has worked on individual differences with a focus on the relationship between L1 performance and L2 performance. He suggests that “there are important relationships between L1 and L2 learning” (Sparks, 2012, p. 6). Individual differences continue to be at the forefront of language aptitude. Clearly language aptitude between L1 and L2 need further inquiry as there are conflicting results in the data (e.g., Sparks, 2012; Kurahachi, 1994).

Considering student (L2) motivation, many scholars (e.g., Papi & Hiver, 2020; Csizér & Dörnyei, 2005) have demonstrated that it has a complex construct, comprising various constituents. When considering motivation in L2 learning it is critical to consider identity, self-efficacy, and the ideal-self. These concepts have huge implications on the motivation of the learner. According to Dörnyei (2010), ideal L2 self is the L2-specific facet of one’s ‘ideal self’. In addition, “if the person we would like to become speaks an L2, the ‘ideal L2 self’ is a powerful motivator to learn the L2” (Dörnyei, 2010, pp. 79-80). Clearly, the ideal-self is a critical motivational element of the L2 identity and is critical to goal setting for the L2 learner. The power of the L2 ideal-self has the potential to establish to autonomy within the learner.

Autonomy is a crucial concept in the science of motivation, which can be generally defined as “feeling free and volitional in one’s actions” (Deci & Flaste, 1995, p. 2). In the context of EL, it means a situation where students are motivated to learn English on their own, independently of the school curriculum and teachers. Self-efficacy “refers to an individual’s judgment of his or her ability to perform a specific action” (Dörnyei, 1994, p. 277). Even if a learner has achievement goals and development aspirations, it is not always easy for him/her to take an actual action toward them. If his/her self-efficacy is high, it motivates him/her to take specific actions towards the goals and aspirations. On the other hand, when his/her self-efficacy is low, the motivation for the goals and aspirations is diminished, and he/she may become reluctant to take actions for them. Hence, it is reasonable to assume that self-efficacy is one of the highly important components of motivation.

Several matters are brought to light by reviewing the literature and studies mentioned above. Firstly, while a certain amount of effort has been made on the study of teachers’ perception of English education in elementary school in Japan, what seems to be lacking is studies on students’ perception of it. This is directly related to the link between autonomy, self-efficacy and ideal-self. They are all of critical importance

to L2 perception and motivation. Secondly, no comprehensive examinations of English education for young students in Japan have been undertaken to date which has led to a stale, unchanging system of EL. This is especially true when considering multifaceted perspectives including critical individual difference variables. The present study focuses on the ideal-self, autonomy, and self-efficacy in terms of the critical nature of their impact on motivation and language aptitude, and their role in the success of Japanese students in elementary EL.

### **3. Research Questions**

Considering the problem statement above, the issue with the previous studies is that they have not sufficiently examined the perceptions of the students, and there is a limited accumulation of studies that have comprehensively examined individual difference variables. Therefore, here are two research questions. First; has English education in elementary school in Japan been successful for ‘students’? Second; how are individual difference variables relevant to English Learning (EL) related to each other in the context of education in Japan?

### **4. Purpose of the Study**

This paper attempts to explore the individual differences of early-stage English learners in Japan, where English education has undergone major changes in recent years. There are still perception issues related to critical elements of student needs for EL at the elementary level. In this study, three individual differences variables were considered: students’ EL experience, motivation for EL, and L1 performance. Experience is regarded as an environmental factor of individual differences, namely, a factor caused by schools or teachers, not a factor within a learner him/herself. In this study, the variables of experience included the starting age of EL, the number of English class hours, the content of English classes, and English-related experience outside of school. Also, this study dealt with perception of experience as a variable of experience as well as experience itself.

Motivation is one factor related to individual learner differences. This study focused on three motivational variables: ideal EL self, autonomy in EL, and self-efficacy in EL. While the term “ideal L2 self” has been employed in previous studies, the “ideal EL self” is used in this paper. The term “L2” has been defined as a target language learned in settings where it is dominantly spoken. In contrast, English is unutilized in everyday life in Japan, which is typically a school subject or business tool. Thus, the term “ideal EL self” is adopted in the present study.

As for L1 performance, learner metalinguistic ability was examined, which is closely related to the linguistic aptitude. Metalinguistic ability refers to “the ability to reflect upon language itself as an object to thought in contrast to simply comprehend or produce language expression” (Igarashi, 2014, p. 9). The metalinguistic literature provides evidence, showing the positive relationship between metalinguistic ability and L2/foreign language proficiency (e.g., Igarashi, 2015; Lasagabaster, 2001; Roehr, 2008).

## 5. Research Methods

Participants comprised 406 first, second and third-grade Japanese junior high school students. They were purposively recruited by English teachers, who were the researcher's colleagues, from three different schools. Before conducting this survey, the teachers explained the nature and purpose of the present study to the participants. Also, it must be noted that participation was voluntary and that the participants could discontinue participation at any time without any obligations. Furthermore, it was emphasized that their responses to the questionnaire and the test in this study were irrelevant to their school grades.

The participants in all three grades answered a questionnaire measuring their motivation for EL while only the first-grade students were asked to complete a questionnaire concerning their experience related to EL. The questionnaire comprising eight items utilized a Likert response scale. Three items were about the participants' perception of English classes taken in elementary school. First, participants were asked the frequency of their English classes and how many English classes they had taken in elementary school. Second, they were asked when they started learning English. Third, they were asked what kind of EL activity they were involved in. Finally, they were asked if they took extra private English lessons and if they had opportunities to use English outside of school or private lessons.

The scale of ideal EL self was developed by referring the theoretical concept of ideal L2 self (Dörnyei & Chan, 2013). That scale of autonomy in EL was made in terms of "the concept of autonomy in second language learning" suggested by Chitashvili (2007). The scale of ideal EL self-consisted of four items and that of autonomy consisted of three items. Concerning the scale of self-efficacy, the scale developed in my previous study (Igarashi, 2016) was adopted. Purposely, I excluded one item from the original version of my previous scale due to the space limitation of the questionnaire.

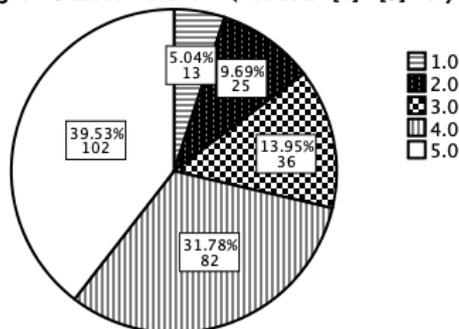
A metalinguistic ability test was given to the participants in all the three grades. The test consisted of ambiguity detection tasks, grammatical relation detection tasks, and morphological awareness tasks. The participants completed a total of 18 items, as every section included six items. This test was a modification of the instrument from an earlier study (Igarashi, 2021). Ambiguity detection and grammatical relation detection tasks were chosen from the earlier instrument. The original items of the earlier work were given in the ambiguity section. Additionally, the items were changed into multiple choice questions in the grammatical relation section since the original version seemed too difficult for the present participants to answer. The measure of the previous study included only ambiguity detection and grammatical relation tasks. However, the morphological items were added to the present test since it is likely that awareness of the need for perceived morphological structure plays an important role in EL of early-stage learners. In other words, it is considered that early-stage learners work on word-level tasks more frequently than sentence or discourse level. Morphological structure is defined as the structure and components of words such as prefixes, suffixes, and stems. The Morphological section contained three types of the items to measure their ability to distinguish between potential and intransitive verbs, between transitive and intransitive verbs, and between nominalized adjectives and nominalized verbs.

## 6. Findings

### 6.1. Data Overview

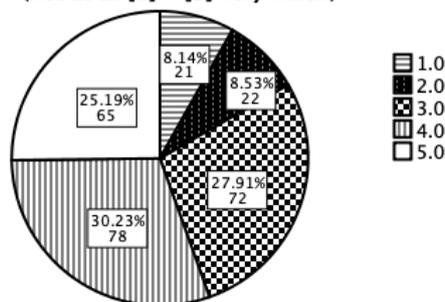
The number of valid responses varied depending on the items of the scale. First, I report the students' perception of English class in elementary school. As Figure 1(a) shows, over 70% of the students considered English classes in elementary school as fun. Also, the result revealed over 55% considered English classes as fulfilling and attended English classes actively when they were in elementary school (see Figure 1(a) & (b)). Next, students' experiences outside of school are reported here. The proportion of the students who took extra private lessons was 33.5% and that of the students who did not was 66.5%. In addition, 35.7% of the students had opportunities to use English outside of school or during private lessons (e.g. travel, conversation with foreign friends, and study program abroad). These findings clarified that most students perceived English classes in elementary school as positive. At the same time, it is true that a certain percentage of students were not satisfied with English classes in elementary school. Hasegawa (2013) suggests that insufficient instruction may give rise to such dissatisfaction. To investigate the cause of negative perception closely, further research may be required.

**English Classes were fun. (not at all [1] ~[5] very much)**

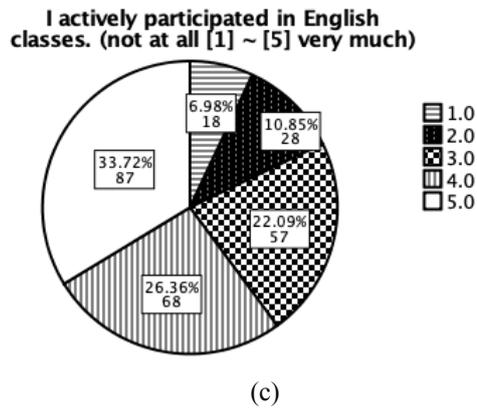


(a)

**English classes were fulfilling. (not at all [1] ~ [5] very much)**



(b)



**Figure 1.** (a), (b), & (c) Students' Perception of English Class

Table 1 shows the result regarding the starting age of EL. 45.7% of the participants answered “10”, which was the highest. The second highest number was 16.80% for “under 6”. This result showed signs of polarization, though it was not extreme. The polarization may progress in the future, and since it may be intertwined with the issue of educational disparity, careful discussion will be necessary in the future research.

In Table 2, descriptive statistics show the number of English class hours per week in elementary school. According to participant responses, some elementary schools did not have regular English classes every week, having English classes irregularly, several times a semester. Therefore, the minimum was remarkably small. In other words, there were still considerable differences among individuals or schools. How to solve this inequality is a challenge for school education and may require further inquiry and/or structural changes to curriculum, including some standardization throughout Japan for EL programs.

**Table 1.** Starting age of EL and Frequency

Starting age	11	10	9	8	7	6	Under 6	Total
Frequency	11 (4.30%)	117 (45.70%)	32 (12.50%)	28 (10.94%)	7 (2.73%)	43 (16.80%)	18 (7.03%)	245 (100%)

**Table 2.** Descriptive Statistics of Number of English Class Hours in Elementary School

	Valid N	Min	Max	Mean	Std. Dev.
Number of English class hours per week	257	2.813 minutes/ week	300.000 minutes/ week	60.150 minutes/ week	56.127

With regard to motivation, the scores of the items in each category were added up and then divided by the number of the items, so that the average scores could be calculated for each student's response. For analysis, the average scores were used as the scores in the following categories respectively. The list of items in each category is as follows:

• Ideal EL self ( $\alpha = .78$ )

1. I'm trying my best to participate in English classes.
2. I want to be good at English.
3. I want to learn English as much as possible.
4. I need to acquire English skills for future use.

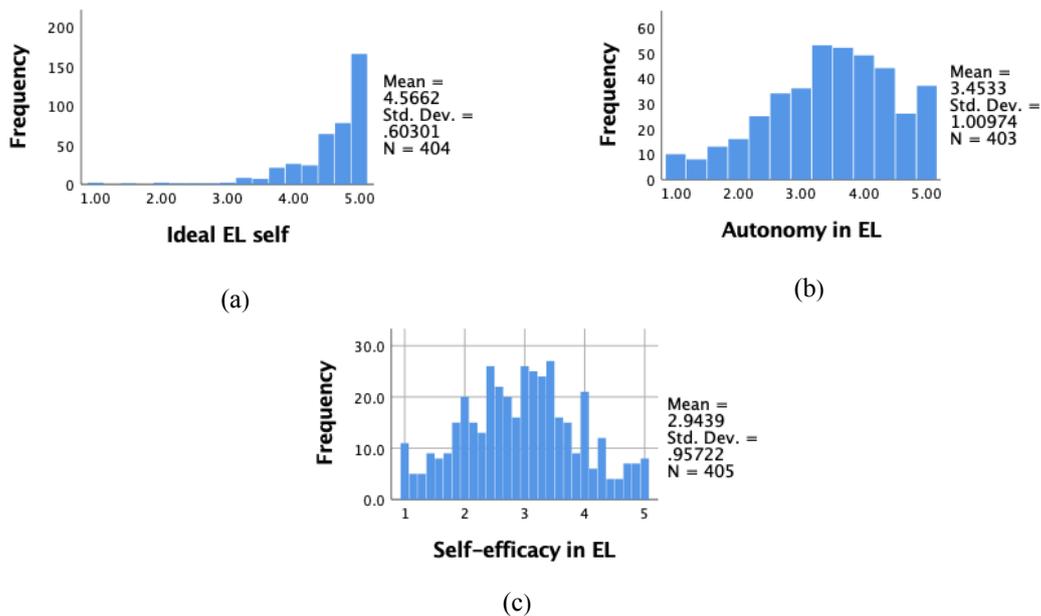
• Autonomy in EL ( $\alpha = .75$ )

1. I look forward to English classes.
2. I would study English even if I did not have to do English homework or take English tests.
3. I would study English even if I did not have an English subject in school.

• Self-efficacy in EL ( $\alpha = .94$ )

1. I expect to do very well in English class.
2. I am sure I can do an excellent job on the problems and tasks assigned for this class.
3. I'm certain I can understand what is taught in English class well.
4. I think I will receive a good grade in English class.
5. I think I'm a good English learner.
6. My English learning techniques are excellent compared with others.
7. I can correctly answer the problems or questions provided by the teacher.

A significant percentage of the students displayed the motivation to meet their ideal-EL-self and answered that they wanted to be good at English (see Figure 2(a)). On the other hand, variations were detected in the answers about autonomy (see Figure 2(b)) which meant that there were students who wanted to be good at English did not necessarily have autonomy to do so. More to the point, almost all learners have an ideal EL self, though when it comes to autonomy, some do and some do not. Henceforth, the variable of autonomy was particularly taken as a motivation variable for analyses instead of the ideal EL self, considering the distribution of the scores and the ceiling effect. The graph of self-efficacy shows a picture close to a normal distribution (see Figure 2(c)). The results suggest that it is relatively easy to increase student ideal-self, but difficult to develop an autonomous learning attitude and self-efficacy. This could be the result of systemic issues within the Japanese EL curriculum that need further inquiry.



**Figure 2.** (a), (b), & (c) Distribution of Data

## 6.2. Experience and Motivation

T-tests were conducted and found that students' experiences of taking extra private lessons had no relation to autonomy in EL statistically. By contrast, another T-test revealed that students who took extra private lessons showed significantly higher score of self-efficacy in EL ( $t = -2.016$ ,  $df = 255$ ,  $p = .045$ ,  $d = .27$ ). It was also found that there was a significant difference between self-efficacy of the students who had opportunities to use English outside of school or private lessons and that of the students who did not ( $t = -2.501$ ,  $df = 399$ ,  $p = .013$ ,  $d = .26$ ). These findings imply that English-exposure time are influential to EL, which is consistent with data reported by Hasegawa (2013). Unfortunately, the results of this survey were limited in terms of causality. Qualitative and longitudinal studies will be necessary to ascertain if a causal relationship can be found.

Correlation analyses were conducted. The results revealed that the number of classes they took in elementary school had no clear relation to their motivation for EL. Also, it was found that the starting age of EL had no significant correlation to autonomy or self-efficacy. However, the results indicated positive correlations between the students' perception of English class in elementary school and their motivation for EL (see Table 3). These data suggests the students who found English classes in elementary school fun or fulfilling were more motivated and confident to learn English.

The participants' responses to the item regarding the content of English class included pronunciation, watching English videos, English songs, listening, writing, speaking, reading, English games, and English plays. To explore the relationship between motivation and the content of English class in elementary school, the participants were divided into two groups. Grouping was done from two perspectives of autonomy and self-efficacy, respectively. The participants with an above-average score were classified into a higher group and the participants with an average or below-average score were

classified into a lower group. Cross tabulation tables of motivation and the content of English class in elementary school are presented below (see Tables 4, 5, 6, 7, & 8). It should be noted that only tabulations resulting in significant interactions through analyses are presented.

**Table 3.** Correlation between perception of English classes and Motivation

	Autonomy (N = 256)	Self-efficacy (N = 258)
English classes were fun.	.512**	.497**
English classes were fulfilling.	.466**	.383**
I actively participated in English classes.	.544**	.515**

Note. \*\* $p < .01$

**Table 4.** Cross Table of “Self-efficacy” and “Writing Activity”

	Writing activity “No”	Writing activity “Yes”	Total
Lower self-efficacy	105	35	140
Higher self-efficacy	69	49	118
Total	174	84	258

**Table 5.** Cross Table of “Autonomy” and “Speaking Activity”

	Speaking activity “No”	Speaking activity “Yes”	Total
Lower autonomy	162	28	190
Higher autonomy	48	20	68
Total	210	48	258

**Table 6.** Cross Table of “Autonomy” and “Writing Activity”

	Writing activity “No”	Writing activity “Yes”	Total
Lower autonomy	135	55	190
Higher autonomy	39	29	68
Total	174	84	258

**Table 7.** Cross Table of “Autonomy” and “Listening Activity”

	Listening activity “No”	Listening activity “Yes”	Total
Lower autonomy	186	4	190
Higher autonomy	62	6	68
Total	248	10	258

**Table 8.** Cross Table of “Autonomy” and “Reading Activity”

	Reading activity “No”	Reading activity “Yes”	Total
Lower autonomy	189	1	190
Higher autonomy	63	5	68
Total	252	6	258

Chi-square tests were calculated comparing the frequency of the content of English class in higher and lower groups. The result indicated a significant relationship between self-efficacy and the experience of taking writing lessons ( $\chi^2(1) = 7.964, p = .01, \phi = .18$ ). The students with higher self-efficacy were more likely to have taken writing lessons than those with lower self-efficacy. Also, significant interactions were found in speaking activities ( $\chi^2(1) = 7.122, p = .01, \phi = .17$ ) and writing activities ( $\chi^2(1) = 4.280, p = .05$ ).

$\phi = .13$ ). The students with lower autonomy were more likely to have taken speaking or writing lessons than those with higher autonomy. As for listening and reading activities, Fisher's (year) exact tests were conducted since an expected value of less than 5 was included. Significant interactions were found in listening activities ( $p = .02$ ,  $\phi = .15$ ) and reading activities ( $p = .01$ ,  $\phi = .20$ ). The students with higher autonomy were more likely to have taken listening or reading lessons than those with lower autonomy.

According to these findings, it is possible that output activities, such as speaking and writing in English, lead to lower motivation. This is probably due in part to the fact that elementary school students still have little knowledge of vocabulary and grammar, so they may perceive the tasks as difficult and demanding. The positive relationship between writing activities and self-efficacy could be explained by the idea that the experience of tackling the challenging task of writing may lead to self-confidence in EL. On the other hand, the content of the input activities (i.e., listening and reading) is relatively adjustable for learners, and the input activities are easier for early-stage learners to engage in, which can contribute to their motivation. Nonetheless, it should be noted here that the effect sizes for the outcomes were small.

### 6.3. Metalinguistic Ability

The number of valid responses of metalinguistic ability test was 406. Descriptive statistics are shown in Table 9. Cronbach's coefficient alpha of metalinguistic scale was .65. The data was analyzed, although the reliability is not high enough. As a result, metalinguistic ability did not correlate to the other variables. This result is not consistent with previous studies; yet, this is presumably attributable to the insufficient reliability of the scale making it necessary to undertake further work on the scale.

**Table 9.** Descriptive Statistics of Metalinguistic Ability Test

	Min	Max	Mean	Std. Dev.
Metalinguistic ability test	0	18	7.810	3.243

## 7. Conclusion

The present study was intended to discover the effect of English education in elementary school on early stage English learners in Japan, with a focus on their individual differences. Consequently, it was found that English classes taken in elementary school are likely to have a positive influence on EL in junior high school. The research questions are reviewed here:

Q1. Has English education in elementary school in Japan been successful for 'students'?

Q2. How are individual difference variables relevant to EL related to each other in the context of education in Japan?

It might be safe to say "yes" to Q1 on the basis of students' perception. Yet, it is also true that there are a few cases where the process has not been successful. There are a few students who perceive the current English education as negative. Those cases need to be examined in detail in the future. In reference to the current educational system, the answer from the study data is "no" to Q1. Regarding the starting age and

the number of English class hours, the results imply a disparity involving English education. It is urgent for Japanese government, especially for the Ministry of Education, to tackle and solve this issue.

For Q2, the results suggest that it is not easy to develop students' autonomy and self-efficacy. Also, the data contributes a clearer understanding that the content of the activities is more influential compared to the starting age of EL and the number of English class hours. Thus, to improve English education, it might be necessary to enrich the educational content rather than unreasonably lowering the initial grade for English education or increasing the number of English class hours.

Despite all these valuable findings, some possible limitations in this study must be mentioned. First, the present results regarding metalinguistic ability contradicted previous studies. It might not be a new outstanding finding but might have resulted from a deficient scale. Further research is needed to explore metalinguistic ability and other variables. Next, data collection was conducted only at one point in time for each variable. Longitudinal surveys and qualitative studies will be necessary to verify the causal relationships among variables in the future

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