

Early Informal Foreign Language Learning and its Impact on Japanese Children's Narrative Ability in English after Homestay Abroad

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In Japan, many parents have a strong desire to raise children to become bilingual from a young age. For these parents, informal foreign language learning programs exist where children can learn a target language implicitly through play and language immersion in the same way as their first language. This study investigates the English proficiency levels of 55 children (ages 12 to 14) who have been attending such a program once a week from as early as age two. Their English narrative ability was assessed using a picture description task before and after they participated in a short homestay abroad arranged by the program. The results show that the children tended to produce a more complex yet coherent story with a wider range of grammar and vocabulary on their return to Japan one month later. This tendency was more apparent for the children who received English input before age 4;6 (years;months). The findings suggest clear benefits of early naturalistic foreign language exposure for later narrative ability, particularly after intensive language immersion abroad, and provide implications for incorporating play into early foreign language learning.

日本では、子どもをバイリンガルに育てることを目的として、遊びや言語イメーションを通しての外国語学習プログラムが存在する。本研究では、そのようなプログラムの一環として実施される一ヶ月の海外滞在の前後で、2歳以降に英語を毎週学習してきた55名の子供（12歳～14歳）の英語でのナラティブ能力の変化を検討した。その結果、帰国後に、より多様な語彙と文法を用いて複雑かつ一貫性のある物語を作れることが、4歳6ヶ月以前から英語学習をしてきた子供らに顕著に現れた。これは、（特に短期の海外滞在後における）ナラティブ能力の向上のためには、できるだけ早期に外国語学習を始め、遊びを通して自然に外国語に触れていくのが有益であることを示唆している。

Keywords: informal foreign language learning; play; short homestay abroad; narrative ability; child language learners

Sending language learners to a country where the target language is spoken is commonly perceived in Japan, and elsewhere, as an ideal way to improve foreign language proficiency and bilingual development. This is based on the belief that, in such learning contexts, one can automatically receive rich opportunities to practice and be exposed to the target language in a natural setting. The last two decades have spawned investigations of the effectiveness of short stays abroad for foreign language learning, particularly in

terms of improvement in speaking abilities among undergraduate students. Such studies generally find that short study abroad (SA) experiences, commonly defined as lasting less than a few months (or sometimes less than a semester) (Neff & Apple, 2020), help to improve oral proficiency, fluency, and lexical complexity. For example, Di Silvio et al. (2014, 2015) report that after a semester abroad, American learners of different languages (Spanish, Mandarin, and Russian) had considerable gains in oral proficiency. Hernández (2016) not only found that most of his participants improved their Spanish-speaking proficiency after a four-week program in Spain, but that such gains were more prominent for novice or intermediate learners than for advanced learners, thus suggesting that short-term SA may be more beneficial for learners with lower rather than higher proficiency in the target language.

However, a certain threshold level of proficiency may be needed to see any improvements in SA settings, according to Pérez-Vidal and Juan-Garau (2011). Gains in diverse linguistic skills are, moreover, not guaranteed for all short-term SA participants. Bilingual Spanish-Catalan learners of English showed significant gains in accuracy and fluency, as well as lexical and syntactic complexity after short-term English immersion in Llanes and Muñoz (2009) and Pérez-Vidal and Juan-Garau (2011), but Spanish learners studied by Serrano et al. (2011) improved only in English fluency and lexical complexity. While short-term SA can improve adult language learners' speaking abilities, this effect may not encompass all linguistic aspects to the same degree.

The above-mentioned studies conducted in the European context with university-aged students suggest that being immersed in a foreign language abroad, even for a short period, can be beneficial for speaking that language. This belief has encouraged more learners, including child and adolescent ones, to engage in such experiences privately during summer vacations or through school exchange programs (Borràs & Llanes, 2020). International exchanges lasting three months or less have also occurred in high schools in Japan although they have not been the subject of any research investigations. According to a government report (Ministry of Education, Culture, Sports, Science, and Technology, 2023), Japanese high school students in the past three decades have been going on such exchanges to the US, Canada, New Zealand, and Australia to improve their English language ability. But as far as we are aware, no studies exist about its effectiveness for younger Japanese children who do short homestays abroad without formal language instruction. We hope to fill this research gap with our study.

Short-Term Language Immersion Abroad for Children

In the past decade, only a few researchers have studied systematically the effects of short-term language immersion on foreign language development in children. These studies, conducted in Europe, have focused mainly on the difference in linguistic gains between children and adults to determine whether younger participants can benefit more than older ones from intensive language immersion experiences. Llanes and Muñoz (2013), for example, investigated English gains in 73 Catalan-Spanish children and 66 adults in two settings, study abroad (SA) versus at home (AH). The results show that the SA context was superior to the AH context for both child and adult learners in terms of increasing their speaking and writing abilities. Children improved more than adults, especially in terms of oral fluency, accuracy, and lexical complexity after a two- or three-month SA experience. Similarly, in their large studies of Catalan-Spanish bilinguals of different ages, Muñoz and Llanes (2014) and Llanes and Serrano (2017) report that children and adolescents experienced larger gains than adults in English oral skills (including fluency, accuracy, and pronunciation) after two- or three-month stays in Ireland.

The superiority of younger learners over older ones in the development of oral skills was explained in these studies as being due to the difference between children's and adults' learning mechanisms and in their quantity and quality of language contact during time spent abroad. That is, children are better than adults at learning implicitly and can thus benefit more from being in naturalistic language immersion settings (Llanes & Muñoz, 2013). Children also tended to spend more time than adults speaking with native speakers, such as their homestay families, in the host country (Llanes & Serrano, 2017; Muñoz & Llanes, 2014). In their investigation of Japanese university students in three-week SA programs, Greer (2018) and Greer and Wagner (2023) have confirmed this by showing that adult language learners found it difficult to participate actively in conversations with homestay families. They report that only those university students who engaged with their host families were successful in improving their lexical knowledge of English. Learners younger than those at university were able to develop intimate relationships more easily with their host families and to interact more often in local communicative situations. In their qualitative studies of American high school students in four-week summer homestays in China, Tan and Kinginger (2013) and Kinginger (2015) report that their adolescent participants assessed their close experience with their host families very positively. The teenagers were grateful for how much their host families included them in family interactions, which then gave them numerous opportunities to learn the Chinese language and culture. While admitting that older participants may also be able to build such close relationships with their homestay families, Kinginger states that:

Younger learners may be more likely than their college-aged peers to be received *in loco parentis* as temporary children, and to tolerate and benefit from this arrangement more easily [...] due in part to the host families' acceptance of legal responsibility for the safety and well being of their charges (2015, p. 56).

The Role of Play in L2 Narrative Development

Can naturalistic play-based language learning, typical of early L1 acquisition, also help children to develop L2 oral skills and narrative ability? This question has been of interest in studies investigating effective ways to help children master L2 skills. Play is often characterized as "a natural way" to encourage children to interact with the objects and people surrounding them (Mourão, 2018, p. 338) and involves an integration of mental and physical activities. In language learning settings, it generally includes activities, such as singing songs, playing (song) games, reciting rhymes, and doing role-playing through dialogues and dramas (Cheep-Aranai et al., 2015; Mourão, 2018). Elvin et al. (2007), who investigated Norwegian children learning English as a foreign language in kindergarten twice a week, have described play as "an important path to language learning" (p. 76). They revealed that, through a variety of fun play activities, the children became more aware of language usage in daily-life conversation and improved their vocabulary and pronunciation in English. Similarly, Mourão (2018) reported that 16 Portuguese child learners of English (aged 5–6) engaged more actively in interactions in English after they had received weekly play-based English lessons for six months. Beside the fact that play helped to create a joyful learning environment, she suggests that a classroom culture where the children were allowed to use their L1, Portuguese, supported the children's emerging use of English, which in turn enhanced the development of their English oral skills. The children used Portuguese when necessary to proceed with play activities or to compensate for their lack of confidence speaking in English. Such use of Portuguese eventually afforded opportunities for the children to produce English easily in a safe and relaxed environment.

For a child, the mastery of narrative ability, or the ability to create and tell a story,

has great value for social interactions and is also a good measure of their oral skills. While most children develop this ability in their L1 naturally from early childhood through adolescence, it is a complex discourse skill (and thus difficult to acquire in an L2), given that the child must understand contexts, produce meaningful utterances with relevant vocabulary and grammar, and describe logical relationships between events to tell a story effectively (Cohen et al., 2021). Indeed, previous research on both monolingual and bilingual children has indicated that narrative ability plays an important role in the later development of listening and reading comprehension, lexical and syntactic knowledge, and communicative skills in their L1 or L2 (Griffin et al., 2004; Karlsen et al., 2016; Karlsen et al., 2021; Reilly et al., 2004). The effectiveness of play in increasing children's L2 narrative ability has been highlighted by both Cheep-Aranai and Wasanasomsithi (2016) and Karlsen et al. (2016). Based on observation and interview data obtained from 12 Thai elementary school children (aged 8–9), Cheep-Aranai and Wasanasomsithi (2016) discovered that the children could use their imagination to create a story and produce spontaneous speech in their foreign language, English, after participating in a weekly, play-based English learning program. Karlsen et al. (2016) investigated 66 kindergarten children learning Norwegian as an L2 and also found that using the L2 in fun activities over time helped to develop the children's narrative ability in that language. They revealed that not only the “number of children's books at home” (p. 1126) but also “the amount of time spent in kindergarten” (p. 1140), where various play activities (such as storytelling and rhyme activities) were included as part of daily classroom routine, predicted the children's ability to construct a coherent narrative in Norwegian a year later. Unfortunately, play is not generally viewed seriously as an approach to facilitate L2 development (Cheep-Aranai et al., 2015) and, as such, has rarely been investigated extensively or comparatively in L2 learning contexts. Nonetheless, the studies reviewed above do provide valuable insights into the benefits of incorporating play into early foreign language learning to develop oral narrative skills in a target language.

The Current Study

As discussed earlier, previous studies, mostly focusing on (Catalan-)Spanish learners of English, have consistently acknowledged the benefits of short-term language immersion in SA contexts for child and adolescent foreign language learners, especially for the development of oral skills. While this previous finding is worth confirming, we would also like to ask whether these benefits occur for all young learners who participate in short homestays abroad or whether they are contingent on the starting age of exposure to the foreign language. These are the questions we address with a group of Japanese children who have been exposed to English from a young age in a play-based English language program. A picture-story description task is used to establish their English level to determine if there are any improvements in their narrative skills before and after a naturalistic short homestay abroad. In broader terms, the research questions are:

- 1) How well can children narrate a story in a foreign language after one month's homestay abroad?
- 2) How early must learners start to learn a foreign language to benefit from a naturalistic immersion experience?

Methodology

Participants and Their English-Learning Program

Fifty-five junior high school children (34 females and 21 males) from monolingual Japanese families living in Tokyo, Kanagawa, and Shizuoka were recruited from a private

education organization that offers an informal English-learning program for children in Japan. Background information on these children and details about the program activities were collected through parental questionnaires and interviews with the staff members from the organization. The children had been attending the program once a week for approximately two hours from as young as age two. In this program, they learned English implicitly through a variety of fun activities, such as singing songs, reciting rhymes, playing games with rules, sharing stories, and doing fantasy play. Activities were conducted mainly in English, except for fantasy play—the central feature of the program’s weekly activities—where the children took on different roles and performed stories from around the world bilingually in English and Japanese. Such play activity stories were illustrated in books with CDs, and the children were encouraged to listen to the CDs repeatedly (sometimes also at home) and recite their assigned characters’ lines and narrations in both languages. They usually worked in similar-aged groups of 10–15 with a trained Japanese-English bilingual tutor supporting and facilitating all activities. Explicit English language instruction was not given during these activities, unlike in English classes at Japanese junior high schools where teachers would explain explicitly vocabulary and grammar rules of the English language, which the children claimed they already knew through their participation in the program.

Although this program’s main target language is English, supported by Japanese, its main objective is actually to develop children’s awareness of languages and cultures. This is done by offering a few infrequent activities in other languages, such as French, Spanish, Korean, and Chinese. But for the most part, the program focuses on having children *experience* the English language rather than *study* it. As such, in addition to the weekly play-based activities, children are given the opportunity to participate in a one-month homestay experience. Our participants went to the United States or Canada during the summer vacation of their first or second year in junior high school when they were aged 12 to 14 ($M = 12;8$). While in the host country, they did not receive any formal language instruction but were naturally exposed to English through living, talking, and playing with homestay families who had children of the same sex and similar age. These host families, mostly middle- to upper-middle class, lived in the countryside where our participants had little or no chance of meeting other native Japanese speakers. The children were matched with families having similar lifestyle habits and hobbies as them as well as according to host families’ preferences. Except for three children who had been overseas as tourists for less than a week each, this was the first time for most of our participants to go abroad and be fully immersed in English. According to the child and host family diary entries, shared with the first author after the homestays ended, all participants had three meals each day with their host families during their homestay. Many also helped out with daily chores on the farms where host families lived and worked. Some also had the opportunity to visit their hosts’ extended family members (e.g., grandparents and cousins), while others joined their host families on their summer vacation to other parts of the country. About half of them had the chance to interact with same-aged peers who were friends of the children in the host families.

Data Collection

A picture description task helped us to elicit narrative discourse before and after the children spent one month abroad. We used the children’s narrative data to determine their foreign language proficiency level. In this task, the children were asked to tell in English the story depicted in Mayer’s (1969) wordless picture book, *Frog, Where Are You?* This book was chosen as it has been used extensively and successfully in studies of second language acquisition (SLA). Reilly et al. (2004) and Karlsen et al. (2016) have described this book as

an efficient tool to assess children's narrative ability as using the same pictures each time allows researchers to easily collect and compare narratives from the children. The book consists of 24 pictures showing a boy and his dog searching for their missing pet frog. It begins with the boy and the dog looking at their frog in a jar. During the night, while the boy and the dog are asleep, the frog escapes. The next morning, the boy and the dog discover that their frog is gone, so they start to look for it. During their search for the frog in the woods, they have encounters with various other animals but eventually find their frog with its family near a pond. The story ends as the boy, the dog, and the frog leave for home together.

Pre- and post-immersion assessment sessions were conducted individually at the home of the tutor from the program or at the community centers where the program's weekly activities were carried out. In both sessions, the children were first given time to look through the book to prepare their story, which took them less than five minutes. They were then asked to tell the story, with no time limit, using the book. The children were not informed about the focus of this task nor that they would be asked to complete the same task before and after their homestay, to minimize the effects of pretest sensitization. In fact, ten randomly selected participants all responded that they hardly remembered the details of the story in the post-test, perhaps because they did not expect to do the same task twice, or they had so many extraordinary homestay experiences to think about instead. The children's narratives were not video-recorded but were audio-recorded, for privacy reasons, as requested by the informal language learning organization where the children were recruited.

Data Analysis

All narratives were transcribed verbatim and coded by two Japanese-English bilinguals: the first author transcribed and coded all the narrative data, while another Japanese-English bilingual transcribed and coded a random 20% of the data. Agreement for all coding exceeded 90% and disagreements were resolved by discussion. Unfilled pauses (or silence) were not transcribed since the rate of the children's speech production was not the focus of this study but rather their ability to structure a story using linguistic knowledge (discussed in detail below).

The children's narrative performances were analyzed in terms of linguistic (micro) structure and story (macro) structure, both of which serve as important elements of narrative production (Karlsen et al., 2016; Norbury & Bishop, 2003; Reilly et al., 2004). The following analyses were done at the linguistic structure level:

- (1) The children's *mean length of utterance in words* (MLU-w) was measured, along with their *total number of utterances*, before and after they had been abroad, as such analyses, according to Ezeizabarrena and Fernandez (2018), enable researchers to determine the development in spontaneous speech production of children;
- (2) Their *lexical richness* was also assessed according to Guiraud's (1954) index (GUI), in which word types are divided by the square root of the total number of word tokens. In her review of the lexical richness measures used in oral data, Vermeer (2000) concludes that, unlike the traditionally used type-token ratio, GUI accommodates the effects of speech length and is therefore more reliable;
- (3) The children's *syntactic complexity* was gauged by the ratio of the total number of clauses to that of T-units (CL/TU), where, according to Hunt, a clause is "any expression containing a subject or coordinated subjects and a finite predicate or coordinate predicates" while a T-unit is "one main clause plus any subordinate clause or nonclausal structure that is attached to or embedded in it" (1970, p. 4). For example,

“*The boy gets depressed because his frog has escaped*” is counted as one T-unit with two clauses (i.e., [1] *The boy gets depressed*, [2] *because his frog has escaped*).

- (4) In addition to the CL/TU analysis (which focuses on sentence-level complexity through *subordination*), we looked closely at each of the children’s narratives to consider other prevalent grammatical structures such as noun and verb phrases and the occurrence and frequency of simple, compound, and complex sentences before and after their one-month homestay abroad. These additional analyses compensate for the fact that CL/TU does not fully capture learners’ syntactic knowledge even though it is commonly used as the index for syntactic complexity in SLA research. The CL/TU analysis does not count short phrases and sentences with coordination which are frequently produced in the speech of novice L2 learners. Moreover, due to the nature of a T-unit (as described above), it treats all simple sentences (with one independent clause) and compound sentences (two or more independent clauses with a coordinating conjunction) equally, as if there were no compound sentences (Bardovi-Harlig, 1992; Tode & Otsuki, 2019).

At the story structure level, the analysis focused on the children’s ability to “construct a hierarchical representation of the main story elements” (Norbury & Bishop, 2003, p. 288). Their narratives were coded based on the presence of the following main plot elements of *Frog, Where Are You?* (Mayer, 1969), according to the episodic organization and the rubric established by Karlsen et al. (2016):

- (1) *Orientation*, which provides information of character(s) and situation(s) (e.g., *The boy lives with his two pets, a dog and a frog*);
- (2) *Onset*, which indicates a problem to be solved (e.g., *One night, the frog escapes*);
- (3) *Discovery*, which presents the character’s finding of the problem (e.g., *When the boy wakes up, he finds that his frog has escaped*);
- (4) *Searching indoors (attempt)*, which shows the character’s attempt to find the frog inside the house (e.g., *The boy searches for his frog in his boots*);
- (5) *Adventures outside (attempt and outcome)*, which describes the character’s attempt to find the frog in the woods and its outcome (e.g., *Because the dog looks in a hive, the bees get angry at the dog*);
- (6) *Resolution*, which presents a resolution of the problem (e.g., *The boy and the dog find the frog near the pond*);
- (7) *Ending*, which clearly describes the last scene where the boy brings his frog home (e.g., *The boy takes his frog back, saying good-bye to the frog’s family*).

The children received one point for including each plot element and one additional point for depicting two or more events from the Adventures Outside category, yielding a possible total of eight points on the story-structure measure. Note, however, that for the children to obtain one point for the Adventures Outside category, they had to articulate at least two elements (namely, [1] *attempt* and [2] *outcome*) connected to an event (e.g., [1] *The boy looks for his frog in a hole*, [2] *but a mole comes out and bites his nose*). Attaining two full points for this category turned out to be a difficult feat for the children.

Results

Effects of Age at First Exposure to English on Narrative Ability after a Short Homestay Abroad

Table 1 displays the 55 children’s story-structure scores from their pre- and post-tests. Each child is identified with a two-letter pseudonym. The data are organized according to the children’s starting age of exposure to English (SAE) from the earliest at age 2;8 (no. 1, MK) to the latest at age 6;9 (no. 55, YS). Their age on the date they took the

Table 1
Children's Story Structure Scores before and after their One-Month Homestay Abroad

	Part	SAE	Age	Pre	Post	Gain		Part	SAE	Age	Pre	Post	Gain
1	MK	2;8	13;3	6	8	+2	28	AY	4;8	12;10	3	3	0
2	SY	2;11	12;7	4	6	+2	29	SA	4;11	12;5	0	2	+2
3	SK	3;0	14;1	3	7	+4	30	MO	4;11	12;7	1	1	0
4	HN	3;2	13;2	7	8	+1	31	RY	5;0	12;5	5	7	+2
5	EA	3;3	13;3	3	6	+3	32	HI	5;2	12;4	0	2	+2
6	FN	3;3	13;4	3	4	+1	33	RO	5;2	12;8	1	2	+1
7	ST	3;6	12;5	4	8	+4	34	HO	5;2	12;5	3	2	-1
8	HA	3;6	12;6	1	2	+1	35	SI	5;5	12;5	5	6	+1
9	MD	3;8	13;0	5	8	+3	36	YU	5;5	13;1	1	2	+1
10	TY	3;9	12;5	6	8	+2	37	YD	5;5	12;4	2	2	0
11	MA	3;11	12;5	5	8	+3	38	AK	5;6	12;7	3	4	+1
12	YT	4;0	12;5	5	6	+1	39	HR	5;6	12;5	1	3	+2
13	NT	4;2	12;9	5	8	+3	40	RK	5;6	13;2	1	2	+1
14	SN	4;2	14;2	8	8	0	41	RE	5;6	12;5	3	2	-1
15	AS	4;2	13;1	2	6	+4	42	ST	5;6	12;9	1	1	0
16	HK	4;2	12;7	4	5	+1	43	YN	5;8	13;1	5	5	0
17	MS	4;2	13;2	2	3	+1	44	SR	5;9	14;0	0	3	+3
18	TC	4;4	13;7	4	7	+3	45	YM	5;9	12;5	2	3	+1
19	MT	4;4	12;6	8	7	-1	46	KT	5;9	12;6	1	2	+1
20	MM	4;4	12;6	2	4	+2	47	KM	6;0	12;5	1	1	0
21	TM	4;4	12;6	3	2	-1	48	SH	6;2	12;5	1	4	+3
22	KZ	4;5	13;3	2	5	+3	49	YS	6;2	12;7	2	3	+1
23	YZ	4;5	12;5	4	5	+1	50	CH	6;2	12;5	4	3	-1
24	RT	4;5	12;5	4	4	0	51	YK	6;4	13;3	4	3	-1
25	ME	4;5	13;3	2	2	0	52	AN	6;6	13;2	0	3	+3
26	HK	4;6	12;8	8	8	0	53	YO	6;6	12;6	2	3	+1
27	SO	4;6	12;4	7	7	0	54	NN	6;8	12;6	0	1	+1
							55	YS	6;9	12;5	1	2	+1
							Mean	4;8	12;8	3.09	4.31	1.22	
							SD	1.08	0.46	2.19	2.38	1.37	

pre-test is also shown. At the bottom of the table, a summary is provided, revealing that

the average age of first exposure to English of our participants was 4;8 ($SD = 1.08$). They were first tested at a mean age of 12;8 ($SD = 0.46$). Pre-test scaled scores for all participants have a mean of 3.09 and a standard deviation of 2.19. Post-test scaled scores have a mean of 4.31 and a standard deviation of 2.38. The average gain from pre- to post-test story structure scores is 1.22 points ($SD = 1.37$).

To examine whether any relationships exist between the children's age at first English exposure and their narrative ability after a short homestay abroad, and between their narrative ability before and after their homestay, we ran a multiple regression analysis in R (R Core Team, 2021) with the "tidyverse" (Wickham et al., 2019) and "broom" (Robinson et al., 2022) packages. The F-test of overall significance in regression revealed that the children's starting age of English exposure (converted to months) and their pre-test story structure scores together can explain a significant amount of variance in their post-test story structure scores ($F(2, 52) = 75.92, p < .001, \text{adjusted } R^2 = .74$). Table 2 thus shows the inclusion of predictor variable 1, Starting age of English exposure, and predictor variable 2, Pre-test score, in our multiple linear regression analysis. It was found not only that the children's starting age of exposure to English significantly predicted their post-test scores ($\beta = .31, p < .001$), but their pre-test story structure scores also significantly predicted their post-test outcomes ($\beta = .66, p < .001$).

Table 2
Multiple Regression Analysis Predicting Children's Post-Test Story Structure Scores

Predictor	Coefficient	SE	β	t	p
(Intercept)	5.47	1.05		5.19	< .001
Starting age of English exposure	-.06	.02	.31	-3.86	< .001
Pre-test story structure score	.72	.09	.66	8.22	< .001

The negative coefficient for the first variable suggests that as the starting age of English exposure increases, their post-test story structure scores tend to decrease. This negative correlation is clearly shown by the downward slope of the regression line in Figure 1. In other words, the earlier children were first exposed to English, the higher their narrative scores after one month abroad. Later exposure to English is associated with lower narrative scores in the post-test.

The positive coefficient for the second predictor variable in Table 2 suggests that as the pretest scores increase, their post-test scores also tend to increase. Figure 2 illustrates this positive correlation by the upward slope of the regression line. Children who had higher narrative scores before their homestay abroad also had higher scores on their return.

To confirm the results shown in the previous tables and figures, we grouped the 55 children into early versus late starters according to their first exposure to English. Age 4;6 was determined to be the most reasonable cut-off point based on "Starting Age of Exposure to English" (SAE) and post-test scores as shown in Table 1 and Figure 1. The mean SAE for all 55 children as previously mentioned is 4;8. We can see on the left side of Table 1 that it ends at 4;6 SAE for SO (no. 27) who maintained a high score of 7 (out of 8) in the pre- and post-tests; the right side starts at 4;8 SAE for AY (no. 28) who had a much lower score of 3 in both tests. Therefore, the 27 children on the left side of the table up to age 4;6 were treated as the early starters and the 28 children older than age 4;6 on the right side as the late starters. Narrative performance was also used to confirm the suitability of age 4;6 as the division between our two groups. Figure 1 shows clearly that top scorers were clustered before 55 months or 4;7 of age for SAE (with the left side of Table 1 also

showing nine children who obtained a perfect score of 8 in the post-test).

Figure 1
The Relationship between Children’s Starting Age of English Exposure and their Post-Test Story Structure Scores

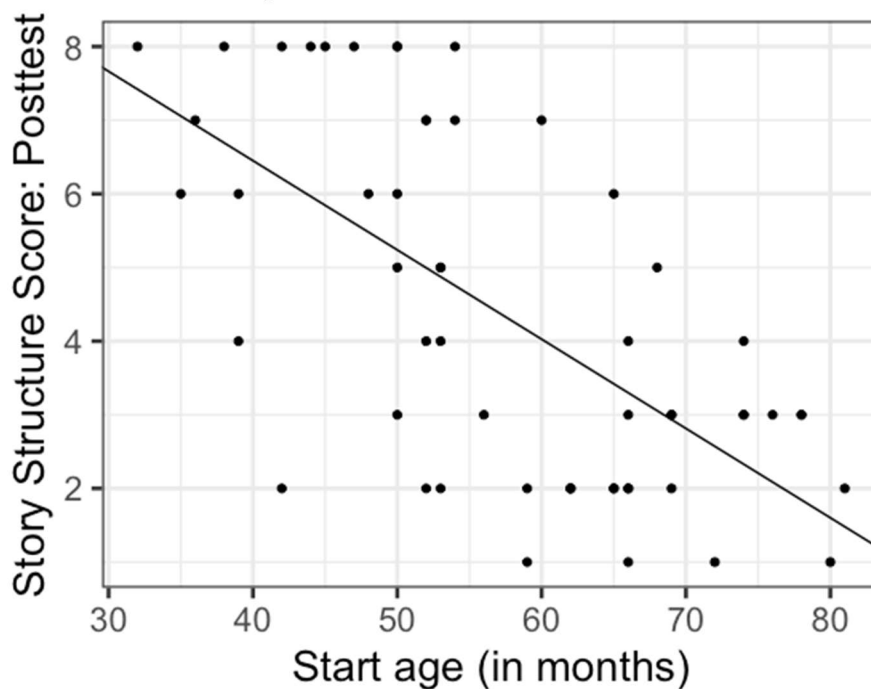


Figure 2
The Association between Pre- and Post-Test Story Structure Scores

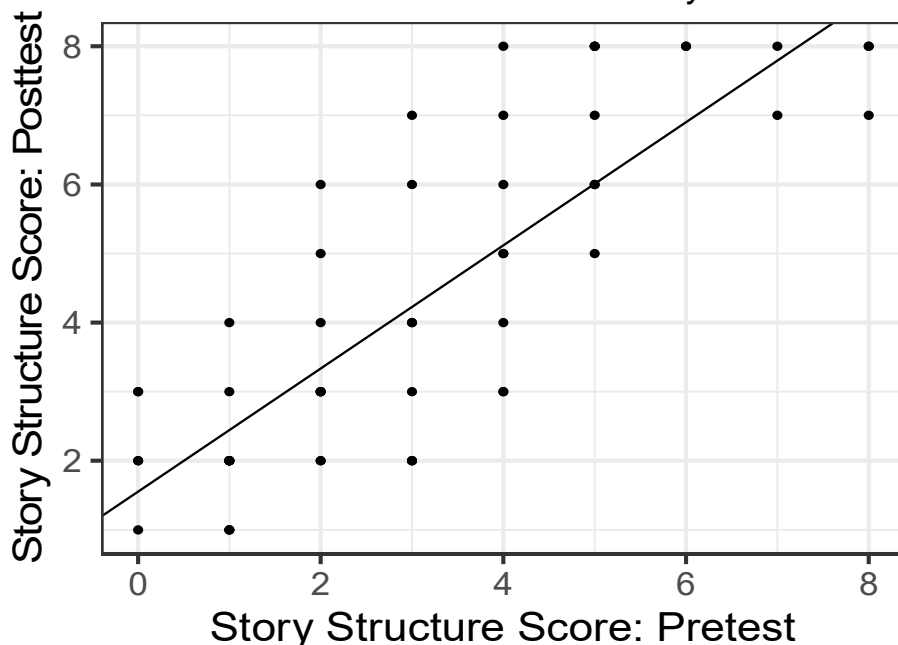


Table 3 shows the mean scores obtained by early versus late starters for story-structure and linguistic structure elements. If we start by comparing the two groups,

Table 3
Inter- and Intra-Group Comparisons of the Narrative Scores

		Early Starters (<i>n</i> = 27)	Late Starters (<i>n</i> = 28)	Intergroup differences in narrative scores (Welch's t-test)			
		Mean (<i>SD</i>)	Mean (<i>SD</i>)	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
Story structure							
	Pre-test	4.33 (2.04)	1.89 (1.59)	4.93	49	< .001	1.34
	Post-test	5.93 (2.07)	2.75 (1.43)	6.59	46	< .001	1.79
Intragroup results (paired sample <i>t</i> -tests)	<i>t</i>	5.52	3.85				
	<i>p</i>	< .001	< .001				
	<i>d</i>	.77	.56				
Linguistic structure							
	Pre-test	18.30 (9.61)	14.93 (7.10)	1.47	48	.07	.40
	Post-test	23.70 (8.95)	18.07 (7.21)	2.57	50	.006	.88
Intragroup results (paired sample <i>t</i> -tests)	<i>t</i>	4.72	2.17				
	<i>p</i>	< .001	.002				
	<i>d</i>	.91	.41				
	Pre-test	5.82 (2.49)	4.05 (1.30)	3.30	39	.001	.90
	Post-test	6.53 (2.30)	4.15 (1.38)	4.64	42	< .001	1.26
Intragroup results (paired sample <i>t</i> -tests)	<i>t</i>	2.26	.45				
	<i>p</i>	.002	.327				
	<i>d</i>	.44	.09				
	Pre-test	3.54 (.88)	3.27 (.86)	1.16	53	.13	.31
	Post-test	4.52 (.62)	3.80 (.77)	3.83	51	< .001	1.03
Intragroup results (paired sample <i>t</i> -tests)	<i>t</i>	6.27	3.14				
	<i>p</i>	< .001	< .001				
	<i>d</i>	1.21	.59				
	Pre-test	1.07 (.09)	0.98 (.20)	2.17	39	.002	.58
	Post-test	1.14 (.14)	1.03 (.06)	3.62	34	< .001	1.79
Intragroup results (paired sample <i>t</i> -tests)	<i>t</i>	2.49	1.18				
	<i>p</i>	< .001	.123				
	<i>d</i>	.48	.22				

Welch's (1947) *t*-tests reveal that the early starters had significantly higher story structure scores than the late starters both *before* ($t(49) = 4.93, p < .001, d = 1.34$) and *after* their one-month homestay abroad ($t(46) = 6.59, p < .001, d = 1.79$). This outcome, where the early starters outperformed the late starters in the pre- and post-immersion narrative sessions, is also observed at the linguistic structure level. The mean scores of the early starters are always higher than those of the late starters for each linguistic structure measure. Welch's (1947) *t*-tests indicate that these differences are statistically significant *pre*-immersion for two measures: MLU in words, $t(39) = 3.30, p = .001, d = 0.90$, and syntactic complexity,

$t(39) = 2.17, p = .002, d = 0.58$. These differences are statistically significant *post*-immersion for all four measures: total number of utterances, $t(50) = 2.57, p = .006, d = 0.88$, MLU-w, $t(42) = 4.64, p < .001, d = 1.26$, lexical richness, $t(51) = 3.83, p < .001, d = 1.03$, and syntactic complexity, $t(34) = 3.62, p < .001, d = 1.79$. In other words, the early starters generally described more plot elements, produced more complex longer utterances and used a greater variety of vocabulary than the late starters in their pre-immersion narratives, and this trend was even more evident in their post-immersion narratives.

Gains in Narrative Ability after a Short Homestay Abroad: Early versus Late Starters

Do early starters differ greatly from late starters in their narrative ability after being abroad? At the story structure level, both the early and late starters generally made gains after one month abroad as their mean scores increased from pre- to post-tests, as shown in Table 3. Paired-sample t-tests indicate that their intragroup increase is statistically significant (early starters: $t(26) = 5.52, p < .001, d = 0.77$; late starters: $t(27) = 3.85, p < .001, d = 0.56$). Improvements, however, are more apparent for the early starters than the late starters, given that the proportion of participants with gains after being abroad is higher among the early starters than among the late starters. Specifically, of 25 early starters, 20 (80%) increased their scores by an average of 2.25 points, three (12%) remained the same, and two (8%) saw their scores decrease slightly by one point after their month away (see nos. 1–27 in Table 1; note that SN and HK, or no. 14 and no. 26, respectively, in Table 1 were excluded from this calculation as they had a perfect score in both the pre- and post-immersion sessions). By comparison, of 28 late starters, 18 (64%) improved their scores by an average of 1.55 points, six (21%) stayed the same, and four (14%) had a one-point lower score in the post-immersion session (see nos. 28–55 in Table 1).

At the linguistic structure level, both the early and late starters appear again to improve on average on all the measures examined from the pre- to post-tests (see Table 3). For the early starters, paired samples t-tests consistently reveal that the differences in the mean scores for each linguistic structure measure between the pre- and post-immersion assessments are all statistically significant (total number of utterances: $t(26) = 4.72, p < .001, d = 0.91$; MLU in words: $t(26) = 2.26, p = .002, d = 0.44$; lexical richness or GUI: $t(26) = 6.27, p < .001, d = 1.21$; syntactic complexity or CL/TU: $t(26) = 2.49, p < .001, d = 0.48$). The results indicate that these children were likely to produce more complex and longer utterances, and to use more different words in their narratives after one month abroad. For the late starters, on the other hand, significant results are seen for the total number of utterances, $t(27) = 2.17, p = .002, d = 0.41$, and lexical richness, $t(27) = 3.14, p < .001, d = 0.59$, but not for MLU in words or syntactic complexity. This suggests, together with the findings discussed earlier (that the late starters had significantly lower scores than the early starters in MLU-w and syntactic complexity measures in pre-immersion), that the late starters did relatively poorly in composing long and complex utterances in their pre-immersion narratives and did not improve in their post-immersion narratives. Nevertheless, they started to produce more utterances with more different words in telling the story after their one-month homestay abroad.

Two complete sets of narrative samples are provided below to show representative patterns of development in early versus late starters. They illustrate quite clearly not only how well the participants became able to tell a story after one month of English immersion abroad but also the difference between the early and late starters in their narrative ability. Example 1 shows the narratives by YT (no. 12 in Table 1), the early starter, who had been regularly exposed to English from age 4;0, whereas Example 2 is produced by HR (no. 39),

a late starter, whose starting age for regular English exposure was 5;6. YT (pre-test score of 5 and post-test of 6) and HR (pre-test score of 1 and post-test of 3) were both 12;5 of age at the time of the pre-test and had composite story-structure scores relatively close to the mean scores for their group (early versus late starters) before and after the one-month homestay abroad.

Example 1 Narratives produced by YT, an early English learner

Pre-immersion:

There are boy and dog and frog. One morning, the boy wake up dog. He found frog so much. He found, he found no anything. He found no frog. But he's looking for frog. And he met, he met owl. But he found, he found, he found frog. He found his frog and he take, he got, he got his frog. Frog makes a friend. The boy, the boy take his frog out, frog his home.

Post-immersion:

Once upon a time, there was one boy and dog and a frog. The frog is in the boy's, the boy's jar. But he lost him, so he searched everywhere in the home, house. But he is not in the house. He searched the frog. He called his name. But he is not coming back. So many animals, many animals, he met many animals which were so angry: beetle, and owl and deer. But lastly, he heard the frog's noise. He searched the frog, frog's voice, and then, he found the frog. And he met many frog's friends like a family. And he take back him to home.

In Example 1, while we see him make some grammar errors, it is evident that after a month abroad, YT provided more *elaborated* descriptions of the characters and events of the story, not only through lexical diversity but also by producing a variety of long and complex sentences in his narrative. More specifically, he used various coordinating (e.g., *and*, *but*, *then*) and subordinating conjunctions (e.g., *so*) that he rarely or never used in his pre-immersion narrative to articulate more clearly temporal and causal relations between the story events in his post-immersion narrative. He also tried to flesh out the story by using a relative pronoun and adding emotional information about the character in his post-immersion narrative (e.g., *he met many animals which were so angry: beetle, and owl and deer*).

Example 2 Narratives produced by HR, a later English learner

Pre-immersion:

My frog. I'm, um, sleep. *Nante ieba ii-n-darou? Muzukashii.* Morning, I get up and not frog. *E, um, wakan-nai-na. Muzukashii. E, um, wakan-nai, wakaranai. Muzukashii desu.*

Post-immersion:

I, dog, and frog. I go to sleep. Next morning, I woke up. But frog, not frog in the bottle. "Frog, where are you? Frog, where are you going? No. Frog?" But he's not come back. Frog is, um. Dog is breaking the bottle. "Frog, where are you going? Do you know my frog?" Mouse, "Oh, I don't know." "Frog, where are you? Frog, where are you going?" Frog is not at. I am, I am on deer. And deer go out. And I got down river. I'm in river. Frog said "croak, croak." I listen. I look, um, I look frog. Frog has children and I get one frog. "Good-bye, frog."

Example 2 clearly shows HR's improvement in vocabulary and utterance fluency. Before his short homestay abroad, HR struggled to tell a story, as implied by his Japanese comments, such as "*Nante ieba ii-n-darou?* [How do I say this?]," "*Muzukashii* [This is difficult]," and "*E, um, wakan-nai* [Oh, I can't do this]." He eventually made only three short utterances in English and could not complete the task in the pre-immersion session. After

a month abroad, however, he produced 26 English utterances, including simple and compound sentences, and told a complete story.

Unlike YT in Example 1, HR gave no signs of being able to add meaning to the story by revealing causal relations between the story events (using subordinating conjunctions) or by describing the inferred feelings of the characters in his post-immersion narrative. Nevertheless, he was able to establish the overarching “search” theme of the story by describing more pictures and creating dialogue between the characters in his narrative after one month abroad.

Discussion

All the children began attending the informal English learning program from a relatively young age ($M = 4;8$); however, there is a four-year gap between the child who started participating in the program the earliest (at age 2;8) and the one who joined the program the latest (at age 6;9) (see Table 1). The children’s narrative data obtained from the picture description tasks show that differences in starting age of learning English appear indeed to influence English narrative ability (as all the children, including late starters, joined the program without any initial English ability). The children who received English input before age 4;6 in the weekly informal program were more likely to perform better in the narrative task at both the story-structure and linguistic structure levels before and after their short homestay abroad. This could be an indication that consistent, albeit minimal (i.e., two hours per week), foreign language exposure through play from a very young age can lead to narrative ability in that language, with better outcomes for those who were exposed before age 4;6. This finding corresponds to the benefits of implementing play in L2 learning contexts to enhance children’s L2 oral (narrative) development found in previous studies (Cheep-Aranai et al., 2015; Cheep-Aranai & Wasanasomsithi, 2016; Elvin et al., 2007; Karlsen et al., 2016; Mourão, 2018). Earlier foreign language exposure through play may furthermore increase learners’ chances to acquire linguistic and story-structure skills necessary to create a story in that language. As previously mentioned, our participants were allowed to use Japanese in the weekly informal English learning lessons, especially when they engaged in fantasy play activities. This is consistent with Mourão’s (2018) insistence on the importance of allowing the use of L1 to support L2 play activities. Our findings suggest that the children were able to develop their narrative ability and related oral skills in their weekly informal English lessons because they were afforded rich opportunities to experience the English language in a playful and comfortable environment supported by Japanese. They were subsequently able to make use of the English learnt in this way when placed in a naturalistic homestay environment that required them to use only English without any recourse to their L1 for one month.

Overall, our participants produced better narratives in the post-immersion than in the pre-immersion sessions. Most of the children could describe more plot elements, producing more utterances with greater lexical diversity after their one-month homestay experience. This result is surprising given that unlike the child participants in the studies reviewed earlier (Llanes & Muñoz, 2013; Llanes & Serrano, 2017; Muñoz & Llanes 2014), our children did not receive any formal language instruction during their short homestay abroad. Notably, they improved their narrative ability just by being naturally immersed in English for a month. Furthermore, early starters benefitted more than the late starters from their short experience abroad. The proportion of the participants who increased their story-structure scores in the post-immersion session was noticeably higher among the early starters than among the late starters. The early starters also improved, on average, on all the linguistic structure measures examined, whereas the late starters did not show much

improvement on mean length of utterance in words (MLU-w) or syntactic complexity (CL/TU). Differences in gains between the early and late starters may be due in part to their English language proficiency levels before they went abroad. Previous SA studies have indicated, on the one hand, that learners with lower proficiency may experience greater improvements during their stays abroad (Hernández, 2016) and, on the other, that a certain threshold level of proficiency may be needed for noticeable improvement in such learning contexts (Pérez-Vidal & Juan-Garau, 2011). As shown in Table 3, the early starters had, on average, higher scores than the late starters on all the measures examined in the pre-immersion narrative assessment. Our participants were generally able to improve their narrative ability during a short stay abroad probably because they all had relatively low proficiency due to their limited exposure to English while living in Japan. However, the early starters may have acquired, prior to departure from Japan, the linguistic background necessary to take full advantage of being immersed in the foreign language to activate their latent knowledge. Thus, they performed better than those who had not acquired sufficient English skills before departure.

Conclusion

Our current study investigated a group of Japanese adolescent children at an age considered to be advantageous for naturalistic language learning (Llanes & Muñoz, 2013; Llanes & Serrano, 2017; Muñoz & Llanes, 2014). This study not only adds to the limited number of studies on child foreign language learners but also confirms the impact of short-term stays abroad for them, particularly for those who have been exposed to the foreign language through play-based learning. Sixty-nine percent of our 55 participants produced a better-structured narrative with more plot elements and a greater range of vocabulary and grammar after being fully immersed in English for one month. Twenty percent maintained their pre-test scores on the post-test. Only 6 children (11%) scored lower on their post-test than their pre-test. These results provide evidence that many children can benefit from short-term language immersion abroad. Furthermore, such narrative improvements were more evident for the children who received regular weekly exposure to English through play before age 4;6 as they appeared more likely to have reached a threshold level of proficiency before their month abroad.

While the results are encouragingly positive, especially for early English starters, it is uncertain if the age of first English exposure (and the children's pre-immersion proficiency levels) alone contributed to the difference in the children's gains in narrative skills after their one-month stay abroad. As Muñoz and Llanes (2013) and Llanes and Serrano (2017) have suggested, for example, it is possible that participants with larger gains (in this case the early starters) had more interactions with their host families (and therefore a greater quantity and quality of contact with the target language) because they had the oral skills to do so. Personality may also have an effect on the children's narrative gains. In fact, the parents of ME, MO, and CH (nos. 25, 30, and 50 in Table 1, respectively), who had the same or a lower narrative score after a month abroad, reported on parental questionnaires (from which child background information was obtained) that their children were relatively quiet and introverted. We can surmise that these children did not show improvements because they did not participate in English conversations as actively as other children did while abroad.

Our current study on the children's narrative performance before and after their month abroad does not investigate how much individual participants were immersed in English while abroad or whether such interactions could have affected their narrative development. Despite this limitation, our findings provide valuable insights into the effects

of age at first exposure to a target language and naturalistic language learning contexts on the development of narrative ability in that language. Raising children to be bilingual in a predominantly monolingual society and monolingual home environment is a formidable task. This study suggests that short-term stays abroad in a naturalistic environment without formal study and early informal foreign language exposure have the potential to nurture children's foreign language narrative ability. Parents can thus raise bilingual children by enrolling them from a young age in play-based programs that provide consistent, even if minimal, foreign language input, and allowing them, when older, to experience intensive naturalistic language immersion to activate their foreign language potential. Further research on children in other such programs and different stay abroad settings is certainly needed to gain more in-depth and generalizable knowledge about the effectiveness of informal naturalistic language learning for child foreign language learners. We hope that our current study has paved the way for such future investigations.

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