A home-based intervention towards preschoolers’ EFL sentence development: A case study

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Research has shown that the initial few years of children’s lives are the best times for language to develop at a rapid pace, the first language (L1) or a foreign language (FL) may be acquired these times. Researches on preschoolers FL acquisition with home-based intervention (HBI) have not been studied extensively under the L1 environment. This study aims to examine the results of HBI on the development of the acquisition of Indonesian preschoolers’ English as a Foreign Language (EFL) sentences. This research is a case study with naturalistic observation design, where data were obtained from logbooks and interview. The research subjects were 2 preschoolers about 36 months. The study’s duration was 24 months from the 13th until the 36th month with HBI, namely parents-based and authentic/semi authentic-media intervention. The data were the children’s English sentences taken at 24th to 36th months at their own homes. The Owens’ acquisition of sentence forms measured the English sentences’ development of in the respondents’ conversation and self-narration. This research found that at about 36th month, these Indonesian preschoolers were able to communicate in English in various sentences such as declarative, negative, interrogative, imperative, embedded and conjoining.

Keywords: home-based intervention; preschoolers; EFL; sentences; development

INTRODUCTION

Being able to speak more than one language in the current global era benefits from various aspects. Mastering two languages is considered as a cognitive reserve (Craik et al., 2010) and the brain is more efficient in processing information and preventing cognitive weakening (Marian & Shook, 2013). Children learning other language than their L1 have gained increased ability to communicate and better cognitive development (Ghasemi & Hashemi, 2011). Learning more than one language is considered better to start at an early age, because children can simultaneously build neural networks for the two languages. At a very young age, the brain plasticity is still strongly reliant on environmental impacts and the brain networks have not fully evolved. Ramirez & Kuhl (2017) found that with intervention activities carried out with high interaction intensity, such as listening and playing with native speaker tutors, preschoolers grow EFL vocabulary comprehension and produce vocalization.
Acquiring EFL since early age seems to be a new trend among urban young families in Indonesia. Finding young children saying words or conversing in English with their parents is common. Many English courses or bilingual of EFL and L1 schools for children are found in big cities. Parents who speak English introduce various ways, such as using English communication for daily activities or utilizing media such as videos, music or books. Considering that EFL learning by parents is not an explicit learning, then its learning outcomes are still questionable.

Researchers have found that acquiring language including FL indeed depends on several aspects, such as social environment (Beller, 2008), sufficient input and interaction (Ramirez & Kuhl, 2017) to develop both the language structure and the pragmatic side of the intended language. Interaction and social environment facilitates the complicated language learning pathways, because it strengthens the relationship between words and their references (Verga & Kotz, 2013), words and their meaning, pragmatics and pronunciation (Conboy et al., 2015) thus it influences children's language development (Ramirez & Kuhl, 2017). Meanwhile authentic input from the target language contributes practical and cultural target language for children to acquire (Pinsonneault, 2008). It creates FL environment in L1 environment (Ruiz & Garcia, 2003), promotes the target language awareness, increases the accuracy at the use of vocabulary, grammar, the conventions and structure of information. The research of Ramirez et al., (2017) finds that social environment and interaction have an important influence on the development of language acquisition. Interaction embedded in children's routines encourages the language skills learned to be more functional and meaningful for them (Jennings et al., 2012). Under conversational context, maternal verbal behavior assists children’s language acquisition by involving in ‘modeling, cueing, prompting, and responding behaviors’ (Owens, 2016). Parents or teachers adjust talk to children and build connected and meaningful conversations (Van Balkom et al., 2010) in daily activities. Through regular various meaningful contexts, children obtain vocabulary, semantic forms and simple pragmatic functions (Neuman & Wright, 2014) and a slightly more complex morphology and syntax (Steinberg & Sciarini, 2006). Besides, a sufficient amount of English input in learning EFL through native speakers contact is part of the important intervention in learning FL for preschoolers (Ramirez & Kuhl, 2017), either in the form of pictures, sound or music (Dryden & Vos, 1999) as effective media with parents interaction, it thus speeds up the process of the target language acquisition (Brito, 2017). Intervention in TEFL for preschoolers such as challenging material, an integrated model of literacy and media (Indrasari et al., 2018) can significantly improve (Neuman & Wright, 2014) and lead to a rapid increase in the understanding of English words and speech production (Ramirez & Kuhl, 2017). A routine-based intervention appears to be significant to introduce and grow language acquisition (Jennings et al., 2012) and the development of foreign language skills is immediately visible even in a short intervention (Ramirez & Kuhl, 2017).

The above studies mostly conducted in schools, day-care centers or infant education centers. Seldom is there research on EFL learning at home, so this research focuses on observing EFL learning activities in non-English speaking countries, in non-English family homes. Therefore, this study aims at how far the acquisition of EFL sentences is acquired through the home-based intervention (HBI), namely parents-based and authentic-media intervention towards Indonesian preschoolers with the Indonesian and Javanese local language environment.

METHODS

This research used naturalistic observations to conduct a case study to observe a detail description and analysis of the data which were taken naturally, not controlled and carried out at the respondent's own places (Cozyb & Bates, 2015). This is a non-experimental research. The intervention means where the process of L1 acquisition, namely Indonesian, was intervened with the learning of EFL under Indonesian and Javanese language society. It was thus an intervention against the normal process of L1 acquisition. The research subjects were 2 Indonesian preschoolers at about 36 months of age. The data were English sentences of the two respondents when having dialogue with their mothers and sibling, or doing self-narration. The data were obtained from some instruments, namely log books by means of sampling event (Frey et al., 1999). The first logbook recorded the learning activities with elements namely setting, activities, frequency, goals, media characteristics, media titles, and interaction types; the other book documented English sentences the children created with elements i.e. age, sentences and meaning/intention. Owens’ sentence forms acquisition (Owens, 2016) was used to observe the age-based sentence development. To ensure robust data, the triangulation was carried out by applying different methods (Shenton, 2004) that is using several independent sources of evidence (Yin, 2006) indicating the same data. This was done by applying interviews (open-ended) to the children’s fathers and grandmother; a direct observation and a participant observation. The points asked in the interview were confirmation of the children’s sentences, sentence production frequency, children's understanding, ability of making sentence types, context and reason. The researcher directly observed the field and the respondents’ mothers, as respondents-observers, performed the participant...
observation in intervention undertaking, logbooks filling, observing and filling real-life role in the learning situation being observed.

The study was conducted for ± 24 months. The first phase of the HBI, namely parents-based and authentic/semi-authentic media intervention was started at the age 13 to 24 months in the procedure of early literacy of bedtime reading English books for 3 times a week, daily watch of the selected videos with authentic/semi-authentic books and videos and other routine activities like playing, bathing or eating. At the next phase, at 25-36 months of age, the previous activities maintained and widened with books, videos and activities fitting their ages. At this phase, the data were recorded. All of these mother-child learning activities were in English, thus English was used approximately 50% regularly every day.

RESULTS AND DISCUSSION

The acquisition of English sentences was measured from the kinds of sentences produced in daily conversation or in self-narration. They were sentences that appeared frequently, rarely and those that appeared once and then disappeared. This is based on the assumption that every sentence that has been used indicates that the respondents are able to make it. The following is the description of the findings of those sentences. In accordance with the theory of acquisition of children's sentences (Owens, 2016) the sentences appeared most are the Declarative sentences. The sentences that show up consisting of simple sentences in the form of /S + V1 + Object/ like 'I need bandage' often appear in their utterances. Other sentences complement by some addition of /collocutor + S + ing + Verb/ also grows gradually and is seen in many of these children's utterances, firstly, it is preceded by a verb phrase such as 'jumping on the bed' into more various and complete sentences, for example with the addition of comparative adjective like 'The rain so getting bigger'.

Around the 36th month the auxiliary 'is' appears, so the present progressive sentence begins to appear more complete. During this period the definite article 'the' is seen for the first time, however, there seems to be a temporary generalization of the initial use of 'the' so that the definite 'the' article is added before some nouns such as 'The papa is sleeping'. Some other abilities emerged at the end of this period. They are the use of modal auxiliary which appears in the use of 'gotta' in 'I gotta brush my teeth', some past-verb sentences as in 'I found the Dad', the inflection of the plural noun /s/ like 'I love vegetables' and the present indicator /s/ like in 'Wafi hurts' also seen for the first time.

Negative Sentence Forms

The negation appears in longer utterances, yet the earliest negative of the single word 'no' is maintained until at the age of 36 months or more. That negative element appears in the form of 'no', 'can't' and 'not'. It begins with 'no' before the noun or 'ing-Verb' as in; 'no sharing' or 'no sweets' which is then followed by multi-words sentence like /S + no + Infinitive verb/ like 'Wafi no bath'. This syntactic patterns develop into /No 'added in: S + Ing-verb/ like 'No, Meme crying or No police car is coming'. It appears here that the auxiliary 'is' has started to be used. Negative element 'not' is seen to appear before the adjective in 'Mas not round and round', while other negative element emerges in sentences like the use of modal auxiliary ‘can’t’ afterwards. The children seemed to have a series strategies put one above the other. It starts with the form of /can't + infinitive + object/ like 'can't reach it', then followed by practicing using the form with subject at the beginning of a sentence like /S + negative capital/ in 'I can't' and complement with /infinitive verb + object/, so proper negative sentence is successfully created like in the sentence 'I can't draw a car'. At the end of 36 months the auxiliary verb form 'do' first appears, namely /S + do not + V1/ in the expression 'I don't know', but this expression is rarely used later on.

Interrogative Sentence Forms

The interrogative form began with a single word or a noun phrase with rising intonation, such as 'I'm in the bed'. By the age of 25 months and more non-inversion questions such as /collocutor + S + ing-Verb/ like 'nuni, you doing?' or 'you okay?' started to be used by these children. Other sentences complement by some addition of question words in these sentences, like 'bunda, what you doing?' Meanwhile, syntactic non-inversion in interrogatives with /QW + S + Verb/, such as 'Where the balloon go?' also appear. At the end of this phase the inversion form of /Subject + Verb/ starts to appear and auxiliary verbs /be/ have also been used, for example 'are we there yet?'; 'Where is the ball?', including the inversion of copula /be/ in 'What's that?'. The yes/no style question sentence with modal auxiliary 'Can I have some?' or with /auxiliary + ing-Verb/ for example 'Are you reading?' have been used in talks and self-narration. As has been illustrated in Table 1, the children under observation were able to use the various kinds of...
interrogative sentences.

### Imperative Sentence Forms

The imperative mood that can be noted from these children mostly functions as requests, invitations and even exhortations. At the beginning of 25 months of age, request was expressed using the sentence of /S + infinitive/ like in ‘Wafi bath’ and invitation was produced in the sentence /Let's + infinitive/ in ‘Let's go’ which in the middle of this phase these sentences develop into more varied ones like /Let's + repeated Verb + Object/ in 'let's go share the crayon'. The use of infinitive as in the usual imperative sentence exists, such as 'turn off the lights' which is enriched later with variations such as possessive, namely /infinitive + possessive pronoun + object/ in 'wash my hand' and added with modal auxiliary 'can' into request, as in /Can+S+infinitive+Object/ in ‘Can you help me?’.

Meanwhile other imperatives function as exhortation gradually appears in the children’s sentences, one of them was articulated in the form of negative imperative /don't + auxiliary be + adjective/ like in ‘don't be scared, neni’ sentence.

### Embedded and Conjoining Sentence Forms

As seen in Table 2, as far as 36 months old, only one embedded sentence appears, namely /Verb + noun clause/ in 'look what I have'. This sentence undergoes contextual repetition, but has not yet been developed in the form of other syntactic variations; this finding is in accordance with Owens’ research that new embedded appears near to the age of 4 years (Owens, 2016). Whereas for conjoining sentences until as far as 36 months these children have begun to combine various sentence patterns. Many conjoining sentences consist of two, three or more sentences are seen in the children’ sentences and are generally without conjunctions, for example ‘Mas the blue one, ayah the white one, Wafi the yellow one, Memei the pink one’.

The conjoining sentences of these children have syntactic patterns that vary greatly according to the context. An interrogative is combined with other question such as ‘What are you doing mama? Are you building something?’ or two declarative sentences are put together in the pattern such as /S + copula verb + complement and S+ing-Verb+adverb/ in the sentence ‘The moon is down. The sun is going up upup’. The combination of imperative and declarative is also found in the pattern of /Look, S+copula verb+ complement/ like ‘Look, it’s broken’ or combined with /ing-Verb/ like ‘Look, bunda. The train is getting faster. Choo-choo’. The coordinating conjunction ‘and’ to combine the clauses appears as the only conjunction used until at the end of this phase, some sentences like this are seen in a series of sentences consisting up to 6 sentences with pattern /S + aux + ing-Verb phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase, a noun phrase, ing-Verb phrase/. (see Table 2). Nevertheless, this ‘and’ conjunction is not yet widely used, so far the children only combined sentences with a pause without a conjunction.

### TABLE 1 | The Preschoolers’ Simple English Sentences

<table>
<thead>
<tr>
<th>Months</th>
<th>Declaratives</th>
<th>Negatives</th>
<th>Interrogatives</th>
<th>Imperatives</th>
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</thead>
<tbody>
<tr>
<td>25-30</td>
<td>S + copula verb + complement</td>
<td>No + Noun/Ing-Verb/Adjective</td>
<td>collocutor, S+ Ing-Verb</td>
<td>S+infinitive</td>
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<td></td>
<td>S+ing-Verb</td>
<td>S+no+Infinitive verb</td>
<td>QW + S+Ing-Verb</td>
<td>Let's+infinitive</td>
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<td></td>
<td>Basic S + Verb + Object</td>
<td>modal (can't) + infinitive verb + object</td>
<td>QW + auxiliary verb + noun</td>
<td></td>
</tr>
<tr>
<td>30-36</td>
<td>S + copula verb + complement (with possessive pronoun)</td>
<td>S+modal (can't) + infinitive verb + object</td>
<td>Yes/No Question with adjectives/adverb</td>
<td>Infinitive+ possessive pronoun+object</td>
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<tr>
<td></td>
<td>S + aux + Ing-Verb</td>
<td>No' added in : S + tobe + Ving</td>
<td>Interrogatives with QW + copula verb + complement</td>
<td>don't+be +adjective</td>
</tr>
<tr>
<td></td>
<td>S + Modal auxiliary + infinitive</td>
<td>Demonstrative adjective + not + adjective</td>
<td>Interrogatives with QW + Modal auxiliary + verb</td>
<td>Modal+Subject +Verb+Object</td>
</tr>
<tr>
<td></td>
<td>S + past-Verb + Object</td>
<td>S+don't+V1</td>
<td>Interrogatives with QW + S+ infinitive</td>
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A systematic pattern in the conceptualization process of grammar and semantic function is recognized in these children’s sentences. Basic syntactic structure such as the use of copular and infinitive verb was used repeatedly with expanded variations, and followed by a tiered process until a more complete sentence was made. From holoplastic sentences, for example 'ants' referring to many ants’ existence was enriched then into telegraphic sentences 'many ants' and 'so many ants' to become sentences with multi words 'there are so many ants' where these children practiced remarkably fast. Of the sentences they produced, many of them were sentences without function words. The concept of 'here and now' or concrete concepts that might prioritize current action and location in children was manifested in sentences like 'Meme crying' or 'Mama, Juna outside', so as the question words 'what' and 'where' widely used in this phase were included in this concept. Abstract sentences, like the use of the adjective ‘sad’ in the sentence ‘(the) Juna sad’ first appeared at the end of the 30-36 months phase.

There are differences in fundamental concepts and syntax of English and Indonesian. The principle of 'tense and aspect' or inflection is not recognized in Indonesian, but it turns out that there are such sentences in their output. For example, the phenomena seen in the pattern of /past-Verb/ in 'I found it' or /ing-Verb/ in 'Papa is working' also /noun +'s’ plural indicator/ in 'I like vegetables' illustrates that they have the capacity to distinguish English 'tense' and plural forms in sentences. The plausible explanation is that although English is a foreign language for the family and the environment, yet for the respondents, English is the first language exposed along with their mother tongue since they were toddlers. Therefore, no L1 intervention or inter language compared to those who have acquired L1 before learning a foreign language. The children’s acquisition of English sentences is near that of native speaker children at the same age measured from Owen's table of children sentence acquisition (Owens, 2016). Their utterance mean-length is not far different from English native children as far as 36 months old.

The use of several expressions seems to be inspired by similar forms they watched on videos, read in books or heard from parents. For example, one used 'no' and the other preferred the 'don't' form as the prohibiting statement depending on parental use to control behavior. This is consistent with Owens's statement that the children's negative sentence forms emulate what their mothers usually use to control their attitudes (Owens, 2016). Some sentences used the expressions the children saw on the videos and then used them in the same context in real life. For example, when one of the children heard an alarm outside the house, he immediately said to his mother, 'Mama, it's emergency, let's call the police' while giving his mother a cell phone. The input recorded in the children’s minds seems to appear later in their words as memorized language chunks and self-made as well, such as those with high frequency sounds, namely 'thank you'; 'I'm sorry' or 'Are you okay?' or the self-made sentences like 'the clock not loud' or 'mother, make my milk'. The role of input towards these students’ sentences is central to their EFL development.

Based on the above observation, there are several implications that emerge from this study. The first implication is that the mother's English ability must be good and the English program must be consistent, because it turns

<table>
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<th>TABLE 2</th>
<th>The Preschoolers’ Embedded and Conjoining English Sentences</th>
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<tr>
<td>Months</td>
<td>Embedded Sentences</td>
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<tr>
<td>25-30</td>
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<tr>
<td>30-36</td>
<td>V+Noun clause</td>
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out that children absorb language from the three main inputs, namely mother’s interaction, videos and books. Mothers’ English must be rich in vocabulary and their good command of English grammar and active communication is central. This research is not in line with Scheffler (2015) stating that parents do not need to have proficient English well to accompany their children in watching videos, because the videos are easy to understand. Yet, videos are only input and not real, they need someone to interact and to use those videos and books sentences into the real life. Interaction in good English, consistent use of English at home and good implementation of language programs greatly influence results. In addition, all three inputs should be sufficiently exposed, so that children can obtain adequate input needed to have a good EFL command. This finding is not the same opinion with Astutik et al. (2019) stating that English has a significant effect towards EFL learners even though it is not used as much as the learners’ L1.

The second implication, when the school age comes later, English improvement occurs only if this input is maintained and modified according to the children’s age. At that time the children already go to school, there will be a new language environment for them. English kindergarten is rarely found in Indonesia, if they go to a normal school with Indonesian as the main language, there will be some possible problems arise; they experience a feeling of alienation from their new environment, since they speak English among Indonesian speakers. The other problem is that their English might stagnate, and be interrupted by Indonesian. The question that arises from the problem is that under the environment, how is the development of their English? Is their English maintained or do they become bilingual, so which language is dominant? This is an opportunity for future research.

CONCLUSION
After getting the HBI for more than 2 years, these kids made a significant development of EFL that is very important to be observed. By the third year of their ages, they already communicated in English with children's unique sentences namely telegraphic utterances. Carrying out foreign language learning like acquiring a first language on preschoolers requires intervention. With maintained planning and consistency, the mastery of EFL for preschool children is not impossible to achieve.

After the children were able to make one-word sentences and had enough vocabulary, within 2 years they were able to talk in English, their sentences were meaningful although they were still in a temporary incomplete-structure. At this time, the emphasis on concrete concepts are still dominant, so that function words have not been frequently used. Question words with 'here and now' mood ‘what and where’ were repeatedly used and abstract sentences were still rare. An encouraging concern is their ability to make conjoining sentences in the 25-36 month phase; they learned fast from simple to compound sentences and even began building complex sentences.

The characteristics of the sentences they made in simple sentences were in ‘child-like’ sentences, yet they talked in a meaningful use of possessive, infinitive, modal auxiliary, copular verbs, ing-Verbs and various phrases. In negative sentences, the use of ‘no’ both as single-word and multi-word sentences are still dominant, even though the form with ‘not’ has also begun. In interrogative, yes/No and QW questions with Noun, adjective as complement, 'be' and modal as auxiliary and ing-Verb are able to be made and used in conversation and self-narration. In the imperative, sentences with nouns and verb phrases still dominate, besides that, occasionally, there were also prohibition with ‘don’t' and invitation with ‘let’s’ appear. They succeeded in making conjoining sentences, behind the inadequate ability to make an embedded or complex sentence, by combining various sentence-patterns according to their wishes and intentions.

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