A STUDY ON INPUT QUALITY AND SECOND LANGUAGE GRAMMAR ACHIEVEMENT IN YOUNG CHILDREN

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ABSTRACT: Second language acquisition depends on the experience of the target language. Accounts of successful L2 acquisition have accordingly emphasized the importance of the quality of the input available to the learners. As a result, this study probes the impact of input quality (natural and instructional) on second language grammar knowledge of young children. 40 infants (4 to 5 years old) were selected as the sample size in this study. The results revealed that both natural and instructional input promoted the target grammar knowledge in both grammaticality judgment tasks and elicited oral imitation tasks effectively. But it supports the superiority of instructional input over natural input in promoting second language grammar achievement.

KEYWORDS: Input Quality, Natural Input, Instructional Input, Grammar Achievement

INTRODUCTION

There are different internal and external factors which influence the second language acquisition. One of these factors is the quality of the samples of the target language which the learners are exposed to, in other words the input. Input that learners receive in the learning process plays a very important role in the language acquisition, and the quality of the input can affect the learners’ second language acquisition.

In the process of second language acquisition, input has more of an impact on the second language learning process, and it has received considerable attention in recent years. According to Ellis (1994; 2008), theories of SLA attach different importance to the role of input in language acquisition process but they all acknowledge the need for language input. In many approaches to SLA, input is considered as being a highly essential factor while in other approaches it has been neglected to a secondary role. In fact, what has been changed in relation to the role of input in language learning from the viewpoint of various language learning theories is the conceptualization of how language input is processed by language learners considering the quality of input being natural or instructed (Doughty & Long, 2003).

The importance of these distinctions for L2 development has been emphasized by many researchers (e.g., Ellis, 1994; Hulstijn, 2002; Ellis, 2008a). Understanding the relationship among these different distinctions (explicit/implicit knowledge, learning and instruction) is important for the field of second language teaching and learning. Acquisition comes about through meaningful interaction in natural communication settings. Speakers are not concerned with form, but with meaning; nor is there explicit concern with error detection and correction. This contrasts with the language learning situation in which error detection and correction are central, as is typically the case in classroom settings, where formal rules and feedback provide the basis for language instruction (Mcloughlin, 1987).
Krashen (1985) argued that the Input Hypothesis helps to settle an apparent contradiction in the research literature. Some studies indicate that formal instruction helps second – language acquisition, while others seem to argue that informal environments are superior or just as good. To resolve this contradiction, Krashen proposed that language classes are effective when that are the primary source of comprehensible input (McLaughlin, 1987). There is considerable variability in the rate of language development among children (Mogford & Bishop, 1988). Some of this difference in rate may be related to aspects of input (Potts et al., 1979). One of the issues related to input is the question of whether or not input implies an equal degree of intake (Brown, 2014).

The role of input quality in second language (L2) development has long been a highly controversial issue in the field of L2 learning and teaching, particularly concerning the procedural use of the language. L2 processes are often discussed in terms of the distinctions between implicit/explicit knowledge, implicit/explicit learning and implicit/explicit instruction.

This study tries to answer the following questions:

1. What is the effect of input quality on second language grammar achievement of young children?
2. Which input (instructional or natural) is more effective in second language grammar achievement of young children?

**Significance of the Study**

This study is in significance of providing information on the issue of the role of input in SLA which has been a topic of intense research since the 1970s. Most research underscores the significance of the input that a learner receives (Gor & Long, 2009), but tempers the earlier claim that input is the sole cause of successful language acquisition (Krashen, 1985). Without question, L2 learners derive their information about the L2 from the aggregate of all their input, which includes (in the classroom) teacher talk, textbooks and materials, the output of other students, and audio, visual/technological input, all of which are usually controlled, positive samples of language (Gor & Long, 2009). Outside the classroom, learners must filter a much wider variety of language form other speakers in natural contexts, news and entertainment media, and written sources including newspapers, magazines, and literature (Brown, 2014).

Furthermore, this study would also be a review on the impact of the quality of input (natural and structural) on young children grammar. That input is an important factor in language learning is apparent especially when one looks at cases where the language learner has the opportunity of natural immersion through living in the language community. Singleton (1995, in Fullana, 2006) estimated that in order to attain as much input as a second language learner would during one year in a second language naturalistic setting, more than 18 years in a formal instructional setting would be required. He underlined that “no one would want to postulate a literal equation between a given quantity of input over 12 months and the same amount of exposure over 18 years, but the point is that when comparing different categories of language learners one does always have to keep in mind the varying relationship between real time and exposure time.” (Singleton 1995, in Fullana, 2006, p.43).
Theoretical Framework of the Study

The basic theoretical assumption behind the impact of input quality on second language comes from the idea of krashen’s input hypothesis; the input hypothesis is central to all of acquisition and also has implications for the classroom:

1. Language is a result of acquisition and not its cause. Language cannot be taught directly, butt “emerges” on its own, as a result of building competence via comprehensible input

2. If input is understood, and there is enough of it, the necessary grammar is automatically provided. The language teacher need not attempt deliberately to teach the next structure along the natural order – it will be provided in just the right quantities and automatically reviewed, if the student receives a sufficient amount of comprehensible input (Gass,Beney&Plonsky, 2013).

REVIEW OF LITERATURE

Children need to be at least exposed to a language in some sort of interaction in order to be able to acquire the language (Skuze,1988; Mayberry & Eichen,1991). A well-known example of the consequences of the deprivation of language in a child is the description of Genie by Curtiss (1977). Another case was presented by Emmorey, Grant and Ewan (1994) who described the linguistic isolation of a 16-year old Guatemalan deaf girl, Anna, and the first steps towards the acquisition of American Sign Language (ASL) after her arrival in the United States. Not much is known, however, about how much language children must be exposed to, to be able to acquire a language.

Several studies have compared the effects of input – based instruction with and without explicit instruction. Williams and Evans (1998) compared the effects of enriched input (consisting of an artificially increased incidence of the highlighted target form) and the same input plus explicit instruction and corrective feedback on the acquisition of English participial adjective (for example, ‘boring/ bored’) and present passive. For the participial adjective, the enriched input + explicit instruction group did better than both the enriched input group and a control group on a grammaticality judgment test and a sentence completion test while the difference between the enriched group and the control did not reach statistical significance. For the passive, both the experimental groups outperformed the control group on a sentence completion test, but no group differences were evident on a narrative test. This study raises an important consideration – namely, that the effects of different types of instruction may vary depending on the target feature.

Spada, lightbown and White (2006) compared the effects of instruction consisting of direct consciousness raising with input – based instruction involving both possessive determiners (i.e. ‘his’ and ‘her’). The results indicated an advantage for the explicit instruction. However, it should be noted that the explicit instructors were asked to refer to an explicit explanation of the possessive determiners while completing a cloze passage and discussed answers in class. Thus the comparison between explicit instruction and input – based instruction was not a ‘pure’ one (Ellis,2008).

Input – based instruction is directed at enabling learners to (I) notice the presence of a specific feature in the input ,(2) comprehend the meaning of the feature , and (3) rehearse the feature in
short–term memory. One of the assumptions of input–based FFI is that it is psycholinguistically easier to manipulate the processes involved in intake that it is to induce learners to restructure their interlanguage systems. Pienemann (1985) noted that “the input to the comprehension system does not need to be adjusted to the level of complexity of the production learning task since there are different types to processing procedures in the two systems” (1985, p. 53). Input–based FFI can be distinguished in terms of whether it involves enriched input or Processing instruction (Ellis, 2008).

Studies that have investigated enriched input options have drawn on Schmidt’s Noticing Hypothesis and the Frequency Hypothesis. Enriched input can take the form of oral or written texts that learners simply listen to or read (i.e. input–flooding) or texts where the target structure has been highlighted in some way (for example, through the use of underlining or bold print). Three groups of enriched input studies can be identified: (I) studies designed to investigate whether the forms targeted in the enriched input are noticed by learners, (2) studies designed to investigate whether enriched input promotes acquisition, and (3) studies comparing the effects of enriched input with some other instructional option (Ellis, 1999b). In accordance with the Noticing Hypothesis, enriched input can only work for acquisition if learners actually pay attention to the target structure (Ellis, 2008).

The studies have been primarily concerned with learners’ use of linguistic realization devices rather than with sociopragmatic aspects of L2 use. The pragmalinguistic features investigated include both formulaic devices associated with early L2 development (Tateyama, 2001) and more complex devices likely to be found in more advanced learners (Takinoto, 2006). The studies were conducted mainly in foreign language classroom contexts, with notable exceptions being Lyster’s (1994) study of address forms in an immersion context. Artistic features are often not salient to learners, suggesting that instruction is needed in second as well as in foreign language contexts.

In Long’s view, interaction and input are two major players in the process of acquisition, a combination emphasized by Gass (2003). Interaction and input are two major players in the process of acquisition, a combination emphasized by Gass (2003). In a marked departure from viewing L2 classrooms as contexts for “practicing language forms”, conversation and other interactive communication are, according to Long, the basis for SLA development. A number of studies supported the link between interaction and acquisition (Pica, 1997; Gass & Varonis, 1994; Loschky, 1994). In a strong endorsement of the power of interaction in the language curriculum, van Lier (1996) devoted a whole book to “the curriculum as interaction” (p. 188). Here, principles of awareness, autonomy, and authenticity lead the learner into Vygotsky’s (1978) zone of proximal development (ZPD), where learners construct the new language through socially mediated interaction (Brown, 2014).

Heike Behrens, 2003 in a study (The input–output relationship in first language acquisition) provided an account of the distributional information and the production rates in a particularly rich corpus of German child and adult language. Three structural domains were analysed: the parts-of-speech distribution for a coded corpus of circa one million words as well as the internal constituency of 300,000 noun phrases and almost 200,000 verb phrases. In all three domains, the distribution over time in the adult input was extremely homogenous. The child showed a steady approximation towards the adult distribution. It was argued that two notions of
acquisition have to be distinguished: acquisition in terms of the availability of a given structure, for example in terms of first occurrence of a structure or according to various criteria of productivity, and acquisition in terms of full communicative competence, i.e. using structures in the way adults use them. The data presented show that the child acquires not only the structural options of German but also highly conventionalised ways of encoding concepts. The amount of information about the structure and conventions of German that was available in the input had the potential of making innate stipulations unnecessary. Instead, the data supported usage based and probabilistic theories of language and language processing.

Matychuk, 2004 in a study (The role of child-directed speech in language acquisition: a case study) examined the nature of child-directed speech (CDS) from the perspective of functions and social interactionist theory. It was argued that previous explanations of CDS, often called motherese or caregiver speech, had either minimalized or neglected the functionalist–interactionist dimension of input in language acquisition. Far from being merely a novel way of describing the language caregivers use with infants, CDS was presented as a crucial catalyst in the complex process of acquisition. At the heart of CDS is negotiation between caregiver(s) and infant. The infant needs not always respond with complete or near-complete linguistic units or constituents such as an adult might during a given negotiation, yet the context of the negotiation remains crucial to the infant. As physical maturation increases and the infant begins to produce more adult-like utterances, the negotiation between interlocutors becomes more balanced, syntactically and phonologically, but not necessarily semantically/functionally. This study presented the results of a case study which specifically examined the utterances or input which family members direct at a Japanese infant during the early part of his language development. The data generated by the subject and his parents provided an interesting glimpse into one of the ways in which infants absorb language. The results of the data analysis showed that while the parents of the subject were seen to use roughly equal amounts of language with the child, the distribution of language functions used by the mother was importantly different from that used by the father; therefore, it was suggested that this difference in CDS aids the language development of the infant by providing more interactive negotiation, which was argued to be the crucial factor in language development.

Westergaard and Bentzen, 2004 in a study (The Effect of Input Frequency on the Acquisition of Word Order in Norwegian Embedded Clauses) said that input frequency is also argued to play a role in this analysis. Together with the general complexity of the relevant constructions, the lack of input frequency may be a reason why the non-target-consistent word order produced by the Norwegian children is so persistent, compared to word order in other constructions. Thus, they argued that there may certainly be effects of input frequencies in language acquisition, but they doubted that input frequency alone could account for acquisition orders and children’s non-target-consistent production. Rather, they believed that explanations must be sought in a variety of areas. In the particular case discussed in this study, they have argued that economy as well as complexity interacts with frequency to produce the particular error patterns found in the child data.

Cole, 2008 in a study (The importance of parental involvement in language acquisition and activities and techniques to enhance the home-school connection) claimed that children achieve higher language levels when they have access to more parental input and involvement. Children do not learn complete language systems in a vacuum, such as the learning environments where teachers use direct instruction to develop children’s vocabulary and teach language structures. To develop language fully, it must also be learned within the social contexts found at school.
and at home. Although teachers have no control over the quantity or quality of language that their students have been exposed to in the past, they can affect future language development in two important ways. They can increase the quantity and quality of language used in the classroom, and they can encourage parents and other caregivers to do the same at home. Professionals may blame a child’s current language level on their home environment, socioeconomic status, or parental involvement; however, once given the responsibility of a child’s linguistic development, those factors must not be used as excuses for failure. Time and effort must be concentrated on what can be done from there. When parents and teachers work together during this process, children make the greatest gains in language development.

Lieven, 2010 in a study (Input and first language acquisition: Evaluating the role of frequency) mentioned that there is a strong relationship between the frequency of morphological, lexical and syntactic forms in the input and children’s language acquisition. The study showed a relationship between the relative frequency of forms in the input and children’s errors, including morphological errors, optional infinitive errors and accusative-for-nominative errors in English.

Unsworth et al., 2011 in a study (On the role of age of onset and Input in early Child bilingualism in Greek and Dutch) showed that there is a complex interplay between the factors of input quantity and age of onset.

Thomas, 2013 in a study (Scientists get glimpse into infant language learning Infants) mentioned that the developing human brain learns language at a remarkably accelerated rate starting at about one year old. But even at six months, baby brains begin to log basic language foundations. After several months, when toddlers have acquired language fundamentals, the brain soon transitions out of its language acquisition mode.

Sparks and Leyva, 2013 in a study (Child language acquisition) found that there is a universal cognitive linguistic and sociolinguistic process in bilingual children.

Haddad Narafshan et al., 2014 in a study (The Role of Input in First Language Acquisition) claimed that the process of language acquisition depends on an innate language ability which holds that at least some linguistic knowledge exists in humans at birth, and also the input that learners receive plays a very important role in the language acquisition since the input activates this innate structure.

Haddad Narafshn, 2014 in a study (the mysteries of language acquisition) showed that a fundamental task of language acquisition, recognition of theta roles, can be accomplished by 18-month-old infants based on the syntactic relationships.

Although the role of input in L2 acquisition is increasingly attracting researchers’ interest, the role of input quality (natural or instructional) in second language (L2) acquisition is subject of much debate. Since the input quality (structured vs natural) has been neglected in Iranian EFL contexts to some extent, the effect of input quality on Iranian learners’ grammar needed to be reviewed.
METHODOLOGY

Participants

The population of this study was beginner female young children (3-4 years old) in Iran, kerman, district 2. In accordance with Dornyie (2007) cluster sampling, all beginner female EFL young children (based on Oxford Placement Test) in a kindergarten located in Kerman, district 2 were selected as the sample of this study. They were 40 infants, all female with the age range 3-4 years old. These 40 infants were divided into two groups of 20 (control and experimental one). 20 participants (50%) were assigned in control and experimental groups.

Instruments

To find the relationship between input quality and grammar learning, the researcher utilized the quantitative research method. The instruments applied in this study were two tests of grammar (Oxford placement Test & Oxford Grammar Test). To consider the internal consistency reliability (to evaluate the degree to which different test items that probe the same construct produce similar results), split-half reliability as a subtype of internal consistency reliability was used. The process of obtaining split-half reliability begun by splitting in half all items of the test that were intended to probe the same area of knowledge in order to form two sets of items. The entire test was administered, the total score for each set was computed, and finally the split-half reliability was obtained by determining the correlation between the two total set scores. The reliability of the test was (0.81).

To check the validity, the oxford grammar test, as a valid test was used in a way to test the topics being covered at class to follow the content relevance and content coverage validity (simple present, present continuous & to be verbs) and also ten university professors as experts of English language teaching filed were asked to check the questions considering the content validity of the test, and the answers were analyzed based on the Content Validity Ratio Formula (CVR). In accordance with Lawsche (1975), questions whose CVR was more than 0.99 were chosen as the main items.

Data Collection and Data Analysis

The data for this study was collected by asking the participants (infants) to answer the grammar test (pre& post) questions; all the answers to the tests were used as the data in this study. The obtained data was statistically analyzed by using descriptive statistic, inferential statistics, SPSS 16, and excel 2010. In descriptive statistics, frequency tables, bars, and histogram charts were used to describe the variables. In inferential statistics, one sample T-Test was used to analyze the questions of the study.
RESULTS

![Figure 1: Bar Chart of Average Grammar in both Groups in Pre-test and Post-Test](image)

Table 1: Descriptive Statistics of Research Variables in Participants in Pre-test and Posttest

<table>
<thead>
<tr>
<th>Time</th>
<th>Group</th>
<th>Statistics Variable</th>
<th>Control (n1=20)</th>
<th>Experimental (n2=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>Pretest</td>
<td>Total Score (second language grammar acquisition)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Posttest</td>
<td>Total Score (second language grammar acquisition)</td>
<td>59.50</td>
<td>9.54</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 2: Paired-Sample T Test to Compare Grammar Total Score in Experimental and Control Group in Infants

<table>
<thead>
<tr>
<th>Group</th>
<th>Total number</th>
<th>Mean</th>
<th>Std.Deviation</th>
<th>T-Test</th>
<th>Df</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>20</td>
<td>59.50</td>
<td>9.54</td>
<td>-7.43</td>
<td>26.882</td>
<td>0.0005</td>
</tr>
<tr>
<td>Experimental</td>
<td>20</td>
<td>77</td>
<td>4.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Children’s Descriptive Indicators in Total Score in Experimental and Control Group in Different Times

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>time1</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time2</td>
<td>9.00</td>
<td>6.41</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time3</td>
<td>41.75</td>
<td>9.07</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time4</td>
<td>55.75</td>
<td>6.54</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time5</td>
<td>63.75</td>
<td>5.35</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time6</td>
<td>68.75</td>
<td>3.58</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time7</td>
<td>70.75</td>
<td>3.35</td>
<td>20</td>
</tr>
<tr>
<td>Experimental</td>
<td>time1</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time2</td>
<td>30.25</td>
<td>5.50</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time3</td>
<td>66.25</td>
<td>6.04</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time4</td>
<td>74.50</td>
<td>3.20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time5</td>
<td>80.25</td>
<td>3.80</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time6</td>
<td>84.50</td>
<td>4.26</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>time7</td>
<td>88.75</td>
<td>5.35</td>
<td>20</td>
</tr>
</tbody>
</table>

Figure 2 The Line Graph of Scores of Participants in Terms of Time and Group
DISCUSSION

The present study was conducted to investigate the impact of input quality on second language grammar knowledge of young children. According to the results (tables 6.1, 6.2, & 6.3 and figures 6.1 & 6.2), it can be said that there is a relationship between the input quality and children second language grammar knowledge. Both instructional and natural input promoted the target grammar knowledge of both groups effectively, but the findings supported the superiority of instructional input over natural input in promoting children second language grammar knowledge. Young children who were exposed to instructional input outperformed the ones being exposed to the natural input. It shows the indispensability of L2 instructional input for successful language development of L2 grammar. It follows the assumption that a better understanding of the nature of instruction on SLA may lead to improvements in second language teaching practices. Instructional input was found to be significantly more effective than natural input both in short and long terms. Considering the time interval, both groups (control and experimental) showed progress in terms of time interval. But the mean and standard deviation changes (table 6.3 and figure 6.2) show that the experimental group performed better than the control group in terms of time interval.

CONCLUSION

The study was set out to explore the impact of input quality on second language grammar in young children. The main findings were summarized within results and discussion part, and this section synthesizes the findings to answer the study’s research questions:

1. What is the effect of input quality on second language grammar knowledge of young children?
2. Which input (natural or instructional) is more effective in second language grammar knowledge of young children?

Evidence from this thesis rejects the idea of Krashen’s acquisition/learning hypothesis that children who are exposed to natural input (acquisition) are better second language acquirers than the ones being exposed to instructional input (learning), and it points that instructional input can even help EFL children to be better second language learners in case of second language grammar. Krashen’s acquisition/learning hypothesis (1981) holds that the fluency in second language is due to what they have acquired, no what they have learned. The discussion of learning and acquisition was led by Krashen, who proposed a model of second language acquisition in which the natural input plays the pivotal role. Krashen and Terrell (1983) claimed that if language input is provided naturally over a wide variety of topics with communicative goals, the input would automatically include the necessary grammatical structures. Carter (1993) pointed out that acquisition is a natural and unconscious process that takes place as the result of meaningful exposure to language that occurs naturally and is used for the purpose of meaningful communication. This natural process of acquisition is in contrast to the conscious process of language learning, which occurs when instructional input is provided regularly. This study has used empirical findings to show that both instructional and natural input promoted the target grammar knowledge in both grammaticality judgment tasks and elicited oral imitation tasks effectively. But it supports the superiority of instructional input over natural input in promoting second language grammar knowledge.
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