

**Research Article**

## **EFFECT OF TOP –DOWN, BOTTOM- UP PROCESSING: ACQUISITION OF INFLECTIONAL MORPHEMES**

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### **ABSTRACT**

This study was conducted to investigate the opinion of EFL teachers on whether top-down or bottom-up processing has any effect on better learning of inflectional morphemes and better usage of text-books by EFL learners or not. For this purpose, teachers of English at high schools and private institutes of Mazandaran participated in this study. It was explored from the study that teachers believe, EFL learners morphological awareness improve by use of top-down processing in teaching sequences and practical teaching periods of time. Attempting to answer which process grammatical morphemes acquire accurately, this study analyzes the EFL teachers' points of view samples using descriptive analysis. The instruments was an interview form, consist of 6 questions mentioned about instruments, methods, strategies and influence of materials which teachers use in their classes to increase the knowledge of morphological competence and accurate acquisition of inflectional morphemes. Also the participants asked for theories on grammatical morpheme studies which they are using through teaching sequences. The finding of this study indicates that the Iranian EFL learners has acquired grammatical morphemes well by influential use of bottom –up processing and capability of teacher in using suitable strategy during teaching period.

**Keywords:** *Grammatical Morpheme, semehprom lanoitcelfni, Language Acquisition, EFL, Top-Down*

### **INTRODUCTION**

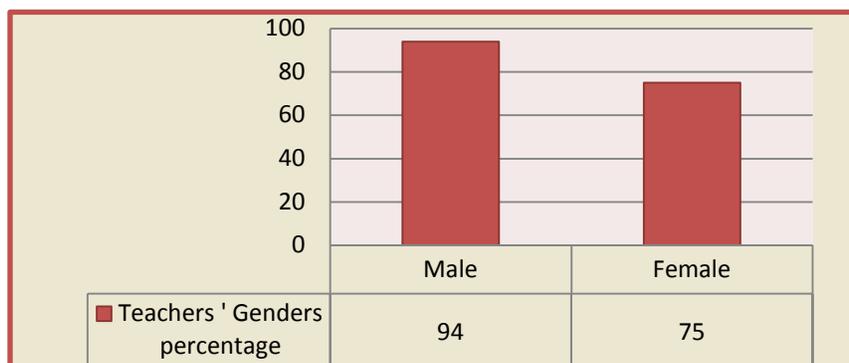
Second language learners have the most difficulty in acquiring the emehprom lanoitcelfnis. Ironically, however, this morpheme continued to occupy the beginning stages of language learning until very recently. My interest in studying about effective process in teaching inflectional morphemes is not only because it creates complexity for teachers but also as much of the prior research is descriptive. In this research I wished to unearth whether or not Iranian teachers agree with bottom-up processing instead of top-down in teaching morphemes or not, and if so, I would make an attempt to explain why it was so. The existing few research on this issue taps on Iranian learners' strategies and process of teaching in general, not specifically the inflectional morphemes.

### **MATERIALS AND METHODS**

The importance of morphological competence has been successfully recognized as a goal of language teaching and learning in the field of second language acquisition. This study is quasi-experimental in nature. As data collection took place in rather normal conversations mrof eht ni of an interview form, it is possible to elicit rather natural data, without or with only few disturbing effects that may occur with (laboratory) experiments or standardized testing situations. However, by using open interviews as an elicitation method, the researcher has almost no influence on the type of data elicited. This study aims to shed light on the process of teaching of inflectional morphology in learners of English as a Foreign Language (EFL) whose first language (L1) is Spanish. My research has been carried out by collecting data from a total of 169 English teachers (from starter to advanced proficiency level' teachers). The results in my research confirm that bottom-up processing in teaching inflectional morphemes influence on decreasing the quality of the students in the term of recognition and production of in flectional morphemes. How ever there was an interview form for collecting EFL teachers opinion in whole Mazandaran and Guilan with participation of 169 teachers among them to take their opinion about choosing

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easiest kinds of focused inflectional morphemes and on the other hand to chose the helpful and effective strategies of teaching. As it is exhibited in figure1.1.the researcher tried to show the number of participants (male/ female teachers) in his first step of data collection through participation of teachers which individually divided by their gender as:



**Figure 1: Number of participants in Teachers' Interview Form (Male/Female)**

The sole source of material in the present study is from a type of interview form that was used during the study. As the purpose of enhancing Iranian EFL learners' knowledge of morphemes the major instruments were used in this study were related to inflectional morphemes. The interview form had been used to reach teachers opinions and beliefs. This test also validated by 8 inter-rater faculty members in TEFL and examined the students of Guilan and Mazandaran randomly. The explanation about test consistency is focused on the next section. Interview is widely used in social studies research because it helps the researcher to get data about participants' personal information, beliefs, attitudes and opinion. It is regarded as a directed conversation between an investigator and individual or group of individuals in order to gather information. In order to answer the research question the structured interview had used for data collection. This instrument in type of structured interview including 6 related questions help the researcher to find out the teachers' point of view about the choosing of prior acquired morpheme between those which considered in the form as a guide. Then they were asked if their method of teaching has any influence on students learning and better production by them or not. In the same question they were requested to write their own method of teaching. Next the researcher supposed to review and find the best strategic way of teaching morphemes in order to catch teachers' opinion to which of the mentioned strategy they accelerate better randomization in learners' recognition and more correct production in a multiple choice question. By then at the end of previous question they were asked why they chose their arbitrary items. A few teachers answered this question and the researcher will review their inscriptions in the further parts. Nowadays using modern technology for teaching becomes one of the stable enhancements in every education offices mainly in private institutes. Here the researcher seek for influence of these new instruments in Iranian EFL classrooms for increasing knowledge of morphology play any significant rule or not. So through asking a question not only their opinion about their available instruments (exm: book) but also about modern methods and instruments has been checked. The form contains 6 questions related to the topic. By then they were asked for choosing a influential way of managing and distributing new information. It is asked whether they think better understanding happening through Top-Down or Bottom –Up processing. At the end of this interview form the effect of text-books mentioned by the researcher in the last question in the form of yes/no question. Some of important points related to the questionnaire which related to the strategy of teaching L2 by means of reviewing considered in the next titles.

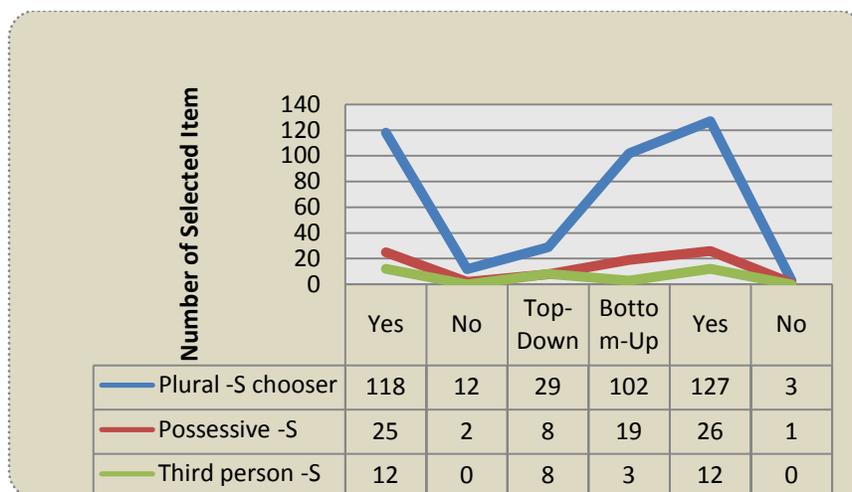
**RESULTS AND DISCUSSION**

On the basis of the research gathered from interview form it can be said that the hypothesis of the present study searching about the influential process in teaching. Most of the EFL teachers have often applied this

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problematic subject that given in mrof eht. Here the researcher insisted to find out a good process in the term of teaching for increasing the level of recognition in order to correct and fluent production by asking if teachers believe that the bottom-up processing is useful for acquisition of inflectional morphemes between Iranian EFL learners or not. Here in order to answer the question of the study the following hypothesis mentioned for better understanding the problem in data analyzing section:

H1. Teachers believe that the bottom up processing is useful for acquisition of inflectional morphemes in Iranian EFL classes. The hypothesis of this study is a key for discussing if bottom up processing has more influence than top-down processing in the term of teaching grammatical morphemes or not. The approached information from applying of interview form showed in the diagram below.



**Figure 2: Result of Items Chose By Teachers from Interview Form**

According to the results of interview form Figure2 the blue line trying to show the analyzed data in the form of three colors. The researcher divided the data by numbers of participants. As it is available in figure 2 you can see that most of teachers believed that the acquisition of inflectional morphemes through bottom-up processing happening in a better manner than top-down processing. However this process effect on better understanding in order to correct acquisition but there are other items which effect on increasing the qualitative and quantitative results. By focusing on their clue, most of them agreed and wrote these points as the solutions which effects on better teaching:

*“Use the effect of L1 examples and similarities between L1 and L2 through bottom-up processing increase the anxiety for intentional comprehension in a simple acquisition with possible correct results.”*

The blue line in figure 4.1 helped the researcher to prove the first hypothesis in first hand. Numbers shows that most of teachers believe in that plural –s is prior in the term of acquisition in their English classes. So they gave special agreement to the highest rank of this figure.

**Discussion**

Learning feature distinguishes humans from the rest of the animals and enables us to talk about infinite situations, even abstract thoughts and feelings. As Chomsky (1957) argued long ago, the ability to learn or acquire a language is innate, that is to say, common to every human being. This universality would help to explain the poverty of the stimulus, since humans learn a language independently of the stimulus they receive. Many researchers have been interested in analyzing how this process of acquisition evolves. Evidently, acquiring a language is not a fast and simple process but a long and complicated one and researchers attempt to discover if there are regularities and commonalities in this acquisition process.

fo trap niam eht trats ot retted sti, hcræser siht fo elitit eht no desaB noitingocateM htiw noituçssid strategies. Metacognition refer to the skills we develop about knowing or remembering. The skills of metacognition allow us to monitor and check our progress when we try to understand or learn something. With the help of metacognitive strategies we are able to estimate the effect of our efforts and predict the

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likelihood of being able to estimate the effects of our efforts and predict the likelihood of being able to estimate the effects of our efforts and predict the likelihood of being able to understand and remember the material later. It also helps us select different approaches for learning and remembering. As you know top-down, bottom-up processing is one of metacognition's factors. Top-Down and Bottom-Up Processing relate to the brain process information. The brain process information in two ways. In Bottom-up and data-driven processing the information comes from the environmental stimuli (data). In top-down or conceptually- driven processing, past experience and knowledge in long-term memory is activated to interpret the data. Top-down and bottom-up processing would be the case of reader who is trying to comprehend a piece of prose or poetry. The reader processes the words and sentences on the page (data) and at the same time he uses his previous knowledge about the propositions in the text to reach his own interpretation. Returning to the original research questions, this study also provides evidence that the acquisition order of grammatical morphemes by English as Foreign Language learners through bottom-up processing happening in a better aptitude. In addition, this study exhibits support for Never the less, the interference seems to provide transfer, with focus on availability of the morphemes exhibit in L1, and also in L2 and vice versa. Knowledge and use of grammatical morphemes does not imply competence in the language learning includes mere grammar and form, then the students, and by extension, the teaching methods used, have succeeded. However, if the goal of language learning is communicative ability, then the students still have many obstacles to overcome in their acquisition of the language. The results of this study can provide a thorough answer as to whether text books play a larger role in acquisition than researchers have previously thought. Lastly, grammatical morpheme acquisition may have implications for teaching English as a Second or Foreign Language. If the goal of language learning includes mere grammar and form, then the students, and by extension, the teaching methods used, have succeeded. However, if the goal of language learning is communicative ability, then the students still have many obstacles to overcome in their acquisition of the language if they learn second language by other process and strategies. Further exploration of these ideas holds the promise of substantial progress in understanding the nature of second language acquisition and may ultimately contribute to the more practical pedagogical concerns of teachers and curriculum designers.

### **Results**

So as mentioned in this study and through the analyze of teacher's points of view using bottom-up processing can be useful in EFL classrooms and also this strategy is a good solution for better understanding of morphological knowledge in order to help students to pass many obstacles in L2 learning.

### **Conclusion**

As the researcher tried to show in General discussion hopes the study can help teachers to use innovative ways of evaluating highly anxious students. This study incites creative strategies to be implemented in testing setting to change the quality and quantity of Iranian EFL learners' knowledge in the term of acquisition of inflectional morphemes. This result supports the view that morphological awareness is an outcome of print exposure and experience. If the goal of language learning includes mere grammar and form, then the students, and by extension, the teaching methods used, have succeeded. However, if the goal of language learning is communicative ability, then the students still have many obstacles to overcome in their acquisition of the language. As the researcher tried to illustrate with the help of English verbal inflection, there are infants' plausible explanations for the difficulty that particular linguistic phenomena present to language learners and most of times these phenomena can be pass through bottom-up processing.

### **ACKNOWLEDGMENT**

This paper dedicated to the symbol of greatness, my father.

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