Incorporating Cognitive Linguistic Insights into Classrooms: The Case of Iranian Learners' Acquisition of If-Clauses

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Abstract

Cognitive linguistics gives the most inclusive, consistent descriptions of how language is organized, used and learned. Cognitive linguistics contains a great number of concepts that are useful to second language learners. If-clauses in English, on the other hand, remain intriguing for foreign language learners to struggle with, due to their intrinsic intricacies. EFL grammar books are paying focal attention to present explanations of if-clauses in terms of their form not meaning; hence, not giving attention to their contextual meaning usage. Cognitive linguistic insights on if-clauses discuss their complexity in such a way that they could be very beneficial for L2 learners. This study aims to investigate the effect of two different ways of teaching (cognitively-oriented and task-oriented) on learning English if-clauses. A sample of 60 non-English postgraduate students in three groups, two experimental groups (cognitively-oriented and task-oriented) and one control group participated in the study. The results indicated that participants from the cognitively-oriented group performed better than those in task-oriented and control groups and proved a higher degree of comprehending English if-clauses in different contexts. The findings have implications for curriculum and materials developers, as well as the English language teachers in incorporating insights from cognitive linguistics in second language materials.

Keywords: Cognitive Linguistics, Task-oriented, If-clause, Cognitively-oriented

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1. Introduction

Second language acquisition studies and L2 teaching have long been trying to investigate particular ways of how instruction can encourage and facilitate successful acquisition of target language structures. While a comprehensive answer does not exist, a number of methods can be more or less effective depending on the given context and instructional situation. However, certain target language features remain challenging for learners regardless of the teaching methods; due to their intrinsic intricacies and other internal, language-specific characteristics English if-clauses are one of such grammatical structure that foreign language learners continue to grapple with. The intrinsic intricacies of if-clauses and the great number of their functions have brought about a great deal of theoretical analyses and classifications, but few, if any, represent noticeable importance for second language learners (Celce-Murcia & Larsen Freeman, 1999; Horn, 2000; Kamp, 2002).

Taking the majority of grammar books and other pedagogical materials into account, English language learners are suffering in two different ways: (a) they receive teaching that is not in fact related with current linguistic theory, and (b) the dominant methods of teaching do not produce a contextualized and usage-oriented description of if-clauses.

This study mainly deals with utilizing cognitive linguistic insights to the teaching of English if-clauses. The main rationale for the inclusion of cognitive linguistic insights as the fundamental paradigm for the current research is that cognitive linguistic insights give the most meaningful description of how language is taught, used and learned (Tyler, 2012).

Cognitive linguistics consists of a great number of notions that can be of special importance to foreign language learners. These include noticeable emphasis on meaning-making as the main objective of language. Earlier studies

show that cognitive linguistic insights can be adapted and then presented to foreign language learners in a more feasible way than what is the norm for standard theoretical sources (Tyler, 2012). This study aims to add to the amount of understanding which involves testing the functionality of cognitive linguistic insights to foreign language situations.

Regarding the target elements under investigation in this study, cognitive linguistic research deals with the internalintricacy of their forms, giving an analysis that pinpoints the importance of the concept of conditionality as well as meaningful contribution of single grammar forms to the entire meaning of the clause. Accordingly, the current issues in the existing state of teaching if-clauses were addressed by presenting and evaluating tangible methodological solutions.

2. Review of Related Literature

In Foreign language learning contexts, cognitive linguistics aims to illustrate how language is connected with conceptual system as this becomes institutionalized during child first language development and as it becomes accessible for change during adult second language learning (N. Ellis& Robinson, 2008). Some researchers (Achard, 2008; Cadeirno & Robinson, 2009; Robinson & Ellis, 2008; Tyler, 2012) believe that the essential concepts of the language approved in cognitive linguistics are useful for L2 learners, because it yields particular ways to examine and emphasize linguistic issues that are ignored in the majority of L2 materials and because it indicates systematicity in language that other theories do not manage to identify.

It is not only cognitive linguistics that accepts the usage-oriented function of language. While usage-oriented view of language is an umbrella concept covering some approaches toward language analysis, the field of Cognitive

Linguistics remains to be one of the most outstanding approaches (Cadeirno & Robinson, 2009; Ellis & Cadeirno, 2009; Tyler, 2012); because the only focus of this study is the Cognitive Linguistics, it will be the only one discussed.

During the past decade, a number of authors and researchers tried to investigate the relevance of cognitive linguistic insights to SLA contexts. Some of these studies have paid special attention to areas of teaching idioms, prepositions and verbal marker or aspects. Dirvn (2001) introduces a cognitive linguistic examination of phrasal verbs in English and offers some instructional suggestions to apply these suggestions to actual teaching procedures in second language classrooms. Cadeirno (2008) has conducted a few research projects on the basis of cognitive linguistic insights indicating that cross-linguistic differences might modify production patterns of coding motion events in second language situation. Holm (2009) in his book on "Cognitive Linguistics and Language Teaching" investigated different ways of producing the ideas of incorporating language and cognition into classroom practices. Applying constituent parts of Total Physical Response into language pedagogy through emphasizing word stress and intonation patterns is one of the most important notions of his book.

Articles in English grammar seem to be a difficult category for most EFL learners, particularly considering the fact that some of the languages in the world do not include any article and language learners are required to learn both the idea of articles and several article forms and uses in the target language. Verspour and Hung (2008) carried out a cognitive linguistic analysis of the English articles pinpointing various alternatives available to native speakers and elaborating the general difference between forms of article as placed on the dichotomy of boundedness and unboundedness.

In another work on cognitive linguistics, Tyler, Mualler, and Hu (2010) worked on English modals using the two methods of cognitive linguistics treatment and speech act treatment. Using a great number of tasks based on the insights from cognitive linguistics, English modal verbs were presented to the cognitive experimental group while the speech acts group was taught with insights based on speech act theory. The cognitive experimental group performed significantly better than the speech acts group on the posttest showing the effectiveness of incorporating cognitive linguistic insights into foreign language classrooms.

Although there is valuable qualitative proof for incorporating cognitive linguistics insights to EFL classrooms, the total number of research studies is not adequate to give firm experimental support to the predicted qualitative claims of the EFL pedagogical advantages of cognitive linguistics insights. Much more research studies must be conducted to discover how exactly insights from cognitive linguistics can be adapted to EFL instruction in the most meaningful and successful way. The present study is aiming to fill this gap at least to some degree.

If-clauses as grammatical structures have been studied extensively from a variety of perspectives. If-clauses represent a very challenging part of the English language due to a number of factors. First of all, if-clauses are a specially complicated class of English grammar even for theorists. Most linguists fail to reach an agreement on the unified conceptualization or on a thorough categorization of if-clauses. Secondly, ESL textbooks present a particularly restricted notion of if-clauses, almost completely depending on form rather than meaning and basically ignoring or disregarding multiple meaning differences from the more general conceptualization.

In this study, the purpose is particularly to deal with the issues more commonly encountered in the current state of affairs in the teaching of English if-clause constructions by formulating and evaluating certain methodological solutions with the use of cognitive linguistic insights and the latest developments in second language acquisition research. The argument is that incorporating cognitive linguistic insights to perceive key elements of if-clause structures and adapting that information in instructional tasks would be a vital development over the existing trends. Applying a usage-oriented function of if-clauses and emphasizing the details of their meaning would potentially be helpful to EFL learners to see the native-like understanding of if-clause construction based on the most recent insights of second language teaching.

2.1. Research Questions

This study, accordingly, aims to answer the following research questions:

1. Does task-oriented teaching have any effect on EFL learners' development of if-clause constructions?
2. Does task-oriented teaching accompanied by cognitively-oriented insights have any significant effect on EFL learners' development of if-clause constructions?

2.2. .Research Hypotheses

Since there are few studies of the acquisition of if-clause constructions through task-oriented and cognitively-oriented pedagogy, the following null hypotheses were formulated:

H1: Task-oriented teaching does not have any significant effect on EFL learners' development of if-clause constructions?

H2: Task-oriented teaching accompanied by cognitively-oriented insights does not have any significant effect on EFL learners' development of if-clause constructions?

3. Method

3.1. Participants

The participants of this study consisted of 60, 37 males and 23 females, Iranian PhD candidates majoring in different engineering fields and learning English for academic purposes. All participants were students from intact EAP classes. They were divided into three groups based on the EAP classes into which they had enrolled and randomly assigned into two experimental groups, namely, "cognitively-oriented" and "task-oriented" and one control group. The groups were approximately the same in size, 18 and 19 in cognitively-oriented and task-oriented groups respectively, and 23 in the control group. All participants were at the advanced level of English proficiency, as determined by the placement test they were required to take prior to being enrolled into the corresponding level of EAP class. Table 1 represents all the basic information related to the study participants.

Table 1. *Participant Information*

Characteristic		Cognitively-oriented group	Task–oriented group	Control group
Total number		18	19	23
Mean age		26 (SD = 5.8)	25 (SD = 4.9)	27 (SD=4.5)
Gender	Male	10	11	16
	Female	8	8	6

3.2. Instrumentation

Pretest, posttest, and delayed posttest: The tests administered consisted of four different parts: Controlled and free production parts aimed to target mainly implicit knowledge. Students were asked to fill in the blanks and describe a picture respectively. The goal was to get learners to show how they use the target form in specific contexts (Ellis, 2009; Norris & Ortiga, 2000;). Grammaticality judgment and comprehension parts, on the other hand, intended to target both explicit and implicit knowledge. Ellis (2004) also supports this idea that tests of grammaticality judgment nature can be utilized to measure both implicit and explicit knowledge.

To produce items for the four sections of each test, the British Academic English Corpus was utilized. As to the picture parts of the test, Google Image searches were run to write test items. All item collections devised were piloted first with native speakers, then with non-native speakers, in order to determine which items made sense and provided a generally acceptable context in which if-clauses are used. When the collection of items was finished, test versions were formed. Three different versions were developed for each subsection and then were counterbalanced for each test (pretest, posttest, and delayed posttest).

3.3. Instructional Procedure and Data Collection Process

The type of treatment received by each group was as follows:

1) The participants in the control group (n=23) received no explicit classroom instruction targeting if-clauses and only completed the three tests;

2) The participants in the "task-oriented" group (n=19) received instruction targeting if-clauses using the traditional teacher-mediated explanation and pedagogic tasks not based on insights from cognitive linguistics;
3) The participants in the "cognitively-oriented" group (n=18) received teacher-mediated presentation of if-clauses, as well as pedagogic tasks based on insights from cognitive linguistics.

All in all, it took six weeks to complete the process of data collection. All three groups were given pretests during the first week. The average group scores on the pretests were nearly the same in all three conditions. The pretests showed that the intact classes used for the purpose of data collection are regarded representative of the population and were nearly at the same proficiency level in terms of the general understanding of English if-clauses. Cognitively-oriented group as well as task-oriented group received their treatment for three weeks. Upon the completion of the treatment, the two posttests were administered to measure relative gains that may have taken place in the course of the treatment. Each of the tests took nearly 50 minutes to complete.

3.4. Instructional Materials

In line with theoretical insights into cognitive linguistics, an attempt was made to bring and actualize those insights into EFL classroom through some teaching PowerPoint Slides for cognitively-oriented group and some others for task-oriented group.

Instructional PPS1: It was used to expand metalinguistic understanding and conveying a cognitive view of language. The first set of slides focused on exposing the subjects to the meaning-centered reality of language. It started with giving a general introduction of how language is organized conceptually,

highlighting the compositional nature of language, then with asking students to reflect upon and share what they already know about the if-clause structure with the purpose of later building upon this background knowledge structure and focusing upon possible points and discussing general functions of if-clauses like prediction and establishing cause-and-effect relations. The next portion of the teacher-led slides focused on highlighting the compound structure of a typical if-clause. In the second part of the presentation, students were given two phrases: *"If John finds the necessary data, he will share it with us in class"* and *"If John found the necessary data, he would share it with us in class."* Each of these two sentences was then analyzed more closely following the blending scheme, where the base space of each phrase was referred to as background knowledge. First, each sentence was analyzed from the point of view of background knowledge: i.e., students were asked to discuss what information had to make sense and be true before either of these conditional sentences could be formed. After the discussion of background knowledge, the two scenarios were highlighted and implications of those scenarios elaborated. Students were asked to think about what would be the more realistic scenario, given that we already have a final output phrase and speaker has a choice of how to manipulate the available linguistic tools in order to highlight a specific meaning.

Instructional PPS2: The second set of slides demonstrated the underlying meanings of English tenses and how they are used in a variety of if-clause contexts. First, to make connections with a previous teacher-facilitated session, an overview of the concepts of speaker background knowledge structure and possible scenarios was provided. Then, the participants were asked to speculate about implications of human motion and task as captured by a photograph as opposed to a video.

Instructional PPS3: The third set of slides aimed at showing the participant show if-clauses are shaped within specific usage contexts and how surrounding information might affect the tense composition of either of the two clauses. The slides started with drawing the students' attention to the idea of perspective and how it can be expressed through visual means. Visual characteristics associated with different points of view humans can assume translate into the thinking patterns and what we associate with various viewing points in our real life.

PowerPoint Slides for task-oriented group: The task-oriented group received PowerPoint slides informed by the traditional analysis of if-clauses, which conveyed the most common classification of if-clauses: factual, hypothetical, and counterfactual. A brief description of the whole treatment is provided.

During the first week of instructional treatment, learners were given an overview of all three if-clause types with subtypes as informed by the more extended classification provided by Celce-Murcia and Larsen-Freeman (1992) in *"ESL Grammar Book*". During the second week, the focus was on tense combinations in all types of if-clause structures. The tense sequences were highlighted according to the explanations and descriptions provided in the traditional EFL materials. During the third week, the focus was on practicing using these forms in various contexts. Students were given examples similar to the ones provided in EFL textbooks.

4. Results

To answer the research questions, results of the three tests completed by the subjects must be taken into account. Both descriptive statistics of the test scores by testing task type are presented and ANOVA results for each testing task are

presented. Table 2 below provides an overview of all test score means obtained on all three tests by participants of all three groups.

Table 2. *Descriptive Statistics by Testing Task for all Groups*

Groups	Pretest Means			Posttest Means			Delayed Posttest Means		
	Cognitively-oriented	Task-oriented	Control	Cognitively-oriented	Task-oriented	Control	Cognitively-oriented	Task-oriented	Control
Controlled Production	13.59	12.61	13.18	22.06	18.11	14.82	21.29	16.56	14.32
Free Production	3.82	4.11	3.55	6.24	5.56	3.77	6.29	5.61	4.45
Comp. Pictures	2.65	2.83	2.91	3.24	2.94	2.77	2.71	2.50	2.50
Comp. Sentences	5.12	4.89	3.95	6.65	4.94	4.23	6.24	5.11	4.14

Next, Table 3 provides an overview of mean scores obtained across three tests by participants of all three groups.

Table 3. *Descriptive Statistics of Mean Test Scores across All Three Groups*

	Group	Mean	SD	N
Pretest score	Cognitively-oriented	24.50	5.27	18
	Task-oriented	25.00	4.33	19
	Control	24.00	4.83	23
Posttest score	Cognitively-oriented	38.06	3.25	18
	Task-oriented	31.67	5.35	19
	Control	25.59	4.85	23
Delayedposttest score	Cognitively-oriented	36.53	3.00	18
	Task-oriented	29.78	4.44	19
	Control	25.45	5.71	23

As can be seen from Table 3, mean pretest scores were quite similar among all three groups, with 24.50, 25.00, and 24.00 for cognitively-oriented, task-

oriented, and control groups respectively. The average standard deviation among all three groups was 4.77. On the posttest, the average score of the cognitively-oriented group, task-oriented group, and the control group were 38.06, 31.67, and 25.59 respectively. The standard deviation for the entire sample was 6.87. Simple mathematical calculations suggest that the average score of cognitively-oriented group increased by 13 points, and that of task-oriented group grew by 7 points, while that of control group by 2 points. The delayed posttest scores were 36.53, 29.78, and 25.45 for the cognitively-oriented, task-oriented, and control groups respectively, which demonstrate an average loss of about 2 points for both treatment groups. The score of control group remained approximately the same, declining only by an average of one tenth of a point between the posttest and the delayed posttest.

As can be seen from this table, the mean score of cognitively-oriented group changed from 24.50 on the pretest to 38.0 and 36.5 on the posttest and delayed posttest respectively. The task-oriented group progressed from 25.00 on the pretest to 31.6 and 29.7 on the two subsequent tests, respectively. Finally, the control group had the mean 24.00 score on the pretest, while their posttest and delayed posttest scores were around 25. The standard error for all means was calculated to be around 1.

Cognitively-oriented group improved the most over time, while the control group stayed at approximately the same level throughout. Between the two treatment groups, the cognitively-oriented group outperformed the task-oriented group: the average pretest-posttest gains score was 7 for the task-oriented group as opposed to the 13 for the cognitively-oriented group.

ANOVA comparison among all three groups was performed to address the issue of effectiveness of any teaching type for the acquisition of English if-clauses.

To ensure that all groups were at the same level at pretest, a one-way ANOVA was run to measure possible differences between pretest scores. The differences among all three groups were not statistically significant (cognitively-oriented vs. task-oriented: p=0.809, SE=1.7; task-oriented vs. control: p= 0.88, SE=1.6; cognitively-oriented vs. control: p=0.71, SE=1.65), which provided a basis for further comparison.

In order to check the specific areas of interaction between groups, Scheffe's post-hoc comparison was run. The results are reported in Table 4.

Table 4. ***Repeated Measures ANOVA: Multiple Comparisons, Scheffe's Post-Hoc Test***

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitively-oriented	Task-oriented	4.63*	1.25	.003
	Control	8.38*	1.19	.000
Task-oriented	Cognitively-oriented	-4.63*	1.25	.003
	Control	3.75*	1.17	.008
Control	Cognitively-oriented	-8.38*	1.19	.000
	Task-oriented	-3.75*	1.17	.008

*p < .01

As can be seen from Table 4, the relationships between all group pairings were statistically significant with p value always being <0.01.

The most considerable increase in mean scores took place in the cognitively-oriented and task-oriented groups between the pretest and the posttest; the participants in the control group did increase their posttest scores compared to the pretest, but not nearly as much as the participants of the other two groups did. The posttest gains obtained by the participants from the cognitively-oriented and task-oriented groups were preserved to some extent on the delayed posttest; however, the mean scores decreased on the delayed posttest in comparison to those on the posttest. A similar trend was also observed for the participants of the control group. Participants of the

cognitively-oriented group demonstrated the largest range of score means increase, with the task-oriented group being second and the control group third.

ANOVA for controlled production: Overall differences between all of the groups for controlled production were found to be significant (between-subjects effects for interaction between time and group: F=8.3, p=0.01, partial eta-squared=0.22). In order to avoid possible redundancy in discussion, only the data demonstrating actual interactions between groups are reported. Scheffe's post-hoc test showed that the differences between the cognitively-oriented and task-oriented groups and the cognitively-oriented and control groups were statistically significant, while the differences between the task-oriented and the control groups were not statistically significant. Table 5 provides the specific details of the post-hoc test.

Table 5. ***Scheffe's Post-hoc Test for the Controlled Production Parts of Tests***

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitively-oriented	Task-oriented	3.22*	.820	.001
	Control	4.87*	.783	.000
Task-oriented	Cognitively-oriented	-3.22*	.820	.001
	Control	1.65	.771	.110
Control	Cognitively-oriented	-4.87*	.783	.000
	Task-oriented	-1.65	.771	.110

ANOVA for free production: For the free production part of the tests (between subjects effects for interaction between time and group: F=3.4, p=0.01, partial eta squared=0.12), the interactions between cognitively-oriented and control group, as well as task-oriented and the control group were found to be significant, while the interactions between the cognitively-oriented and the task-oriented group were not statistically significant. The details of

Scheffe's post-hoc test showing exact interactions between groups are provided in Table 6.

Table 6. ***Scheffe's Post-hoc Test for the Free Production Parts of Tests***

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitively-oriented	Task-oriented	.36	.321	.540
	Control	1.53*	.306	.000
Task-oriented	Cognitively-oriented	-.36	.321	.540
	Control	1.17*	.301	.001
Control	Cognitively-oriented	-1.53*	.306	.000
	Task-oriented	-1.17*	.301	.001

ANOVA for 'comprehension: pictures': For the 'comprehension: pictures' part, none of the interactions between groups proved to be statistically significant (between subjects effects for interaction between time and group: F=1.1, p=0.5, partial eta squared=0.02). This may be related to the small number of items in this part of the test. The details of Scheffe's post-hoc test showing exact interactions between groups are provided in Table 7.

Table 7. ***Scheffe's post-hoc Test for the 'Comprehension: Pictures' Parts of Tests***

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitively-oriented	Task-oriented	.10	.14	.761
	Control	.14	.13	.600
Task-oriented	Cognitively-oriented	-.10	.14	.761
	Control	.03	.13	.971
Control	Cognitively-oriented	-.14	.13	.600
	Task-oriented	-.03	.13	.971

ANOVA for 'comprehension: sentences': Finally, for thispart of the test, the differences between all group pairings proved to be statistically significant.

The calculations of between-subjects effects for interaction between time and group were as follows: F=3.3, p=0.04, partial eta squared=0.05. In Scheffe's post-hoc tests, as provided in Table 8, p values were on average equal to or lower than 0.02.

Table 8. ***Scheffe's Post-hoc Test for the 'Comprehension: Sentences' Parts of Tests***

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitively-oriented	Task-oriented	1.02*	.32	.010
	Control	1.89*	.30	.000
Task-oriented	Cognitively-oriented	-1.02*	.32	.010
	Control	.88*	.30	.020
Control	Cognitively-oriented	-1.89*	.30	.000
	Task-oriented	-.88*	.30	.020

These numbers suggest that the instructional treatment produced a positive effect for the development of participants' comprehension skills in regard to if-clause structures.

5. Discussion and Conclusions

As to the research questions and hypotheses, based on the statistical findings provided, the task-oriented group performed better than the control group on both the posttest and the delayed posttest. The differences between the task-oriented group and the control group were statistically significant on the two tests. This finding allows us to reject the first null hypothesis.

The second research question concerned the effectiveness of adding cognitive linguistic issues into task-oriented teaching of if-clauses. Descriptive

statistics of scores on all three tests, as well as inferential statistical analyses conducted in regard to all three groups revealed that the group that received task-oriented teaching with cognitive aspects significantly outperformed the control group on both the posttest and the delayed posttest. In other words, the null hypothesis can be rejected implying that task-oriented teaching with added cognitively-based perception does produce an effect for learning if-clause structures.

Considering the challenge of making theory comprehensible to learners, this study indicated that cognitive linguistic insights can be incorporated into instructional materials without disturbing learner expectations too much and making it a worthwhile and valuable enterprise overall.

The design of this study and the statistically significant results supporting the use of cognitive linguistic insights in L2 development partly addressed the gap in applied linguistic research, where many previous studies were not sufficiently rigorous methodologically (Achard, 2004; Chun & Oller, 2008; etc.) or had a largely qualitative focus (Dirvn, 2001; Maunier, 2008; Neimeier & Rief, 2008; etc.). More general implications of this line of research concern the fact that theoretical linguistic understanding can indeed be of use in second language classrooms (Achard & Neimeier, 2004b; Gries, Hampe & Schoenefeld, 2005; Tyler, 2012; Tyler &Evans, 2004). Within the narrow context of this quasi-experimental study, using the cognitive explanation of English if-clauses proved to be a fruitful endeavor. Expanding the findings of the present study into a broader context can work as a supportive foundation that will ensure the stability of teaching practices and will hopefully systematize how language is presented to learners. If consistently translated into second language materials, cognitive issues can provide a unified view of language to learners and show numerous logical connections between language structures.

In other words, such comprehensive theory can function as strong support to successful L2 teaching.

The target structure of English if-clauses was selected because they represent a significant challenge for second language learners. Existing EFL materials may be of limited help, as they present simplified classifications of if-clause forms and ignore the presentation of discourse and usage patterns associated with them. Also, the vast majority of theoretical approaches to the analysis of if-clauses are too abstract for addressing the needs of second language learners. As far as the population involved in this study is concerned, they continued to show confusion over how to use the if-clauses to convey their ideas.

Approaching the study of language from the perspective of human cognitive processes, cognitivists claim that language naturally reflects the human experience and subsequent conceptualization of the world, or the internal world, as uniquely captured by each individual. Cognitive linguistic theory puts emphasis on the usage-based nature of language and inherent connections between form and meaning. A growing number of researchers (Achard, 2008; Robinson & Ellis, 2008; Tyler, 2012; among others) argue that this underlying conceptual view of the language can be of particular use for second language learners. Another advantage of using cognitive theory in L2 contexts involves bringing a coherent and relevant linguistic theory back into EFL materials (Tyler, 2008; 2012).

Accordingly, the present study aimed to address this gap by investigating the effectiveness of incorporating the cognitive analysis of English if-clauses to second language teaching through focusing on form and the use of task-oriented language teaching. Task-oriented language teaching was chosen because of its conceptual compatibility with the underlying principles of

cognitive linguistics, as well as its experimentally examined superiority as a language teaching methodology. The goal of the study was to test whether decoding cognitive insights into EFL materials and replacing them with instructional activities would facilitate second language development.

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