



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

Seyed Jalal Abdolmanafi (Rokni)

Islamic Azad University, Behshahr Branch, Iran

ABSTRACT

The most recent means to a grammar pedagogy is the focus on form approach which is a language teaching option taking into account the research on the role of attention in language development which suggests that L2 forms must be noticed in order to be learned. Focus on form attempts to optimally exploit the learner's attentional resources in order to promote noticing. A review comparing the focus on form approach to a selection of alternative teaching methodologies demonstrated that focus on form is by far the most progressive approach available to today's language teachers, because other methods do not capitalize on what is known about the role of attention in second-language grammar development. The current study testing the effects of such focus on form instruction by comparing the short-term benefits of two focus on form techniques in enhancing noticing, Grammar Consciousness-Raising and Textual Input Enhancement on the learning of relative clauses intends to emphasize the role of attention and focus on form approach in language teaching.

Key words: *focus on form, grammar consciousness-raising, textual input enhancement*

INTRODUCTION

Recently, researchers conclude that attention is necessary for language learning to take place, and also that a level of attention called noticing is crucial for learning L2 grammatical forms (Schmidt, 1990, 1994, 1995, 2001). Noticing can be characterized as detection (a cognitive function) with awareness (consciousness), and without it, no new mental representations can be formed.

Some of the first systematic studies in the attention and language learning area are those reported by Doughty and Williams (1998), who suggested that focus on form (FonF), or directing learner attention to target structures within meaning-focused contexts, allows learners to notice the forms and therefore possibly learn them due to a deliberate direction of learner



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

attention to the grammatical forms. The least obtrusive FonF methods attempt to enhance detection (without awareness), while other, more obtrusive techniques focus on promoting noticing (which includes awareness). This current study tested this claim by comparing the noticing-enhancing effects of the FonF technique Textual Input Enhancement (TIE), a less obtrusive method intended to promote detection, to an instructional treatment known as Grammar Consciousness-Raising (GCR), a more obtrusive technique which promotes detection with awareness, or noticing.

Attention

The role of attention has been extensively studied both in cognitive psychology and second language acquisition (Dulany, 1991; Reber, 1989; Schmit, 1995; Tomlin & Villa, 1994). The general consensus in SLA is that attention to a certain linguistic feature is crucial for learning to take place, and it is also accountable for the ways that learners process linguistic stimuli to which they are exposed (Gass, Svetics, and Lemelin, 2003). Only attended stimuli will be encoded in long-term memory, while unattended ones will persist in working memory briefly and then be discarded (Choi, 2005).

It is controversial how much and what type of subjective awareness or attention to an L2 form is necessary for learning to occur (Izumi, 2002; Schmidt, 1995). There are three major positions regarding this issue (Choi). First, Schmidt (1995) claims that “what learners notice in input becomes intake for learning”, here, intake is referred to as the portion of input which has been perceived and processed by learners. From Schmidt’s point of view, therefore, learning cannot take place without learners’ subjective awareness at the level of noticing which refers to a low level of awareness or conscious attention, since noticing is the necessary and sufficient condition for input to be converted into intake (1990, 1995, 2001).

On the contrary, drawing from their theoretical model of attention Tomlin and Villa (1994) proposed that conscious awareness is not necessary for learning. In their model, attention is divided into three interrelated processes; alertness – “general readiness to deal with incoming stimuli or data” (p. 190), orientation – “the specific aligning of attention on a stimulus” (p. 191), and detection – “the cognitive registration of sensory stimuli” (p. 192). They further argued that



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

learners' awareness of the target form might facilitate learning, but what is crucial for learning is the detection which does not require the learners' conscious awareness.

The third position is posed by Robinson (1995) who posits himself in the middle of the previous two propositions. He defines *noticing* as detection plus further activation which uses attentional resources allocated by a central executive processor. He also contends that learning might happen even when a learner detects the form without subjective awareness, but the amount of learning would be very limited. Rather, in order to store a stimulus into long term memory, a learner has to detect the target form, and then rehearse it in short-term memory. That is, *noticing*. Robinson also suggests including a higher level of subjective awareness, *understanding*, into the awareness research in SLA. To be more specific, understanding refers to recognition of general rules or patterns underlying input, while noticing refers to surface level of phenomena or simple recognition of certain forms or events. Thus, understanding is correlated to a higher level of learning than noticing.

Despite the controversy presented above, it is now widely agreed that focal attention to a target linguistic form is necessary for learning to take place and a higher level of subjective awareness or noticing is correlated with better learning (Rosa & O'Neill, 1999). Several recently published studies have also provided empirical evidence for the facilitative effects of subjective awareness on L2 learning (Alanen, 1995; Leow, 1997, 2000; Rosa & O'Neill, 1999).

Focus on Form (FonF)

Focus on Form has its basis in the most recent developments in neuroscience and applied research on the role of attention in second language acquisition (SLA), and it was also a reaction to the shortcomings of previous language teaching methods (McGinnis, 2007).

Following the development of the Natural Approach methods in the 1970s, the field of language teaching was waiting for an innovation that would save teachers from having to choose between explicit methods and the newer, but not completely successful, incidental methods. FonF was proposed as the solution to this dilemma. FonF attempts to capitalize on the beneficial aspects of incidental, explicit, and implicit language instruction, while avoiding the shortcomings of previous methods. It does so by relying on a wealth of new knowledge about how language learning occurs. Specifically, the role of attention in language learning is central to the FonF



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

approach, because FonF techniques are intended to create or increase detecting of L2 forms or, more obtrusively, noticing them (McGinnis, 2007). White states, “Although there is a general agreement that attention plays a key role... the level of attention that is required for L2 acquisition and the role of conscious awareness... are currently the topic of debate and empirical investigation” (White, 1998).

According to the FonF approach, detection or noticing is the key to learning. In FonF techniques with low obtrusiveness, learners can merely detect a target language form in the input and this allows them to create an initial mental representation for the item. In more obtrusive FonF methods, noticing is promoted. Noticing, because it involves detection with awareness, can allow learners with such preliminary mental representations (interlanguage rules or structures) to notice the correct grammar in the target language input, or to notice the gap between their initial mental representation of the target grammar and the target-like rule or structure (McGinnis, 2007).

Researchers Doughty and Williams are proponents of FonF as a middle ground in the debate between implicit and explicit models of language development. The language teaching approach called FonF seems to these experts to tie together many of the most beneficial aspects of both naturalistic and instructional techniques (Doughty & Williams 1998). In a FonF lesson, learner attention is directed in some unobtrusive way to the form of the content while still maintaining an emphasis on meaning, which enhances the possibility of a general concept establishment rather than a memorized example. This is accomplished by making the form more noticeable through emphasis such as tone of voice in spoken input, or varied font in written input. This enhancement of target language forms is intended to cause the item to be selected for rehearsal in short-term memory and eventual form-meaning mapping as a permanent mental representation (elaboration, in Robinson’s terms, 1995).

A FonF approach adopts a version of the weak interface position, in which different kinds of processes are somewhat related, and rejects the dual-system or no-interface model. In this way, declarative knowledge can become procedural, and implicit (memory-based) and explicit (conceptual) processes work together with natural orders to create language development, just as Robinson and Schmidt had concluded (McGinnis, 2007).

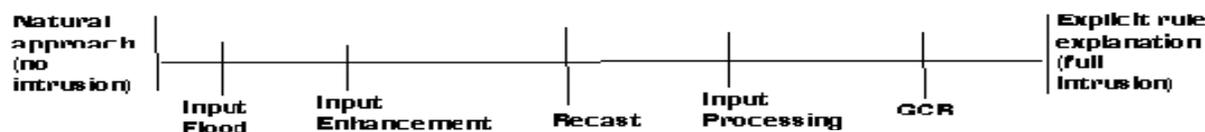


The results of study by Doughty and Williams (1998) suggest that FonF could be a solution to issues such as which aspects of language are acquirable at different developmental stages, the amount and kind of focus which should be provided, and how the complexity of different forms recommend or counter-indicate a FonF approach.

Implementing Focus on Form Treatments

When implementing a FonF approach, there are many treatments for teachers to choose from. FonF techniques can be chosen from a continuum that ranges from explicit, obtrusive techniques to unobtrusive ones. Explicit, traditional rule explanation is at one end of the continuum and represents full intrusion into the learner's attentional resources because they are directed entirely at processing for form (code-breaking). At the other end, with no intrusion, is the Natural Approach, which devotes all the learner's resources to processing for meaning (decoding). FonF techniques can occur at any point along the continuum, which would look like Figure 1.

Figure 1 *Intrusiveness Continuum* (Thibeau 2007)



FonF techniques at the less intrusive end, such as Input Flood and Input Enhancement, attempt to increase the learner's ability to detect the forms in the input, a sufficient condition for creating a preliminary interlanguage rule. Proposed by Sharwood Smith (1981, 1991), typographical (or textual) Input Enhancement (TIE) involves drawing learner attention to a particular form through bolding, italics, underlining, or enlarging of the target forms in the input. TIE is dubbed the "visual equivalent of stress and emphasis" (White, 1998) in spoken input. Another attention-directing option for language teachers is known as Grammar Consciousness-Raising (GCR) or sometimes consciousness-raising. This technique is from the other end of the explicitness continuum, one of the most obtrusive FonF techniques, and intends to provide conscious noticing of the target language grammar or the gap between the interlanguage rule and



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

the target rule. Like TIE, GCR was first proposed by Sharwood Smith (1981), and is based on ideas about the relationship between attention and language learning. Schmidt's Noticing Hypothesis is central to the idea of GCR, as the learner is provided with input and activities which are designed to create awareness of the target forms. GCR is unlike a traditional syllabus because learners are not expected to produce the forms accurately or at all before their internal syllabi have brought them to the developmental point at which their Interlanguage systems can accommodate the new structures (as cited in McGinnis, 2007).

Target structure

The target form selected for the study was relative clause (RC) which is a noun-modifying construction resulting in the generation of a higher level noun phrase. Celce-Murcia & Larsen-Freeman (1999) define a RC as "a type of complex postnominal adjectival modifier that is used in both written and spoken English" (p. 571). They further explain "RCs give a means to encode complex adjectival modifiers that are easier to produce than complex attributive structures and that are less wordy than two independent clauses" (p. 571). Therefore, a RC is formed based on the relationship of more than one sentence, where the relationship is the result of *embedding* (p. 572) or the creation of one clause within another higher-order clause.

Celce-Murcia & Larsen-Freeman (1999) present four common types of relative clause structures that relate the function of the head noun/antecedent in the main clause with the function of the relative pronoun in the adjective clause (p. 577).

- Subject-subject (SS) relatives: *The girl [who speaks Persian] is my cousin.*
- Object-subject (OS) relatives: *I know the girl [who speaks Persian].*
- Subject-object (SO) relatives: *The man [whom you met] is my teacher.*
- Object-object (OO) relatives: *I read the book [that you mentioned].*

This study tries to investigate the increase in noticing the four types of relative clauses provided by the two treatments. TIE, as the less obtrusive technique, should promote detection but not noticing. GCR, on the other hand, is a more obtrusive method and is meant to promote noticing. An unobtrusive technique such as TIE might increase their detection of the form for which they remained in pre-emergence, allowing the formation of a new interlanguage rule for



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

this form, while GCR should provide increased noticing of the gap between the interlanguage and target rules for the forms which have already emerged in L2 output.

Several major previous studies (Doughty, 1991; Alanen, 1995; DeKeyser, 1995; Robinson, 1996; Norris & Ortega, 2001) have emphasized the effect of instructed SLA, based on the finding that the more learners notice the input, the more facilitated the process of language acquisition. The general consensus regarding grammar instruction that draws learner's attention to grammatical form is that it may be useful when it is carried out within communicative and meaningful contexts. However, the optimal degree of explicitness has yet to be determined with regards to the complexity of rules and the types of grammar knowledge.

Research Questions

The major research questions addressed in the present study include:

1. Does Focus on Form technique have positive effects on learning of English relative clauses?
2. Do the types of treatments (grammar consciousness-raising and textual input enhancement) have a differential effect on learning of English relative clause?

METHOD

Participants

The participants in this study were 72 first year university students studying English as foreign language at the University of Applied Science. They were all non-majors from two intact classes (36 students in each class) who were randomly exposed to two kinds of treatments. Both males and females were involved in the study. They ranged in age from 19 to 23.

Instruments

In this study, two different tests were carried out at three different points: one pretest one day before the instruction, one posttest one day immediately after the instructional treatments. None of the questions in those two tests of pretest and posttest overlapped; this prevented the students from answering the questions from memory.

Sentence Combining Test (SCT)



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

In this test, 20 sets of two sentences which could be combined into one sentence by using one of the four basic types of relative clauses related to each type of relative clause were administered. The distribution of each type of relative clause is at random.

Grammaticality Judgment Test (GJT)

GJT in this study also compensates what sentence combination cannot do to reveal what is lacking in learners' interlanguage (Gass & Selinker, 2001). The GJT consisted of 24 sentences for each test. Out of 24 items, 12 sentences were ungrammatical, while the rest were grammatical.

Procedures

Over a period of one week in four sessions for 60 minutes, the subjects received two kinds of treatments. The first treatment was the Grammar-Consciousness Raising unit in which first, the subjects were tested to determine their level of proficiency with regard to the target form (relative clause). The pre-test provided grammaticality judgments and sentence combining tests. The pre-test indicated that the subjects were in an interlanguage stage for these forms because the subjects performed at less than target-like levels. The GCR activity involved providing the students with lists of sentences. The incorrect sentences were marked with asterisks. Subjects were asked to compare the correct and incorrect sentences, and to explain why the sentences with the asterisks were incorrect. This treatment occurred during four sessions for a one-hour class period. Immediately following the GCR activity, the students were given a post-test involving grammaticality judgments and sentence combining tests, initially meant to see if the treatment had an observable effect on accuracy. The second treatment was the Input Enhancement unit. Students received textually enhanced reading materials in which relative clauses appeared in italics in the materials.

RESULTS

Combined Scores of SCT Plus GJT

To investigate a significant difference in overall learning outcomes between the grammar consciousness raising (n=36) and input enhancement (n=36) groups, the t-tests of independent samples were conducted on the combined mean scores of the SCT and the GJT measured in three tests as displayed in Table 1.



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

Table 1 *Descriptive and Inferential Statistics on the Combined Mean Scores of the SCT and the GJT for the Experimental and Control Groups*

Tests	CR Group (n = 36)		IE Group (n = 36)		MD	Difference	
	M	SD	M	SD		T	p
Pretest	32.57	6.18	35.77	6.11	1.41	0.965	.338
Posttest	59.84	6.01	49.48	4.94	14.09	3.118	.003*

*p<.05

The major findings show that both groups significantly increased their overall learning outcomes as a result of the treatments involving the SCT and the GJT, but that the CR group had higher overall learning outcomes on both the SCT and the GJT than the IE group. These findings indicate that the CR instruction was more effective than the IE instruction. More specifically, as can be seen in Table 1, the findings indicate that there was no significant difference between the pretest scores for the two groups ($t=0.965$, $p>.05$); thus, the subjects participating in the study were initially at a similar level of competency in the target structure, relative clauses. Thus, any significant differences from the pretest to the posttest between the two groups can be attributed to the instructional treatments. Also, the results show that the mean scores in both groups significantly improved from the pretest to the posttest after all instructional treatments. However, the results display that there was a significant difference between the posttests in the GCR and TIE groups ($t=3.118$, $p<.001$). As shown in Table 1, the results indicate that the GCR group showed significantly higher scores in the posttest than the TIE group; thus, the GCR group performed significantly better on the posttest than the TIE group. As a result, these results also demonstrate that GCR treatment was more significantly effective on both the SCT and the GJT of English relative clauses than TIE treatment carried out.

To examine the overall learning outcomes of the SCT and the GJT in the GCR group, the raw scores and percentages of correct answers on the SCT and the GJT tests in the group were calculated. Subsequently, paired t-tests of dependent samples were conducted to test significant differences between the pretest and posttest on the total scores of the SCT and the GJT in the experimental group. Table 2 reports the summary of the measures and significance of the tests on the SCT ($n=720$) and the GJT ($n=864$) in the GCR group.

Table 2 *Descriptive and Inferential Statistics on Overall Scores of the SCT and the GJT for the CR Group*

Comparing	CR Group (n = 36)				Difference
	Raw Scores				



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

Tests		SCT (n=720)	GJT (n=864)	M	SD	MD	t	p
Pretest vs. Posttest	Pretest	(212) 29.44	(304) 35.19	32.32	6.18	45.81	20.261	.000*
	Posttest	(382) 53.06	(566) 65.51	59.29	4.95			

The major findings indicate that the GCR group significantly increased the overall learning outcomes from the pretest to the posttest involving the SCT and the GJT after the treatment, but the group had higher overall learning outcomes on the GJT than on the SCT in all three tests. More specifically, the findings show that there was an improvement in overall learning outcomes of relative clauses on the SCT and GJT between the pretest and posttest in the group, who improved from 29.44% to 53.06% on the SCT and from 35.19% to 65.51% on the GJT.

To investigate overall learning outcomes on the SCT (n=720) and the GJT (n=864) in the TIE group (n=36), the raw scores and percentages for the combined scores of the SCT and the GJT of correct answers on the pretest and posttest are presented. In addition, paired t-tests of dependent samples were conducted to test significant differences of the total mean scores of the SCT and the GJT on two tests in the TIE group. Table 3 summarizes the raw scores and percentages for the SCT and the GJT, and the descriptive and inferential statistics conducted between the pretest and posttest on the SCT and the GJT for the group.

Table 3 *Descriptive and Inferential Statistics on Overall Scores of the SCT and the GJT for the TIE Group*

Comparing Tests		IE Group (n = 36)					Difference	
		Raw Scores		M	SD	MD	t	p
		SCT (n=720)	GJT (n=864)					
Pretest vs. Posttest	Pretest	(239) 33.2	(320) 37.04	35.12	6.17	17.83	11.602	.000*
	Posttest	(291) 40.42	(488) 65.48	52.95	7.10			

The major findings indicate that the TIE group significantly increased the overall learning outcomes on both the SCT and GJT after all treatment, but that the TIE group had higher learning outcomes on the GJT than on the SCT in the two tests. More specifically, the findings show that an improvement of the combined scores of the SCT and the GJT occurred between the pretest and the posttest in the TIE group (from 33.2% to 40.42% on the SCT; from 37.04% to 65.48% on the GJT).

Combined SCT and GJT Gain Scores



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

Table 4 summarizes the descriptive and inferential statistics conducted to test significant differences on the combined gain scores of the SCT and the GJT in the posttest subtracted by the pretest (posttest-pretest) between the two groups. The findings show that there was a significant difference between the experimental and control groups in the posttest-pretest total gain scores ($t=7.468$, $p<.001$) on the combined SCT and GJT gain scores.

Table 4 *Descriptive and Inferential Statistics of Combined Gain Scores of the SCT and GJT for the Experimental and Control Groups*

Tests	CR Group (n = 36)		IE Group (n = 36)		MD	Difference	
	M	SD	M	SD		t	p
Posttest-Pretest	27.27	3.55	13.68	3.17	13.59	7.468	.000*

* $p<.001$

DISCUSSION & CONCLUSION

To sum it up, both groups significantly increased their overall learning outcomes on the SCT and the GJT as a result of the treatments. However, the GCR group had significantly higher overall learning outcomes on both the SCT and the GJT than the TIE group. Also, both groups consistently had higher scores on the GJT than on the SCT in the two tests. These findings demonstrate that the GCR treatment was superior to TIE one, and that all subjects were able to perform the GJT better than the SCT.

On the noticing activities provided during a four session period from each treatment, the GCR unit resulted in the highest percentages of noticing. Although the presence of too many empirical variables may have overly influenced these results, the findings suggest that these FonF treatments, in general, and GCR, in particular do have an effect on the detecting/noticing functions of attention in language learning.

This study supported the conclusion that the attentional function called noticing is related to components of successful grammar learning, and that these considerations can be utilized by language teachers using FonF to promote noticing of grammatical forms. Also, more noticing is more facilitative in SLA than less noticing. Moreover, the degree of noticing is related to improved performance of L2 learners. Considering the role of attention in the classroom, language teachers should come to know that FonF is the most desirable for maximizing learners' attentional resources by promoting noticing.



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

Furthermore, explicit FonF here GCR is more effective since it combines the benefits of implicit and explicit grammar knowledge (i.e., stability/durability and accelerative effect). Thus, in teaching/learning settings, it seems essential to couple rule presentation with meaningful context where learners can learn the target rules in both explicit and implicit learning mode.

As the optimal degree of explicitness has to be determined with regards to the complexity of rules and the types of grammar knowledge, this study concludes that in the case of relative clauses which are considered as complex rules, GCR seems to be suitable as an effective treatment for the Iranian EFL learners.

REFERENCES

- Alanen, R. (1995). Input enhancement and rule presentation in second language acquisition. In R. Schmidt (Ed.), *Attention and awareness in foreign language learning* (pp. 259-302). Honolulu, Hawai'i: University of Hawai'i.
- Celce-Murcia, M. & Larsen-Freeman, D. (1999). *The grammar book*. Boston: Heinle & Heinle.
- Choi, S. (2005). *Cognitive efficiency of animated pedagogical agents for learning English as a second language*. Unpublished doctoral dissertation, University of Southern California.
- DeKeyser, R. (1995). Learning second language grammar rules: An experiment with a miniature linguistics system. *Studies in Second Language Acquisition*, 17, 379-410.
- Doughty, C. (1991). Second language instruction does make a difference: Evidence from an empirical study of SL relativization. *Studies in Second Language Acquisition*, 13, 431-469.
- Doughty, C. & Williams, J. (1998). *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press.
- Dulany, D.E. (1991). Conscious representations and thought systems. *Advances in social cognition* (Vol. 4). R. Wuer. & T. Srull. Hillsdale, NJ, Erlbaum.
- Gass, S. & Selinker, L. (2001). *Second Language Acquisition: An Introductory Course*. New Jersey: Lawrence Erlbaum Associates.
- Gass, S., Svetics, I., & Lemelin, S. (2003). Differential effects of attention. *Language Learning*, 53(3), 497-545.
- Heo, Y. (2007). *The effects of grammar instruction with three noticing levels on ESL learners' grammar test*. MA thesis, Michigan State University.
- Izumi, S. (2002). Output, input enhancement, and the noticing hypothesis: An experimental study on ESL relativization. *Studies in Second Language Acquisition*, 24, 541-577.
- Leow, R. (1997). Attention, awareness, and foreign language behavior. *Language Learning*, 47(3), 467-505.
- Leow, R. (2000). A study of the role of awareness in foreign language behavior: Awareness versus unaware learners. *Studies in Second Language Acquisition*, 22, 557-584.
- McGinnis, A. (2007). *The role of attention in second language development: implications for language classrooms*. MA thesis, The University of Montana, Missoula, MT.
- Norris, J. & Ortega, L. (2001). Does type of instruction make a difference? Substantive findings from a meta-analysis review. *Language Learning*, 51, 157-213.



Effects of Focus on Form on the Learning of Relative Clauses in an EFL Context

1. Seyed Jalal Abdolmanafi & 2. Behshahr Branch

- Reber, A.S. (1989). Implicit learning and tacit knowledge. *Journal of Experimental Psychology, General*, 118, 219-235.
- Robinson, P. (1995). Aptitude, Awareness, and the Fundamental Similarity of Implicit and Explicit Second Language Learning. In R. Schmidt (Ed.), *Attention and Awareness in Foreign Language Learning* (pp. 303-358). Honolulu, Hawai'i: University of Hawai'i.
- Robinson, P. (1996). Learning simple and complex second language rules under implicit, incidental, rule-search, and instructed condition. *Studies in Second Language Acquisition*, 18, 27-67.
- Rosa, E. & O'Neill, M. (1999). Explicitness, intake, and the issue of awareness. *Studies in Second Language Acquisition*, 21, 511-556.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 129-158.
- Schmidt, R. (1994). Deconstructing consciousness in search of useful definitions for applied linguistics. *AILA Review*, 11, 11-26.
- Schmidt, R. (1995). Consciousness and Foreign Language Learning: a tutorial on the role of attention and awareness in learning. In R. Schmidt (Ed.), *Attention and Awareness in Foreign Language Learning* (pp. 1-64). Honolulu, Hawai'i: University of Hawai'i.
- Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3-32). New York: Cambridge University Press.
- Sharwood Smith, M. (1981). Consciousness-raising and the second language learner. *Applied Linguistics*, 2, 159-168.
- Sharwood Smith, M. (1991). Speaking to many minds: On the relevance of different types of language information for the L2 learner. *Second Language Research*, 7, 118-132.
- Thibeau, T. (2007). Model of Working Memory. Intrusiveness Continuum. Class notes.
- Tomlin, R. & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16, 183-203.
- White, J. (1998). Getting the Learners' Attention: a typographical input enhancement study. In C. Doughty & J. Williams (Eds.), *Focus on Form in Classroom Second Language Acquisition* (pp. 85-114). New York: Cambridge University Press.

Acknowledgements

I would like to thank Dr. Ramasamy, who has helped me with the development and creation of this paper as well as challenged me in my growth as a scholar.

My sincere thanks also go to the participants in my study. Their earnest and stimulating contribution injected a life into this study. I was totally inspired by their vital input.