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The Effects Of Metacognitive Strategy Training On The Students' Performance In Reading Comprehension Tests

Department: English language

School of Humanity

Tarbiat Modares University

By:

Javad Pirhadi

Supervisor:

Dr, Akbar Mir Hassani

Advisor:

Dr. Gholam Reza Kiani

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The judging board members investigated Mr. Javad Pirhadi's thesis under the title " The Effects Of Metacognitive Strategies Training On The Students' Performance In The Reading Comprehension Tests"In terms of form and content and propose it's permission to supplement the MM degree.

Judging Board members	Full name	Academic Degree	Signature
1. Supervisor:	Dr. Akbar Mir Hassani	Phd	
2. Advisor	Dr. Gholam Reza Kiani	phd	
3. Observer:	Dr. Alavi	phd	

4. Supreme Education council:

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Abstract

The present study aimed at investigating the tentative relation between the students' awareness of their metacognitive strategies and their performance on reading comprehension tests. Participants of this study were all students of military academy (Imam Ali University in Tehran). Their average age was 20 to 25 years old; they were all males and at the intermediate level. Two classes were selected as control and experimental groups; each contained 30 students. A TOEFL reading test was used in the pretest in order to homogenize the groups. Reading strategies utilized by the subjects in both groups were elicited using MARSI (Metacognitive Awareness of Reading Strategies Inventory) questionnaire. The experimental group was taught the reading strategies explicitly for 6 sessions within 6 weeks. At the end of the course, a post test including another version of TOEFL reading test was given to both groups. A t-test was conducted at the end of the study, the results of the t-test showed that there is a significant difference between the performance of the both groups on the posttest. The participants in experimental group outperformed those in control one. The results of the study highlight the importance of incorporating metacognitive strategy training in language teaching classes.

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CHAPTER ONE

Introduction

Introduction

Numerous researches in the area of teaching reading skills reflect the difficulty and multidimensionality of the reading task. The difficulty in this are may be due to such personal factors as age, personality, intelligence, family background, native language and many more. One of the factors that plays an important role is the strategies the students utilize while reading a text. These strategies fall in different categories. The present study reports on the tentative effects of strategy instruction in ESL context. It is assumed that explicit teaching of reading strategies and raising the students' metacognitive awareness of these strategies in FL may result in the students' gaining higher levels of competence organizing and manipulating their cognitive skills and come up with better results in their reading abilities.

Statement of the problem

Students' poor strategies in reading a text in FL may result in a few problems that consequently brings about their being not able to grasp the whole meaning residing in the text. This failure may be attributed to a number of factors. Among these factors are affective factors and students' lack of knowledge regarding the strategies they may have utilized subconsciously. Therefore it is assumed that students' aware ness of their metacognitive strategies may help them become more proficient readers.

Significance of the study

Research on reading development has shown that good readers use strategies that are not used by poor readers (Grabe & Stoller, 2002). Research also suggests that

students learning to read can and need to be taught how to use specific strategies for understanding a text (Grabe & Stoller, 2002). Chamot and O'Malley (1994) include strategy instruction as the "third and central component of CALLA" (Cognitive Academic Language Learning Approach), and they stress the importance of instruction in the use of explicit strategies in language development.

Readers need instruction from the teacher and guided practice if reading strategy training is to be successful. Winograd and Hare (1988) explain that the teacher needs to describe what the strategy is; why the strategy should be learned; and how, when, and where the strategy should be used.

The purpose of the study is to observe the tentative relation between students' awareness of the metacognitive strategies and reading comprehension. It is supposed that there is a direct relationship between these two variables.

Research Question

This study will try to answer this question:

Is there any relationship between the students' awareness of the metacognitive strategies they utilize and their reading comprehension scores.?

Research Hypotheses

H0 *There is no direct relationship between the students' awareness of the metacognitive strategies they utilize and their reading comprehension scores.*

Definition of Terms

Different terms and concepts have been used in the researches about strategy training and raising consciousness.

Consciousness has a host of complicated and hard to define layers. For example was stated sometimes consciousness is identified as the focal attention (Schmidt, 1990). On the other hand attention and consciousness can also be dissociated operationally:

Consiousness as Attentional operations: attentional operations include instructions to attend and disattend, effortful control of attention against competing input, and experimental manipulations of attentional selection priorities.... In contrast, our most obvious index of consciousness involves people *describing their experiences* in some verifiable way, under conditions that maximize accuracy. (Baars, 1997a, p. 364)

Consciousness as the function of information processing: However, rather than rejecting the ontological identification of consciousness with information processing, Baars goes on to identify consciousness with a slightly later stage of information processing (as does Mandler, 1997) in terms that once again have very little to do with people's descriptions of what they experience. Attention now becomes the 'gatekeeper' for the global workspace and the contents of the global workspace is equated with consciousness (Velmans, 2000). Needless to say that in our study, we do not intend to delve into the contents of the global workspace. That is why the phenomenology of consciousness and mind is ignored to prevent the probable complexities which are not of concern in language teaching context or related fields of study.

Velmans (2000) suggests that by the time perceived text or speech enters consciousness, the analysis of words in context (including both semantic and syntactic analysis) has already been achieved. If so, consciousness (of the input)

arises too late to affect the processing with which it is most closely associated. Reading and speech perception of attended-to messages are universally thought of as 'conscious process'. Yet the processes that enable reading and speech perception are, strictly speaking, *preconscious*.

On the other hand there are differences between choosing whether or not to do something and actually doing it. And in psychological literature consciousness is often thought to be necessary for carrying out voluntary acts. This is particularly true if the acts are complex or novel, or require monitoring. There are also many claims about the role of consciousness in processes that intervene between input analysis and overt behavior, for example in learning, for memory, thinking, problem-solving, reading and planning.

Metacognitive awareness: Metacognitive awareness (consciousness) on the other hand has to be given a second thought. In his 1976 article, Flavell recognized that metacognition consisted of both monitoring and regulation aspects. He defined metacognition as follows: "In any kind of cognitive transaction with the human or non-human environment, a variety of information processing activities may go on. Metacognition refers, among other things, to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in service of some concrete goal or objective." (p.232).

Metacognitive experience: According to Flavell (1979). Metacognitive experience can also be a "stream of consciousness" process in which other information, memories, or earlier experiences may be recalled as resources in the process of

solving a current-moment cognitive problem. Metacognitive experience also encompasses the affective response to tasks. Success or failure, frustration or satisfaction, and many other responses effect the moment-to-moment unfolding of a task for an individual, and may in fact determine his interest or willingness to pursue similar tasks in the future. Flavell underscored the overlapping nature of metacognitive knowledge and metacognitive experience.

Sometimes consciousness (awareness) has been considered as a state of the mind or the information processing in the brain. However, rather than rejecting the ontological identification of consciousness with information processing, Baars (1986: 9) goes on to identify consciousness with a slightly later stage of information processing (as does Mandler, 1997) in terms that once again have very little to do with people's descriptions of what they experience. Velmans (2000: 39) on the other hand emphasizes that human consciousness follow a reflexive model and goes on to suggest that the first person (the personal and subjective aspects of human experience) and third person (the scientific and objective aspects of cognition) conception of consciousness can be considered integrally. In another word he rejects the dualistic explanations about mind and brain.

think-aloud protocols: One way for teachers to know what reading strategies students are using and help them use effective strategies in their reading is to engage them in think-aloud protocols. With think-aloud protocols, students verbalize, in an interview context, how they are processing the text they are reading (Jacobson, 1998).

Limitations of the Study

As we know the mental processes and human consciousness are not prone to direct observation. That is why we can not get a full picture of human consciousness and its subgroups. In spite of the fact that many mental processes have been observed and analyzed and some valuable advancements in the field of neural networks and mental simulation, the overall function of the human consciousness is still under question. In another word it has so many aspects that function integrally and the direct investigation of some of these function doesn't provide a sufficient ground to be claimed as the consciousness. Velmans (2000) suggests that human consciousness can be analyzed from two perspectives: first person and third person. The first person aspects of consciousness is another factor which poses some limitations in the course of developing consciousness. Therefore those personal aspects of human consciousness have subjective nature and they are not applicable in the context of L2 learning. Velmans (2000) goes on to suggest that the human consciousness has reflexive nature and develops through a process of reflecting and interacting with the outside world. Then the negotiation of meaning plays a very crucial role in the process of learning.

Review of Related Literature

2.1. Conscious versus Unconscious

All knowledge is mediated by the symbol systems used by scientists. Just as there are multiple perspectives, multiple accounts of what is seen, so there are multiple truths. The symbol system or metaphor used by a particular scientific approach may help us see more clearly (McLaughlin, 1990). McLaughlin (1990) also suggests that:

the results of research *probe* but do not *prove* a theory. A theory may repeatedly survive such probing-but it may be always displaced by a new probe. In practice this means that a theory is either disconfirmed or escapes being disconfirmed. But it is never confirmed (MCLaughlin, 1990: 621).

This means in spite of the theories, which is put forward, none of them, should be considered as a leak proof theory.

2.2. Three Debates

In this part three debates that bear on the distinction between conscious and unconscious processes are dealt with.

2.2.1. The Krashen/McLaughlin Debate

McLaughlin (1990) by giving his own personal experience of learning German language, suggests:

> When I "feel" that something is wrong with *Ich habe nicht das Kind gesehen,* I also know that there is a rule about the placement of negatives. Similarly, while I have to have recourse to the rule to be sure that *Ich habe es ihm gegeben* is correct, I also have a feel that *Ich habe ihm es gegeben* is wrong. At least in my own introspection,

> it is unclear whether I am working on the basis of "rule" or "feel" (McLauhlin, 1978).

McLaughlin (1990) states: Krashen would explain this by saying that in the first case "I had unconsciously (or subconsciously) 'acquired' the rule and in the second I had consciously learned it."

This is an important question for a theory such as Krashen's , where the ultimate test of whether a process involves conscious *learning* or unconscious *acquisition* is whether the learner is working on the basis of "rule" or "feel" (McLauhlin, 1978). In his theory Krashen argues that utterances are initiated by the acquired system, with conscious learning available only as a monitor to alter the output of the acquired system. In contrast to this approach McLaughlin argues for a distinction between *controlled* and *automatic* processing (McLaughlin, Rossman, & McLeod, 1983). It is also argued that the distinction between controlled processing and automatic processing is not based on conscious versus unconscious awareness.

John Schumann (1983) in his contention that Stephen Krashen and Barry McLaughlin are employing different metaphor systems, went on to maintain that both views:

Can coexist as two different paintings of the language learning experience-as reality symbolized in two different ways. Viewers can choose between the two on an aesthetic basis, favoring the painting, which they find to be phenomenologically true to their experience.

2.2.2. The Ruber/Dulany Debate

In a number of papers, Reber et al. (1978) have argued for what they have called implicit learning. In their experiments, Reber and his colleagues examined the process whereby complex abstract knowledge of a structured stimulus domain is acquired implicitly, held tacitly, and used unconsciously to make accurate decisions about the well-formedness of novel items. (see McLaughlin, 1990: 627).

In this research, subjects were exposed to finite-state grammars made up of letter strings; subjects were found to be significantly accurate when they subsequently had an opportunity to judge the grammaticality of novel grammatical and non grammatical strings.

The subjects in these experiments were encouraged to maintain a running commentary on the reasons and justifications for their judgments. This introspective evidence convinced Reber and his colleagues that "learning occurs in the absence of explicit code breaking strategies; our subjects can not tell us very munch about what they know" (Reber & Allen, 1978: 203).

This conclusion has been challenged by Dulany, Carlson, and Dewey (1984), who questioned the degree to which the knowledge of subjects in these experiments is properly characterized as abstract and the degree to which it is truly unconsciously held. Using the same artificial grammar that Reber and his associates used, Dulany et al. replicated the finding that subjects acquire sufficient knowledge of the rules of grammar by simple observation of exemplary strings to be able to judge the grammaticality of novel strings.