

*In the Name of God, the
Most Kind and the Most
Merciful*

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Hereby we are submitting a thesis written by **Elmira Poorghafour Langhroudy** entitled “**Cognitive and Metacognitive Reading Strategies Used by Field-dependent/independent Iranian EFL learners**”. We have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirements for the Degree of Master of Arts in the field of English Language Teaching (ELT).

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Dedicated to

My Blessed Father

My Dear Mother

And

My Dear Supervisor

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ABSTRACT

Thesis Title:
Cognitive and Metacognitive Reading Strategies Used by Field-dependent/ independent Iranian EFL Learners

The current study attempted to investigate if there was a significant difference between field-dependent/independent Iranian EFL learners in terms of the use of cognitive and metacognitive reading strategies. The difference between these two groups was studied with reference to both their general reading strategy use and the strategies they used in reading a particular text they were invited to read. To this end, 62 EFL students (27 males and 35 females) who were assumed to be skilled in L2 reading were chosen from Urmia University. As a first step, Group Embedded Figures Test was employed in order to assign the participants into either field-dependent or field-independent groups. Next, they were requested to answer a self-reported reading strategies questionnaire to determine their general reading strategies utilized across various contexts. After one week's interval, a reading text was given to the participants to read first and then to answer another adapted reading strategies questionnaire to identify context specific strategies they actually used in the reading task they had just completed. The frequency of general/specific cognitive and metacognitive reading strategies employed by male and female field-dependent/independent EFL students were calculated and compared through Chi-Square statistical test using SPSS software. The results indicated that there was a significant difference between field-dependent and field-independent Iranian EFL learners in terms of using general metacognitive and specific cognitive reading strategies. Regarding the role of gender, the findings revealed that female field-dependent and female field-independent participants outperformed their male peers in both groups concerning the use of general metacognitive reading strategies.

Keywords: field-dependence, field-independence, reading strategies, general reading strategies, specific reading strategies, cognitive reading strategies, metacognitive reading strategies

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List of Abbreviations

EFL	English as a Foreign Language
ESL	English as a Second Language
FD	Field-dependent
FI	Field-independent
GEFT	Group Embedded Figures Test
L2	Second Language
MARSI	Metacognitive Awareness of Reading Strategies Inventory
SILL	Strategy Inventory of Language Learning
SPSS	Statistical Package for Social Sciences
TEFL	Teaching English as a Foreign Language

CHAPTER I: INTRODUCTION

1.1 Background

Reading has been considered as one of the most important skills that second/foreign language learners should acquire. This skill has a special connection with knowledge, maturation of thoughts, innovation, advancement, and modernization (Hamdan, Ghafar, Sihes, & Binti-Atan, 2010). Brumfit (1980) considers reading as an extremely complex activity involving a combination of perceptual, linguistic, and cognitive abilities. According to Goodman (1967), reading is a “psycholinguistic process” that starts with a linguistic surface representation encoded by a writer and ends with meaning which the reader constructs (p. 127). Flavel (1979) defines reading as a cognitive enterprise which occurs as a result of interaction among the reader, the text, and the context in which reading takes place. Goodman (1998) believes that proficient readers are efficient and effective because they are able to reconstruct the meaning by assimilation and accommodation automatically without expending so much effort. It has been claimed that the main purpose of foreign language teaching in Iranian context is reading comprehension, but Iranian EFL learners may find it very difficult to master and use this skill actively (Ghonsooly & Eghtesadee, 2006).

Many research projects on learning English as a second/foreign language (ESL/EFL) have revealed that strategy-based instruction can enhance language acquisition. In the context of second/foreign language learning, a distinction can be made between strategies that make learning more effective and strategies that enhance comprehension. The former is generally referred to as *learning strategies* and the latter is called *reading strategies* (Singhal, 2001). Oxford and Crookal (1989) define learning strategies as learning techniques, behaviors, or study skills which make learning more efficient. Furthermore, comprehension or reading strategies are concerned with how readers conceive of a task, how they make sense of what they read, and what they do when they do not understand a text (Singhal, 2001). According to Oxford (1990a),

language learning strategies are “actions taken by learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to other situations” (p. 8). In other words, learning strategies are the specific attacks that learners employ when faced with a problem (Brown, 1994). Oxford (1990a) classifies learning strategies into memory, cognitive, metacognitive, compensation, affective, and social strategies.

O’Malley and Chamot (1990) distinguish between cognitive and metacognitive learning strategies. The term metacognitive was first coined by Flavell in the mid-1970s (Karbalaee, 2010). Anderson (2002) defines metacognition as “thinking about thinking” (p. 23). Metacognitive awareness is knowledge of the learners about themselves, the task they face, and the strategies they employ (Baker & Brown, 1994). In fact, metacognition is the ability in which the learner can stand back and observe herself/himself applying the knowledge (Tei & Stewart, 1985). Metacognition includes three aspects: Declarative knowledge, such as knowing what the strategy is; procedural knowledge, such as knowing how the strategy works; and conditional knowledge, such as being aware of why the strategy is used (Paris, Cross, & Lipson, 1984). On the other hand, cognitive learning strategies are seen as a set of mental processing that are concerned directly with processing of information in order to store, retrieve, or use information (Williams & Burden, 1997). In other words, these strategies are directly involved in learning. Cognitive strategies are task-specific and they manipulate learning material directly (Brown, 1994).

Najar (as cited in Fazilatfar, 2010) asserts that cognitive and metacognitive learning strategies provide the learner with a framework for independent efforts and learners can apply well-established learning strategies across content and skill areas such as reading, writing, listening, and speaking. More specifically, reading strategies are regarded as the comprehension processes that readers use to make sense of reading texts. Some of these strategies may be more useful than others regarding different types of reading texts and tasks (Brantmeier, 2002). These strategies are used by the readers deliberately and consciously in order to help them decide what clues they use, and what actions they take when they have difficulty in understanding a text (Block, 1986; Johnston, 1983).

Similar to learning strategies, reading strategies consist of two major categories: cognitive and metacognitive reading strategies. Cognitive reading strategies involve direct manipulation of the reading materials. For example, the readers employ strategies such as using background knowledge, predicting the content of the text, getting the gist of the text, skimming, and scanning (Oxford, 1990a). Metacognitive reading strategies involve thinking about the reading process, planning for reading, monitoring comprehension while reading, overseeing, supervising, regulating, evaluating the reading process and the effectiveness of strategies used in reading (O'Malley & Chamot, 1990; Wenden, 1991).

It has been claimed that almost all of the reading strategies are influenced by a variety of factors such as age, gender, attitudes, motivation, setting, learners' language proficiency level, learning styles, and cognitive styles (Ghonsooly & Eghtesadee, 2006). In general, Ehrman, Leaver, and Oxford (2003) classify learner differences that may be influential in second language learning under the three main areas: (1) Learning/cognitive styles; (2) Learning strategies; and (3) affective variables. They indicate that learning styles and learning strategies are closely related to each other. Learning styles are made manifest through learning strategies which are overt learning behaviors or actions

In the studies on individual differences and language learning, the terms learning style, cognitive style, personality type, and sensory preferences are often used interchangeably (Ehrman, Leaver, & Oxford, 2003). Keefe (1979) defines cognitive styles as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment. According to Ellis (1990), cognitive style is "a term used to describe the manner in which people receive, conceptualize, organize, and recall information" (p. 114). Each individual is assumed to possess more or less constant cognitive style. There are many different cognitive styles and most of them have an influence on language learning, one of the most important of which is field-dependence and field-independence (FD/FI) cognitive style which has attracted researchers' attention (Chappelle, 1995).

Summerville (1999) refers to field-dependence/independence cognitive style as "the degree to which an individual's processing of information is affected by the contextual field" (p. 3). According to Salmani-Nodoushan (2007), field-dependence is a cognitive style in which an individual tends to look at the whole of the learning task that contains many items. On the contrary, field-independence refers to a cognitive style in which an individual is able to identify or focus on particular items and is not distracted by other items in the background or context (Brown, 2000).

In this respect, the present study aimed to explore the role of field-dependence/independence cognitive style in utilizing (general/specific) cognitive and metacognitive reading strategies by male and female Iranian EFL learners.

1.2 Statement of the problem

It has been claimed that reading is not a linear process but one in which readers constantly make predictions, test hypotheses, and use their knowledge of the world and of the language to make sense of a text (Goodman, 1985; Smith, 1982). Reading comprehension has been regarded as an important language skill and EFL/ESL learners are required to master it in order to enhance their overall language knowledge and proficiency. This skill may have even greater significance for Iranian EFL university students since they are learning English in their own country where it is not used as a tool of oral communication. Therefore, they are likely to gain a great deal of their knowledge through reading written English materials.

In most reading contexts, second or foreign language readers are likely to encounter unfamiliar words, syntactic structures or topics that require them to evaluate and examine alternative sources consciously or to use contextual clues intentionally (Phakiti, 2006). As already mentioned, there are specific kinds of reading strategies that can help L2 learners enhance their understanding of written texts. Alfasi (2004) emphasizes that students should use the strategies such as understanding the meaning of the text, evaluating the message critically, remembering the content, and applying the new knowledge flexibly. Using reading strategies may help non-native L2 readers overcome language deficiency and achieve better reading comprehension

(Zhang, 2008). These reading strategies including cognitive and metacognitive strategies are influenced by a variety of individual differences such as age, gender, motivation, attitudes, level of language proficiency, learning styles, and cognitive styles. In other words, different individuals are engaged in reading comprehension activities in different ways depending on their specific personal characteristics and learning/cognitive styles. For instance, one student may employ strategies such as previewing a text first and then reading its important parts selectively, guessing the meaning of unknown words from the context, trying to get the gist of the passages, while other students may tend to read the text from the beginning to the end without selecting its important parts, paying more attention to the details, or even others may use a dictionary to understand every unfamiliar word.

Moreover, specific reading tasks and contexts may require L2 readers to employ various reading strategies. Therefore, there might be a difference between EFL learners' general (cognitive and metacognitive) reading strategies which are used over a variety of contexts and reading tasks and strategies that they actually employ while reading a particular text. It has been claimed that this difference is due to the psychology of learners' strategy competence (Phakiti, 2003a).

Assessing language learning strategy use through the questionnaire which usually asks students to report on their general use of language learning strategies has become commonplace around the world (Sotoudehnama & Azimfar, 2011). Usually, researchers on language learning strategies (e.g., Ehrman & Oxford, 1989, 1990; Oxford & Nyikos, 1989; Green & Oxford, 1995) have used the self-report Strategy Inventory for Language Learning (SILL) as a kind of questionnaire that asks about the general strategies used by L2 learners without having them do any L2 task. According to Oxford, Cho, Leung, and Kim (2004), although general learning strategy questionnaire will remain important, task-based strategy assessment may have an increasing role in a way that it examines specific strategy use, when the students do a particular L2 task. They maintain that when a specific task is included in second language strategy assessment, the respondents focus on the strategies they use while doing a particular task; therefore, the task may influence their reporting of strategies. In other words, the presence of a specific task may make the participants answer the reading strategy questionnaire more consciously.

While almost all research studies have investigated whether there is a significant difference between field-dependent/independent EFL learners in using general (cognitive and metacognitive) reading strategies, this research attempted to study field-dependent and field-independent Iranian EFL learners' general as well as specific cognitive and metacognitive reading strategies. That is first, the participants were asked about their general cognitive and metacognitive reading strategy use. Then, in order to determine their specific cognitive and metacognitive reading strategies they were requested to answer another adapted reading strategy questionnaire with reference to the reading text that they had just read. In other words, this study attempted to focus on this new aspect of strategy research not tackled in previous investigations.

Additionally, in spite of numerous studies concerning whether there is a significant difference between field-dependent and field-independent EFL learners in using reading strategies, the role of gender in general/specific cognitive and metacognitive reading strategies used by these two groups has rarely been studied. In the present study, the role of the gender as a moderator variable was also examined.

Therefore, this study attempted to investigate the role of FD/FI cognitive style in the use of general/specific (cognitive and metacognitive) reading strategies by male and female Iranian EFL learners in both conditions of the absence and the presence of a particular reading task.

1.3 Significance of the study

Within the field of education during the last two decades, a gradual but significant shift has taken place resulting in less focus on teachers and greater emphasis on learners and learning process (Nunan, 1988). One consequence of this shift was an increasing awareness and interest in learning strategies in foreign and second language teaching and learning (Sotoudehnama & Azimfar, 2011). Researchers such as Oxford (1990a), Cohen (1987), and O'Malley and Chamot (1990) have stressed that effective learners use a variety of different strategies and techniques in order to solve problems they face while understanding or producing the language. Chamot and Kupper (1989) indicate that the use of language learning strategies is somehow inevitable; what differs among the learners is the frequency and variety of their use which depend on a number of

variables such as age, sex, attitudes, motivation, setting, language proficiency level, and cognitive styles.

Kang (1999) believes that students can enhance their learning power by being aware of style areas in which they feel comfortable and by working on these areas they can foster their intellectual growth. He also states that teachers should identify strong style pattern in their classes and devise lesson plans which accommodate individual learning style preferences. According to Chamot (2004), learning strategies can be taught effectively to second or foreign language learners. Unskilled L2 readers can become skilled readers if they are given instruction in effective strategies and if they are taught to monitor and check their comprehension while reading.

Thus, it is essential for Iranian EFL learners to be aware of their own dominant cognitive style (e.g., field-dependence and field-independence) as well as their use of cognitive and metacognitive reading strategies which are general and context-free; also, it can be useful for them to be familiar with their task-specific reading strategies. It is well worth noting that this kind of knowledge is likely to enhance EFL learners' autonomy in reading comprehension.

Since cognitive and metacognitive reading strategies can be instructed, by understanding which categories are not used enough by field-dependents and field-independents, there would be an opportunity for teachers to teach those strategies to target type of students in an attempt to maximize their efficiency in reading.

1.4 Research questions and hypotheses

This study aimed at finding answers to the following questions:

- 1) Is there any significant difference between FD/FI Iranian EFL learners with reference to the use of general cognitive reading strategies?

Sub-questions:

- a) Which general cognitive strategy is used most frequently by FD Iranian EFL learners?
- b) Which general cognitive strategy is used most frequently by FI Iranian EFL learners?

- 2) Is there any significant difference between FD/FI Iranian EFL learners with reference to the use of general metacognitive reading strategies?

Sub-questions:

- a) Which general metacognitive strategy is used most frequently by FD Iranian EFL learners?
- b) Which general metacognitive strategy is used most frequently by FI Iranian EFL learners?

- 3) Is there any significant difference between FD/FI Iranian EFL learners in terms of the use of specific cognitive reading strategies?

Sub-questions:

- a) Which specific cognitive strategy is used most frequently by FD Iranian EFL learners?
- b) Which specific cognitive strategy is used most frequently by FI Iranian EFL learners?

- 4) Is there any significant difference between FD/FI Iranian EFL learners in terms of the use of specific metacognitive reading strategies?

Sub-questions:

- a) Which specific metacognitive strategy is used most frequently by FD Iranian EFL learners?
- b) Which specific metacognitive strategy is used most frequently by FI Iranian EFL learners?

- 5) Is there any significant difference between male and female FD Iranian EFL learners in terms of the use of general cognitive reading strategies?

Sub-questions:

- a) Which general cognitive strategy is used most frequently by male FD Iranian EFL learners?
- b) Which general cognitive strategy is used most frequently by female FD Iranian EFL learners?