Chapter 2: Literature Review

2.1. Introduction

Scholars have indicated the importance of the reading in second language acquisition (e.g. Johnson, 1982; Wallace, 1992). Reading is the main goal of language learning and teaching in high schools in Iran. Reading comprehension consists of the main section of the English textbooks in high schools in high schools in Iran (Birjandi, Soheili, Nowroozi, & Mahmoodi, 2000; Birjandi, Nowroozi, & Mahmoodi, 2002a; Birjandi, Nowroozi, & Mahmoodi, 2002b). Barnett (1988) says that reading is considered as cognitive process, readers' active engagement in the construction of the meaning, and use of strategies.

The readers can construct the meaning from the text actively by using strategies. Guthrie and Wigfield (1999) state in order for learners to construct meaning from the text, they need to attend to the cognitive processing. This focus on readers' active engagement in constructing meaning requires strategies. In relation to this, the present study intends to examine the use of strategies in reading by surveying cognitive and metacognitive reading strategies of Iranian EFL learners.

Even though some studies were involved in classifying reading strategies, the present study aims to investigate them in relation to the Iranian certain context of learning with respect to cognitive and metacognitive strategies suggested by O'Malley and Chamot (1990), because they are based on cognitive learning theory.

2.2. Distinction between Cognitive and Metacognitive Reading Strategies

Metacognitive strategies are used in different language activities, but cognitive strategies have a restrictive use in certain activities (e.g. Chamot, 2005; O'Malley & Chamot, 1990; Oxford, 1990). Moreover, Chamot and O'Malley (1994) state that cognitive strategies are involved directly in fulfilling reading tasks, metacognitive strategies are involve indirectly in achieving reading tasks through cognitive strategies. In relation to this definition of cognitive and metacognitive strategies, the present study used both cognitive and metacognitive strategies.

As revealed by Pedhazur and Schmelkin (1991), ""strategies may have dissimilar understandings in various contexts" (p. 53). Therefore, exploratory factor analysis was conducted to see which strategy items are classified in this study in the EFL context.

Although learners have their own language experiences, they need to be instructed to employ strategies effectively to enhance language learning (Cohen, 1998; O'Malley & Chamot, 1995). In relation to this issue, the present study aims to examine the impacts of cognitive and metacognitive reading instruction on reading comprehension.

2.3. Learning Strategies and Different Models

The aim of this part is to shed light on psychological, sociocultural, and social cognitive models. Psychological model focuses on the individual, whereas, sociocultural model focuses on the group. Psychological model describes learning strategies as certain procedures that that learners employ consciously to enhance their language learning. Such learning strategies

pave the way for the internalization of the language units and contribute to independent behavior in language learning (Oxford, 1999). O'Malley and Chamot (1990) advocated this model which is based on cognitive processing and consists of three strategy classification, that is, metacognitive, cognitive, and socio-affective strategies. They were based on Aderson's (1985) cognitive theory. Chamot and O'Malley (1994) said that learners need to practice learning strategies at declarative knowledge to move towards the stage of automatic use of them which is at procedural stage. Chamot and O'Malley (1994) constructed the *Cognitive Academic Language Learning Approach* (CALLA) to teach learning strategies at declarative knowledge to change them into automatic or procedural knowledge. The present study intends to investigate reading strategies with respect to cognitive and metacognitive strategies suggested by O'Malley and Chamot (1990) which is based on cognitive learning model that can defined as the direction from declarative knowledge towards procedural knowledge due to strategy instruction.

A sociocultural model defines learning strategies as the movement from social context to the individual to achieve their aim (Oxford, 1999). This model is based on Vygotsky's (1979) dialogic model which proposed that learning is based on dialogues between a more knowledgeable person such as a teacher or more capable peer. The more capable person aids the learner to change the zone of proximal development, the area that is changed through the help of a more capable person and does not need the help of a more knowledgeable person when there is no need for it (Kozulin et al. 2003). The present study focused on this model, since there were dialogues between the researcher as more knowledgeable person and the learners in the process of teaching strategies to the learners.

Social cognitive model views learning strategies in terms of individual aspect and is based on self-efficacy which is the learners' attitude about his or her ability to do activities Bandura's (1986, 1977). The higher the self-efficacy levels learners have, the more strategies they use (Zimmerman & Pons, 1986; Zimmerman, 1990). The present study used this modal to investigate the impact of strategy training on self-efficacy levels.

2.4. Culture and Language Learning Strategies

One of the factors that determine strategy use is the learners' cultural setting. A number o studies were conducted to examine the impact of cultural variations on strategy use. A study was carried out by Upton and Lee-Thompson (2001) suggests that L1 culture has had an impact on their comprehension of the texts. Further they indicated that learners use their L1 thinking process in the L2 reading comprehension. In other words, they use L1 to manage their L1 comprehension process. Moreover, on the transfer of strategies between different sociocultural backgrounds, LoCastro (1994) stated that strategies are not transferred between them, since learners who were taught in terms of two different methods, grammar-translation method and communicative approach utilized different strategies. As Oxford and Burry-Stock (1995) argued that further research needs to be conducted to investigate how different cultural settings and different contexts of learning affect strategy use. Therefore, with regard to these issues, there is a need to conduct a research on the impact of Iranian context of learning on strategy use.

2.5. Gender and Learning Strategies

2.5.1. Gender and Overall Learning Strategies

Although some studies argued that there are differences between males and females in learning strategy use (Green & Oxford, 1995; Oxford & Nyikos, 1989; Oxford, Park-oh, Ito & Sumrall, 1993; Sheorey & Mokhtari, 200 ; Wharton, 2000), others found no dissimilarities between them (Vandergrift, 1997). Some studies which indicated the differences between males and females with respect to strategy use are discussed below. Wharton (2000) found that males employed strategies more frequently than females, consisting of 677 university students in Singapore. In another study, On the other hand, Oxford, Park-oh, Ito and Sumrall (1993) reported that females employed strategies more than males, consisting of EFL learners in Korea. Similarly, Dreyer and Oxford (1996) found that females used social and metacognitive strategies more than males involving 179 females and 127 males in a researchin South Africa. Peacock and Ho (2003) also reported that females utilized all six categories in the SILL more than females, using 1005 Chinese EFL learners. Additionally, Nisbet, Tindall and Arroyo (2005) argued that the differences between males and females in strategy use are related to the impacts of their certain cultural settings. In contrast to the previous studies, there are some studies that showed no dissimilarities between males and females in strategy use. One study was done by Abu Shmais (2003) found that there was not any dissimilarities between males and females in using strategies, employing the SILL. In another study, Szoke and Sheorey (2002) found that males' use of strategy was not different from females' strategy use, employing the SILL. Hashim and Sahil (1994) also reported that femals' strategy use were not dissimilar from males' strategy use except for affective

strategies that females employed them more frequently than females. Furthermore, Nisbet et al. (2005) claimed that males' strategy use was not dissimilar from females' strategy use in the Chinese context. Griffiths (2003) also reported the same findings that no dissimilarities were between males and females in using strategies. However, since the results of the studies investigating female and male differences in strategy use were not consistent, we can not generalize the results. These dissimilarities in strategy use between males and females require more research.

2.5.2. Differences in Strategy between Males and Females in Relation to the Type of Strategy

In contrast to the previous studies discussed in section 2.4.1, there are other studies which showed that dissimilarities between males and females in strategy use were not related to general differences between them, but the way and how they use them. One study done by Phakiti (2003) found that between cognitive ad metacognitive strategies, males employed metacognitve strategies more frequently than females. In another similar study, Sheorey and Mokhtari (2001) said that among different strategies, females utilized one strategy that is, underlying information in the text more frequently than males. Poole (2005) also claimed that among global reading strategies, problem-solving strategy, support-oriented strategy, females employed support-oriented strategy more frequently than global and problem-solving strategy. In relation to using strategies actually in real-life conditions, Oxford (1996) found that, even though males and females were different from each other in strategy use, it is not the case in actual situations. The results of research related to gender differences in strategy use are consistent, one reason for his inconsistency is explained by Nisbet et al. (2005) that

the inconsistent results about gender differences in strategy use is the cause the impacts of certain contexts of learning, thus further research in needed to address this issue in an Iranian EFL context of learning.

2.6. Language Learning Strategy Use and Language Proficiency

Some studies indicated that there is a positive relationship between strategy use and language proficiency are discussed below. Some studies show that more proficient language learners employ language learning strategies more frequently than low-proficient learners (Bruen, 2001; Chamot & El-Dinary, 1999; O'Malley & Chamot, 1990; Wharton, 2000). One study done by Oxford and Burry-Stock (1995) found that high-proficient learners employed strategies more frequently than less-proficient learners using the SILL as the strategy instrument. Language proficiency is positively related to strategy use. In another study, Park (1997) showed that there was a significant positive relationship between English language proficiency and strategy use employing the SILL as strategy measurement and TOFEL as proficiency measurement with Korean EFL learners. Al Melhi (2000) also indicated that there are dissimilarities between more skilled and less skilled readers in using actual and perceived reading strategies. All of the studies above reveal that language proficiency is positively related to strategy use. However there are other studies that show no positive relationship between language proficiency and strategy use. Among these studies, Oxford and Ehrman's (1995) found that there is no positive relationship between strategy use and language proficiency using the SLL as strategy instrument and self-rating as proficiency measurement. In another research, Mullin (1992) found that few significant relationships

existed between language proficiency and strategy use involving the SILL as strategy instrument and entrance exam and test of placement as proficiency measurement. Further, Nisbet et al. (2005) revealed that there is no relationship between language proficiency and strategy use except for metacognitive strategies using the SILL as strategy assessment and TOFEL as proficiency assessment. One justification for this weak correlation is related to the kind of language proficiency measurement. For instance TOFEL test does not assess learners' communicative competence. Thus, there will be positive correlation between strategies and language proficiency when communicative aspects of proficiency are designed (Nisbet et al. 2005). Further, Rees-Miller (1993) argued that there was no real evidence of relationship between language proficiency and strategy use. This inconsistency of the relationship between language proficiency and strategy use is related to the type of strategy measurement, using frequency for strategy assessment which is limited, other aspects, such as cultural context need to be addressed with respect to strategy use (Cohen, 1998; Gu, 2002). Thus, further research is needed to investigate the Iranian cultural context of learning with respect to strategies.

2.6.1. Differences in Strategy use with different proficiency levels in relation to the Type of Strategy

Some studies merely investigated the general differences between high-proficient learners and less-proficient learners. However, others investigated different types of strategies, the way they use them and how they utilise them. Most of the studies show that high proficient learners employed global reading strategies, but less-proficient learners used local reading strategies. For instance, Carrell (1989) said that high-proficient learners employed more

global strategies and utilized them more effectively. However, she indicated that less-proficient learners utilized higher local strategies. Block (1992) found that high-proficient learners used meaning-based strategies; on the other hand, less-proficient learners identified vocabulary difficulties and did not focus on the meaning of the text as a whole. Good readers are familiarized with using strategies efficiently and construct meaning out of the text, but poor readers read the text word by word (Lau & Chan, 2003). Macaro (2001) also proposed that low=proficient learners' behavior needs to be investigated to find out how they employ strategies and why they use them in this way. Thus, there in a need for further research on how less–proficient learners use strategies in and Iranian EFL context.

The criteria for differentiating high-proficient learners and low-proficient learners are based on the Nelson general language proficiency test. In the present study, Nelson General Language Proficiency test was used to assess the learners' general language proficiency level, in other words, in order to see the choice if reading strategies is not affected by their general proficiency level.

2.7. Differences in Strategy Use with Different Proficiency Levels in Relation to Cognitive and Metacognitive Strategies

It has been reported high-proficient learners utilize more strategies and manages them more effectively to improve the text comprehension the comprehension of text (Alderson, 2000; Young, 2002). By contrast, low-proficient learners do not know how to manage their strategies and they are not good at employing metacognitive strategies (Alderson, 2000). A number of studies have also suggested that low-proficient learners have difficulties utilizing metacognitive strategies. One study carried out by Zhang (2001) indicated that high-

proficient learners are more conscious of their strategies in comparison to low-proficient learners.

In another study, Yin and Agnes (2001) proposed that good readers employed more metacognitive strategies since they are more conscious of them. Phakiti (2003) also suggested that successful test-takers employed metacogniive strategies more frequently than cognitive strategies. Similarly, Vandergrift (1999) suggested that successful learners were better at employing metacognitive strategies. Further, Young (2002) reported using monitoring strategies by more proficient readers more than less-proficient readers employing think-aloud protocols as data collection instrument.

From the previous studies, we can conclude that high-proficient learners reported utilizing metacognitve strategies more frequently than cognitive strategies. It is explained by Winne's (1995) arguments that high-proficient learners are involved in management of their learning process, thus they have more resources for their cognitive process, however, less-proficient learners are not involved in controlling their learning process, thus they do not have enough resources for their cognition process and use less metacognitive processing. These studies show that metacognitive strategies need to be used in L2 classes to pave the way for the learning management.

2.8. Reading Strategy Training

2.8.1. Reading Strategy Training Research

A number of studies have suggested the impact of strategy training on reading comprehension. One study examined the impact of strategy training on reading comprehension using experimental design for high and low proficient learners. The results show that strategy training had a positive impact on merely high-proficient learners by increasing their frequency of strategy use (Ikeda & Takeuchi, 2003, cited in Chamot, 2005).. Further, Muniz-Swicegood (1994) revealed that strategy training caused the learners to transfer cognitive and metacognitive strategies from first language to second language; also strategy training increased their language performance. Similarly, Salataci & Akyel (2002) suggested that strategy training had a positive impact on learners' strategy use and reading performance. Moreover, Johnsen-Glenberg (2000) showed that experimental group performed better than control group in strategy use employing experimental design and effect sizes in their study. Further, Dreyer and Nel (2003) utilized both cognitive and metacognitive strategy in strategy training through experimental design found that learners in experimental group gained higher comprehension scores and reading strategies than control group.

However, all researchers do not support strategy training in language learning. For instance, Kellerman (1991) disagreed with strategy training and argues that learners had already improved their strategies in first language and were able to transfer them to second language. Thus, further research is needed to examine the impacts of strategy training on transfer of strategies between languages, particularly in an Iranian EFL context.

Furthermore, Grabe (2004) claims that there is a need to develop readers' strategies, since strategies cause the readers to control and manage their comprehension of the text. In relation to this issue, there is a dearth of experimental research on the impacts of strategy training on reading comprehension at intermediate level in the Iranian EFL context. Additionally, Chamot (1994) suggest that strategy training is more appropriate for average proficient learners rather than low or high proficient learners. Thus intermediate proficient learners were chosen for this study.

2.8.2. Language Learning Strategy Training Models

Researchers have suggested a number of models for strategy training (e.g. Chamot et al., 1999; Cohen, 1998; O'Malley & Chamot, 1990; Oxford, 1990). These models proposed modeling the strategies by the teacher. Some researchers have suggested teaching strategies explicitly in the classroom (Chamot, 2005; Chamot et al., 1999; Cohen, 1998, 2003; Oxford & Leaver, 1996; O'Malley & Chamot, 1990). The experimental group I this study were taught strategies using CALLA model that is based on explicit strategy traning which is shown in Table 3.4.

Table 2.1 The CALLA model (Chamot, 2005; Chamot et al., 1999)

Preparation	**Presentation**	**Practice**	**Self-evaluation**	**Expansion**	**Assessment**
Teacher focuses on the previous learning strategies.	Teacher presents strategy training by modeling.	Students practice using strategies.	Teachers have students self-evaluate.	Students try to transfer strategies to other activities and other contexts. .	Teacher assesses the impact of strategy training on strategy use and achievement students' use of strategies and impact on performance.

2.9. Self-efficacy

2.9.1. Introduction

According to Bandura (1986), self-efficacy refers to "people's beliefs about their ability to realize and manage some activities to have better performance" (p. 391). Those students who have higher self-efficacy, use more strategies (Zimmerman, 1990; Zimmerman & Pons, 1986). In other words, those who employ strategies have a positive attitude about their abilities. The attitudes that learners can use strategies contribute to higher self-efficacy (Zimmerman, 1990). Further, there are a number of studies that show that there is a positive relationship netween learning strategies and self-efficacy (e.g., Zimmerman & Martinez-Pons, 1990). Further, Pintrich and De Groot (1990) proposed that learners who have higher self-efficacy use cognitive and management strategies more frequently. Ehrlich, Kurtz-Costes, and Loridant (1993) also reported that learners not only need to improve the metacognitive strategies, but also higher self-efficacy paves the way for their use of strategies

(Chamot, Barnhardt, El-Dinary, Carbonaro, Robbins, 1993; Chamot, Robbins, & El-Dinary, 1993). In relation to these points, further research needs to be conducted in certain cultural contexts to see how strategy training affects self-efficacy, particularly in an Iranian EFL context. In addition, Pereira-Laird and Deane (1997) propose that cognitive and metcognitive strategies determine learners' success and the use of strategy is positively related to self-efficacy. However, Powers (1991) suggested that self-efficacy is not positively concerned with performance; it prevents learners from trying hard to achieve higher performance, since Bandura and Jourden (1991) did not find a positive relationship self-efficacy and achievement due to complacency among the learners. It seems that the learners count too much on self-efficacy which leads to their complacency. Further, Vancouver, Thompson, and Williams (2001) claimed that the satisfaction from self-efficacy might influence learners struggle for higher performance. With respect to these points, self-efficacy would not be the only factor for higher performance. Cognitive processing, including cognitive and metacognitive strategies need to be accompanied by self-efficacy in fulfilling the goals in learning (Linnenbrink & Pintrich, 2003).

2.9.2. Strategy Instruction and Self-efficacy

Schunk (2003) proposed that strategy training enhances learners' self-efficacy since strategies facilitates the learning process. Further, Schunk and Rice (1991) indicated that strategy training improved learners' level of self-efficacy and reading performance. However, there is a moot point to see whether explicit strategy training improves learners' self-efficacy in an Iranian EFL context.

2.10. Transfer of Strategies to New Tasks and Other Foreign Languages

There exists a dearth of research to provide further evidence of transfer of strategies (Harris, 2004). As Pressley et al. (1989) proposed, the learner can transfer strategies to new contexts when the learners are conscious of strategies. Further, Wenden's (1999) research shows that metacognitive aspect of learning paves the way for transfer of strategies. In addition, Chamot (2001) suggested that strategis can be transferred either from L1 to L2 or from L2 to L1. However, Kellerman (1991) claimed that learners can transfer strategies from their L1 withot conscious efforts. Rees-Miller (1993) also suggested that strategies could not be transferred since the teachers can not show real examples of transfer of strategies and they could not see the learners' real performance.

2.10.1. Language Proficiency and Transfer of Strategies

Jemenez et al. (1996) revealed that good readers have strategy awareness in comparison to poor readers. Thus, good readers could transfer strategies from L1 to L2. However, Hardin (2001) indicated that language proficiency did not have an impact on transfer of strategies. Several other studies have shown that good readers manage their strategies when they intend to read texts (e.g. Zhang, 2001).

2.10.2. Strategy Instruction and Transfer of Strategies

Research shows that teachers can increase learners' strategy consciousness by teaching strategies (Cohen, 1998). The main aim of teaching strategies is to increase learners strategy consciousness (Nunan, 1996). Further, Harris (2004) revealed that high-proficient learners employed more metacognitive strategies which contributed to increase in transfer of strategies, whereas, low-proficient learners utilized less metacognitive strategy and did not transfer strategies. Therefore, the present study intends to address this research gap by teaching strategies to EFL learners to see that whether it will increase their strategy awareness and increase the strategy transfer accordingly.

The following are the limitations of previous studies

1. Non-random sampling was not used in some of the previous studies, so they have generalizability problems.
2. Some of the previous studies did not use triangulation in data collection.
3. Some of the previous studies focused on the classification of strategies and did not use experimental designs.
4. Some of the previous studies did not control participants' general English proficiency.
5. Few studies examined the effect of explicit strategy training on self-efficacy and transfer of strategies.

In view of these limitations this study was conducted to address them as explained in Chapter 2.

2.11. Summary

Although it is suggested that the classification of learning strategies are helpful, certain cultural settings would have an impact on strategy use. Thus it needs to be addressed in strategy research, particularly in an Iranian EFL context. The present studies focused on finding out general patterns of strategy use. However, the present study intends to investigate the ways and how learners use strategies, what types of strategies they use and why they use certain strategies. In relation to these points, mixed-method approach using both a questionnaire and think-aloud protocols will be used in the present study. This study aims to investigate the impact of strategy training on learners' reading comprehension, self-efficacy, and transfer of strategies in an Iranian EFL context using an experimental design.