The Difference between Field-dependent versus Field-independent EFL Teachers’ Teaching Strategies

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Abstract: The present study aimed at finding whether EFL teachers with different cognitive styles of field dependency/independency are significantly different in terms of their application of teaching strategies. To fulfill the purpose of this study, 100 female teachers were non-randomly selected from a total number of 137 through their performance on Group Embedded Figures Test (GEFT) and the results were used to choose a sample of field-dependent and independent teachers. Based on the results of GEFT, EFL teachers were divided into two groups each consisting of 50 participants. A systematic classroom observation was conducted. To this end, an experienced supervisor participated in the process of two 90-minute session observations of each teacher's classes. Afterwards, the teachers were asked to fill out the second questionnaire i.e. Strategy Inventory for Language Teaching Strategies (SILT). Then, the researcher used independent-samples t-tests to find any significant difference in teaching strategies used by the two groups of learners. Based upon the analyses it was found that in cognitive and compensation strategy use there were no significant differences between FD and FI groups. However, they were significantly different in memory, metacognitive, social, affective and total strategy scores. It was concluded that cognitive style may be a source of difference in the way teachers choose strategies of teaching.

Keywords: Cognitive style, Field dependent/independent teachers.

Introduction

Language learning and teaching has two inseparable stakeholders namely the teacher and learner who can affect the field in different ways. According to Vieira and Gaspar (2013), teachers have a significant impact on educational effectiveness and learners’ achievement. As Brown (2000) asserts, knowing how language is learned will lead to effective teaching. Also, Weinstein and Mayer (2001), suggest that successful teaching includes two types of instructional goals. The first goal is concerned with the learning outcome, and the second one is based on the learning processes, which emphasizes the strategies that learners use in learning.

Strategies for language learning and language use have been receiving ever-growing attention in the areas of foreign language teaching and learning (Oxford 1990, Cohen 1990,

Oxford (1990) has put strategies under two primary categories: namely, direct strategies (memory, cognitive and compensation) which are learning strategies that require mental processing of language directly involve the target language; and indirect strategies (metacognitive, affective and social), which are learning strategies that support and manage learning without directly involving the target language. According to Oxford (1990) “The metacognitive strategies help learners to regulate their learning. In fact, in Oxford’s system, metacognitive strategies enable learners to take control of their learning. Affective strategies are related to learner’s emotions such as their confidence, while social strategies are concerned with the interaction in the target language. Cognitive strategies are the mental processes learners use in their learning, memory strategies are used to store information, and compensation strategies help learners to obviate problems and gaps in the process of communication.” (p.64).

The classification of learning strategies developed by Oxford in 1990 is more detailed, in that it systematically links individual strategies and strategy groups with each of the four language skills (listening, speaking, reading, and writing). Vidal (2002) believes, Oxford’s classification of language learning strategies is the most comprehensive, detailed, and systematic; moreover, the results of Hsiao and Oxford’s 2002 study shows that Oxford’s six factor strategy taxonomy is the most consistent with the learner strategies use. This seems to be the most appropriate classification for a language-learning context as it provides a very detailed description of each individual strategy and exemplifies for each language learning skill (Cohen, 1990). Hence, Oxford’s classification has been incorporated in a widely used strategy training instruments, for example the SILL (Cohen, 1990; Oxford, Lavine & Crookall, 1989; Ellis, 1994; Chamot et., 1993). This study takes Oxford’s classification and the Strategy Inventory for Language Teaching (SILT) as a basis for collecting data on teachers’ strategy use.

A number of models for teaching learning strategies have been developed by some scholars (e.g., Cohen, 2003; Oxford, 1990; O’Malley & Chamot, 1990). Based on Chamot (2004), these models have mutual characteristics as they focus on the need for improving learners’ metacognitive perception of the importance of learning strategies and suggest that it is developed by means of teachers’ modeling.

When teachers apply explicit strategy instruction in their teaching process, as Allebore and Davies (2000) state, teachers’ knowledge of subject they are going to teach may be
affected by many different factors such as their opinions about the nature of the subject, their background knowledge and understanding in the subject, their knowledge about teaching and learning, their own learning style as well as their own learning experience. In fact, the use of language learning strategies as a constituent of teachers’ learning experiences can be very crucial in their teaching practices. Accordingly, teachers’ experience of language learning contributes to their role as a language learner and their application of particular types of language learning strategies. Therefore, it is possible that EFI teachers use their own language learning strategies unconsciously in their teaching process.

Research on second language acquisition indicates that affective factors such as attitude, anxiety, and motivation play a crucial part in language achievement and proficiency (Yashima, 2002). Hence, the learner's self, and his/her features are prone to gravely affect the process of learning and internalizing language items. Dörnyei (2005) asserted that Individual differences among people play a significant role, beyond the theories that are devised and expanded by social scientists. Dornyei believed that individual differences are the “characteristics or traits in respect of which individuals may be shown to differ from each other” (2005, p.1). These characteristics which each person has, could be generally categorized under personality, affective and cognitive factors and may effect some of the variations in facility in L2 proficiency (Rastegar, 2003). Reid (1987) defines cognitive styles as “how the mind actually functions, how it processes information or is affected by each individual’s perception” (p. 88). According to Alptekin and Atakan (1990) cognitive styles are the “specific and relatively stable ways” in which learners perceive and approach mental tasks. That is they prefer to an “individual’s preferred perceptual and intellectual mode” (p. 135).

The main approach to this dimension of cognitive style has been the construct of ‘field-dependence and field-independence’ which refer to the extent to which a person can perceptually dissociate an object from the surrounding field rather than treating it as embedded within the field (Gass & Selinker, 1994) in that “the field-independent person tends to articulate figures as discrete from their backgrounds and to easily differentiate objects from embedding contexts, whereas the field-dependent person tends to experience events globally in an undifferentiated fashion” (Messick, 1986, as cited in Marashi & Moghadam, 2014, p.435).

Actually, a number of important differences exist between field-dependent and field-independent individuals when compared to each other. Within, Oltman, Raskin & Karp (1971 cited in Pithers, 2002, p. 119) discovered that field-dependent individuals were more capable of restructuring the perceptual field or imposing a structure if one is missing. They also tended to act more autonomously than field-independents, and had a more social tendency. Moreover, Witkin and Goodenough (1981) have claimed that field-independent individuals rely more on an internal frame of reference and that they provide structure for stimulus complexes in which a certain shape may be perceived to be ambiguous. They were reported to be more likely to break up the visual field into its elements and often provide a different orientation to a field than the one suggested by its elements. Each cognitive style
represents a continuum of style in information processing, and each person has a place somewhere on that continuum. One such continuum is the cognitive style dimension of field-dependence and independence the focus of this study.

To sum up, teachers can teach effectively if they know how language is learned, so their language learning experience as well as their application of particular teaching strategies may affect their function in teaching learning strategies. In addition, teachers’ cognitive style can play a crucial role in their strategy instruction. Thus, being either field-dependent or field-independent, they may use different strategies to raise learners’ awareness of language learning strategies.

Research Question

Q: Is there any statistically significant difference between field-dependent/field-independent EFL teachers’ teaching strategies?

Method

Participants

The sample of this study comprised 100 female teachers within the age range of 25 to 45 with at least five years of teaching experience who had either a master’s degree or were majoring as a graduate student in one of the subjects including TEFL, linguistics, literature, and translation. They were selected through a convenient non-random sampling procedure from among a total of 137 teachers in different language institutes including LCSUB (i.e., Language Center of Shahid Beheshti University), Kish, Safir, Namjoo and Pars (Language Institutes) in Tehran.

The participants categorized in two groups of field-dependent and field-independent teachers based on their scores on the Group Embedded Figures Test (GEFT). Twenty-three teachers were discarded due to their mixed standing and not belonging robustly to either dichotomy. Sixty-three teachers were identified as field-independent and 51 as field-dependent. In order to have an equal number of participants in each group, the researcher chose 50 of the field-independent teachers and 50 field-dependent teachers to participate in the study as two distinct groups. Moreover, an experienced supervisor participated in the study for the classroom observation processes.

Instrumentation

The following instruments were utilized in this study in order to implement the treatment and to collect the data.

The Group Embedded Figures Test (GEFT)

To measure the participants’ field-dependence and field-independence and group them accordingly, the researcher used the Group Embedded Figures Test (GEFT) developed by Oltman, Raskin, and Witkin (1971). This is a paper and pencil test which measures an individual’s ability to
dissociate an embedded part or shape from the given total field. The GEFT booklet comprises three sections with 25 complex figures from which the participants are asked to recognize eight simple geometrical figures.

The first section which contains seven complex figures is answered in two minutes for practice and familiarizing the participants with the nature of the test; therefore, the score in this section is not included in total score. In the second and third sections the participants are asked to identify 18 simple forms (nine items for each) in 5 minutes; therefore, these two sections will be completed during 10 minutes. The scores range from 0 (highly field-dependent) to 18 (highly field-independent). The participants whose scores is between 0-6 are considered as field-dependent, while those whose scores is between 13-18 are recognized as field-independent. According to Witkin, Olman, Raskin, and Karp (1971), the split-half reliability of the test is .82 for both males and females that was estimated through Spearman-Brown formula.

Since, The GEFT is originally adapted from Embedded Figures Test (EFT) which is a perceptual test to measure the degree of competence at perceptual disembedding, Witkin et al. (1971) compared the two test scores in order to confirm the validity of GEFT in a group of 397 male and female undergraduate students. The reported correlations were r=.82 for men and r=.63 for women with the mean scores of 12 for men and 10.8 for women.

**Strategy Inventory for Language Teaching (SILT)**

To measure the teaching strategies that teachers employ, the researcher used the Strategy Inventory for Language Teaching (SILT) developed by Khabiri and Jazebi (2010). It includes 50 items with a five-point Likert-scale. The responses for each strategy are described as never or almost never true of me (1), generally not true of me (2), somehow true of me (3), generally true of me (4), and always or almost always true of me (5). SILT includes six categories of strategies: 1) memory strategies (9 items), 2) cognitive strategies (14 items), 3) compensation strategies (6 items), 4) metacognitive strategies (9 items), 5) affective strategies (6 items), and 6) social strategies (6 items).

The total average score of SILT shows the frequency of teaching strategies use in general, whereas the average score for each part indicates which strategy groups have been used most frequently.

SILT is a transformed version of Strategy Inventory for Language Learning (SILL) which was originally designed to measure the use of language learning strategies by students of Defense Language Institute in Monterey, California, and it is the most widely used strategy scale with high validity and reliability (Oxford and Burry-Stock, 1995). In order to find a reliable evidence for justifying the validity of SILL, Takeuchi (1993, cited in Oxford & Bury-Stock, 1995) examined its criterion-related validity through a multiple regression and found that eight SILL items predicted 58% of the variance in scores on the comprehensive English language test. Moreover, Mullin (1991, cited in Oxford & Bury-Stock, 1995) examined the construct validity of SILL by comparing two sets of scores related to compensation strategy and language placement test. The reported correlation was r=0.38. Some other scholars have examined the reliability of SILL with different subjects. For
instance, Oxford and Nyikos (1989) conducted a study with 1200 students and estimated the reliability of 0.91.

Since, the researcher used SILT in the present study its validation procedure and the reported reliability is mentioned. Khabiri and Jazebi (2010) examined the construct validity of SILT through gathering criterion-related evidence through two statistical methods. The first method was based on the same statistical procedure that was used for measuring construct validity of SILL by Oxford and Burry-Stock (1995). Therefore, they used a regression analysis which indicated a statistically significant correlation between the average score of teaching strategy use and the teachers’ qualification. In fact, by taking the average score on SILL as an independent variable and students’ average scores on a language proficiency test as the predicted/dependent variable, Spearman’s Rank Order Correlation came was estimated to be 0.63 and significant at 0.05 level and \( p = 0.02 < 0.05 \).

The second method to find evidence for the validity of SILT was the Factor Analysis that explained 44% of the variance in SILT scores. Also, through a confirmatory Factor Analysis, six factors were confirmed to correspond to the six strategy group in SILT including memory, cognitive, compensation, meta-cognitive, affective, and social strategies. In addition, Khabiri and Jazebi (2010), in their study with 113 Iranian EFI teachers, they calculated the reliability of the questionnaire through Cronbach alpha. Based on the results, SILT had a high reliability of 0.89.

**Classroom Observation**

The instrument for investigating the particular teaching strategies practiced by every teacher inside the classroom was a systematic observation for two 90-minute sessions of their teaching behavior. To increase the internal validity of the results, the researcher as well as an experienced supervisor participated in the process of observation. The scheme for this observation was a detailed checklist adopted from SILT including 50 items including six categories of strategies: 1) memory strategies (9 items), 2) cognitive strategies (14 items), 3) compensation strategies (6 items), 4) metacognitive strategies (9 items), 5) affective strategies (6 items), and 6) social strategies (6 items) and every item was followed by 5 options having values ranging from 1(generally not true of her) to 5(almost always true of her).

**Procedure**

In order to conduct the study 137 female teachers who either had a Master’s degree or were majoring as a graduate student in one of these subjects including TEFL, linguistics, literature, and translation with at least four years of teaching experience were selected through a convenient non-random sampling procedure from among different language institutes in Tehran. Based on their performance on GEFT 100 teachers were identified as FD (50) and FI (50) and the rest were excluded from the study. In order to motivate the teachers to participate and cooperate, the researcher guaranteed to mail them some handbooks, magazines, or a package of instructional materials related to effective language teaching. Moreover, those who were interested to be informed about the possible findings and implications of the study were provided with the results. Then, the participants received a ten-minute oral instruction about the purpose of the study as well as the structure of the
questionnaires. Before administrating the second questionnaire i.e. SILT, a systematic classroom observation was conducted for the purpose of not raising the teachers’ awareness toward the content of the questionnaire and controlling any possibly deliberate attempt of teachers to appeal to any particular teaching strategy. To this end, the researcher asked an experienced supervisor to participate in the process of observing two sessions of each teacher’s 90-minute classes to increase the internal validity of the observation results. The researcher also conducted a briefing session with the supervisor to speak about the process and the issues regarding teaching strategies that should be observed in the classroom. Moreover, the scheme of the observation was a detailed checklist based on SILT which contains 50 items (including six major categories of teaching strategies with their related sub-categories) each followed by 5 values ranging from 1 (generally not true of her) to 5 (almost always true of her). After the process of each classroom observation, the teachers were asked to answer SILT which took about 20-30 minutes to be completed for the purpose of determining the teaching strategies employed by them with the presence of the researcher to answer any upcoming questions during the administration process.

The next step after collecting the questionnaires was scoring procedure. As mentioned earlier, only the scores which were obtained from the second and third parts of the GEFT containing two-nine item sections with a five -minute limit for each part were included in total score. Therefore, the scores ranged from 0 (highly field-dependent) to 18 (highly field-independent). In this research those participants whose scores fell between 13-18 were regarded as field- independent, while those whose scores fell between 0-6 were considered as field-dependent. After assigning 50field-dependent and 50 field-independent teachers in two groups with almost similar characteristics regarding their gender, age level, field of study, and teaching experience, the total score for each section of SILT was obtained. The scores in the related section were added, and then each of these total scores was divided by the number of strategies in each category. To compute the total average score, the sum total was calculated by adding the six sums and then the result was divided by 50. Also, the same scoring procedure was applied for each section of the observation checklists, then the total average scores for each checklist related to every teacher were calculated based on the mean of values given to the teachers by the two raters (one of the researcher and another observer of language classes) which demonstrated the inter-rater reliability. Finally, in order to find whether field-dependent or field-independent teachers were significantly different in employing teaching strategies independent samples t-test was used.

Findings

In order to estimate the inter-rater reliability between two raters scoring the SILT based on their observation, two set of correlations were conducted, all the correlation coefficient indices were above .70, showing a high reliability between the two raters. The normality of the distribution of scores was checked according to the ratio of skewness/std. Error of skewness including six categories of strategies for both FD/FI teachers, which fell within the range of -1.96 and +1.96, legitimizing running the correlational analyses. The researcher used the Pearson Correlation Coefficient.
In order to see whether there were significant differences among (memory, cognitive, comprehension, meta-cognitive, affective, social) strategies of the field-dependent and field-independent teachers’ scores in SILT questionnaire, an independent sample t-test had to be run for each strategy which was legitimate due to the normality of the distribution of scores.

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td><strong>FD &amp; FI Memory</strong></td>
<td>8.342</td>
<td>.005</td>
<td>-6.559</td>
</tr>
<tr>
<td>Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-6.559</td>
<td>87.418</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FD &amp; FI Cognitive</strong></td>
<td>.266</td>
<td>.607</td>
<td>-.028</td>
</tr>
<tr>
<td>Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.028</td>
<td>97.955</td>
<td>.977</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FD &amp; FI Comprehension</strong></td>
<td>.126</td>
<td>.724</td>
<td>.196</td>
</tr>
<tr>
<td>Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.196</td>
<td>96.883</td>
<td>.845</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FD &amp; FI Meta</strong></td>
<td>.000</td>
<td>.986</td>
<td>-3.638</td>
</tr>
<tr>
<td>cognitive Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3.638</td>
<td>95.612</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FD &amp; FI Affective</strong></td>
<td>.565</td>
<td>.454</td>
<td>-8.392</td>
</tr>
<tr>
<td>Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-8.392</td>
<td>97.082</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FD &amp; FI Social</strong></td>
<td>3.687</td>
<td>.058</td>
<td>-2.573</td>
</tr>
<tr>
<td>Strategies</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2.573</td>
<td>90.642</td>
<td>.012</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As can be seen in Table 1, FD/FI participants in memory, meta-cognitive, affective, social strategies obtained significant difference as \( p < .05 \), which it means there is a significant difference between the mean scores of each category of FD/FI participants. On the other hand, in cognitive and comprehension strategies, the results of the independent samples \( t \)-test demonstrates (\( p > .05 \)) show that a significant difference does not exists between the mean scores of FD/FI groups.

To test the null hypothesis through the parametric \( t \)-test, firstly the normality of the distribution of strategy scores of both groups was checked statistically. A related point to consider is the total score of teachers’ strategy was the sum of their own answers and the scores derived from the observations. The following table illustrates the statistical calculation of the skewness and normality of total score of the participants’ total score strategy.

### Table 2 Descriptive Statistics of the FD/FI Teachers’ SILT for Total Score Strategies

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
<th>Ratio</th>
<th>Kurtosis Statistic</th>
<th>Std. Error</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD total teachers’ strategy</td>
<td>50</td>
<td>2.9682</td>
<td>.78160</td>
<td>-0.043</td>
<td>.337</td>
<td>-0.13</td>
<td>-.674</td>
<td>.662</td>
<td>-1.02</td>
</tr>
<tr>
<td>FI total teachers’ strategy</td>
<td>50</td>
<td>3.5048</td>
<td>.76884</td>
<td>.115</td>
<td>.337</td>
<td>.34</td>
<td>-.564</td>
<td>.662</td>
<td>-.85</td>
</tr>
</tbody>
</table>

As shown in Table 2 the two distributions of SILT scores were normal (for FD teachers: skewness ratio= -.13, kurtosis ratio= -1.02; for FI teachers: skewness ratio= .34, kurtosis ratio= -.85) and thus, the precondition for running the \( t \)-test existed.

As Table 1 indicates there were differences among the Memory Strategies, Metacognitive strategies, Affective strategies and Social Strategies mean Scores of field-dependent and Independent individuals, therefore the researcher had to resort an inferential statistics to test the null hypothesis of the study to investigate a possible significant difference between two experimental groups of total strategy scores of FD/FI teachers.

### Table 3 \( t \)-test for comparing SILT mean scores between FD/FI teachers

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>( t )-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( F )</td>
<td>Sig.</td>
</tr>
<tr>
<td>FD &amp; FI Total Strategy</td>
<td>.021</td>
<td>.885</td>
</tr>
</tbody>
</table>

As shown in Table 2 the two distributions of SILT scores were normal (for FD teachers: skewness ratio= -.13, kurtosis ratio= -1.02; for FI teachers: skewness ratio= .34, kurtosis ratio= -.85) and thus, the precondition for running the \( t \)-test existed.

As Table 1 indicates there were differences among the Memory Strategies, Metacognitive strategies, Affective strategies and Social Strategies mean Scores of field-dependent and Independent individuals, therefore the researcher had to resort an inferential statistics to test the null hypothesis of the study to investigate a possible significant difference between two experimental groups of total strategy scores of FD/FI teachers.
As evidenced in Table 3, the results of Levene’s test for equality of variances ($F = .021, p = .885 \succ .05$), demonstrates that homogeneity of variance is observed. Therefore, the results for equal variances assumed are reported. The outcomes of the independent samples $t$-test ($t = -3.46, df = 98, p = .001< .05$, two-tailed) shows that a significant difference exists between the mean score of two groups. Consequently, the null hypothesis is rejected and it was found that there was a significant difference between total strategy scores of FD and FI groups. Therefore, it can be claimed that the field-independent group got significantly better scores than file-dependent one did.

The effect size was also estimated as 0.108, which, according to Cohen (1988), is a moderate effect. The following formula for eta squared suggested by Pallant (2007) was used to estimate the effect size:

$$\frac{t^2}{t^2 + (N1 + N2 - 2)}$$

**Conclusion**

Based on the results of data analysis, it was found that there were no significant differences between field-dependent and field-independent teachers in cognitive, and compensation strategy use while significant differences existed in affective, memory, metacognitive, social and total strategy use; besides, FI group was better than FD one regarding affective, memory, metacognitive, and social strategy use respectively. Moreover, the field-independent teachers were significantly better at teaching strategies totally.

Before dealing with theoretical justifications, it should be noted that differences between the field-dependent and field-independent teachers in strategy categories are in line with basic concepts of learning styles and strategies. In other words, differences in strategy use is a reflection of difference in learning styles (Ehrman & Oxford, 1989; Oxford, 1996) as in field-dependent and field-independent styles.

As the first step to explain the differences between field-dependent and field-independent teachers in some strategy categories, the theoretical aspects surrounding field-dependence and strategy use need to be examined. By definition, field-dependent people have “the tendency to be dependent on a total field so that parts embedded within the field are not easily perceived though the total field is perceived clearly as a unified whole” while field-independent people have “the ability to perceive a particular relevant item or factor in a field of distracting items” (Brown, 1993, p. 106). This definition is conceptually similar to the cognitive approach which is based on the cognitive processes of perception, memory, and thought. This approach examines a global and holistic
cognitive style on the one hand, and an intuitive, analytical dimension of the concept on the other (Pithers, 2002). Therefore, it can be argued that field-independent people are analytic in nature while field-dependent are holistic. Brown (2007) also stated that field-independent learners prefer analytic learning. Similarly, Salmani (2006) revealed that there was a positive correlation between field-dependent cognitive style and holistic tasks, while a positive correlation was found between field-independent style and analytic tasks.

The fact that cognitive strategy had no significant difference of field-dependent and field-independent teachers could be associated with the same profit from technique of cognitive style matching between FD/FI teachers. In other words, the effect of cognitive strategy might have neutralized the effect of field-dependency and field-independency.

Another promising direction in the study is the effect of adaptivity in educational system among FD/FI teachers based on cognitive style influences the performance of FD instructors in order to reach the same level performance as FI teachers.

On the other hand, cognitive style is still a source of difference in the way people perform in various fields including field of teaching profession. This claim can be supported based on some studies which investigated the difference between field-dependent and field-independent teachers’ regarding their training methodology. For instance, Witkin, Moor, Goodenough, and Cox (1977) reported that field-independent teachers preferred more formal teaching methods, while field-dependent teachers preferred more continuous teacher-student interaction that is in line with the results of the present study finding that field-dependent teachers tended to use social strategies. Furthermore, Riding and Cheema (1991) have indicated that field-independent teachers tended to use questioning as an ‘instructional tool’, while field-dependent teachers used this instrument more frequently to check students’ learning.

Cognitive styles such as field-dependency or field-independency may not cause differences in all aspects of teaching as the study showed that field-dependent and field independent teachers did not perform differently in cognitive and compensation strategies. Cognitive style is not the only source of difference in teaching performance and strategy instruction because various contextual variables like students’ expectations and learning habits of the learners may partly determine how teachers select the strategy instruction. The another conclusion was that thinking of strategy types as discrete categories may not be very practical because in reality we may use combination of strategies that conceptually may not be divisible. For instance, it is difficult to think of metacognitive strategies without making use of any cognitive strategies.

When relating the analytic and holistic styles to strategy use, one can argue that holistic people may go for more “indirect” strategies like “metacognitive,” “social” and “affective” strategies (Oxford, 1990, P. 17). This argumentation may explain why field dependent teachers used significantly more metacognitive, social, and affective strategies.

On the other hand, no significant difference was found between the field-dependent and field-independent teachers in cognitive and compensation strategy use. The most immediate explanation
for such results is the nature of cognitive and compensation strategies. Oxford (1990) and Khabiri and Jazebi (2010) categorize cognitive and compensation strategies as direct strategies which may be considered regular and general strategies. In direct strategies, teachers can encourage more practice, activities, and guessing for learning the new English language items. Such strategies are seen commonly in all language classrooms as they are seen as the most basic language learning strategies. Therefore, it was not far from expectation to see that filed-dependent and field-independent teachers were not significantly different in terms of cognitive and compensation strategies.

One finding of the study that could not be easily explained was that field-dependent and field-independent teachers had significant different memory strategy tendencies. Memory strategy is a direct strategy, which is commonly used in many language classrooms. However, based on the results, field dependent teachers used significantly more memory strategies in their classroom. One important note seems necessary when finding a reason for such a result and that is the overlap between the categories of strategies. For instance, memory strategy is a direct strategy but to decide to use more memory strategy but to know and plan what strategy works best for learners is a metacognitive strategy. Oxford (1990) has also noted that there is overlap between the types of strategies. She states “the metacognitive category helps students to regulate their own cognition by assessing how they are learning and by planning for future language tasks but, metacognitive self-assessment and planning often require reasoning which is itself a cognitive strategy’ (p.17). Therefore, it can be argued that deciding to use more memory strategy might have been a metacognitive decision by field-dependent teachers.

Finally, as the teachers of the two groups significantly differed with respect to the majority of the subcomponents of the teaching strategies, their total teaching strategies were different significantly.

Suggestions and Recommendations

The present study was conducted on female teachers which affect the generalizability power of the study to male teachers. It is suggested that a similar study be replicated with other participants consisting of male teachers. Furthermore, it is suggested the both male and female teachers participate in a similar study and in interpreting the findings the interaction effect of gender is taken into account.

This study was limited to field dependent and field independent cognitive styles while various cognitive styles have been proposed so far. It is suggested that the effect of other cognitive styles like analytic vs. holistic or judging vs. perceiving styles are taken into account.

References


