# Reconsidering Metaphorical Performance of EFL Learners with a Focus on Their Cognitive Features

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Metaphoric language and understanding such a language have been of central concern in not only private language schools for intermediate and advanced learners, but in universities for students whose major is English. Besides, as Ellis (1994) maintains, various individual differences have an effect on students' performance and learning. One of the sources of individual differences is related to cognitive styles. The cognitive style of field dependence/independence (FD/FI) has been studied frequently from various perspectives. This study was an attempt to find out if FD/FI cognitive style had any effect on students' performance in tests containing figures of speech, embedded in readings and discrete sentences. To achieve such a purpose, 30 intermediate students whose major was English were randomly selected from Shahrekord University. During one session, Group Embedded Figure Test (GEFT) was given to the participants to separate FD/FI styles; then figurative tests in the form of readings and discrete sentences were given to the participants. The findings revealed that there was no significant relationship between FD/FI cognitive style and metaphoric test performance.

**Key Words**: Field Dependence/Independence, Group Embedded Figure Test(GEFT). Metaphoric Test Performance

#### 1 Introduction

One point which is clear-cut and has been frequently approved by many researchers about the process of language learning is the fact that there are numerous factors which may affect the peoples' procedure of performance on language. Among these numerous factors are the individual differences. An awareness of individual differences in learning will make ESL/EFL educators and program designers more sensitive to their roles in teaching (Kang, 1999). Another piece of evidence for this claim is Ellis's statement (1986), according to which, variability in learner languages is the result of both contextual factors and individual differences in the way learners learn second

language. Therefore, no two learners learn L2 in exactly the same way. Ellis further argues that learner factors are infinite and very difficult to classify. However, he has examined five general factors that contribute to individual learner differences. These are aptitude, motivation, personality, age and cognitive style.

Gardner (as cited in Ellis, 1986) says that aptitude is a major factor in determining the level of success of language learners in a class. But there is doubt about it. One reason for such a doubt is that it is not clear what cognitive abilities make aptitude. One point needs to be mentioned here is that aptitude is contrasted with intelligence. Intelligence refers to general ability to master linguistic and non-linguistic skills. But aptitude is the special ability in language learning.

The other individual factor which may affect the language learning and performance is the motivation. Learners' motivation and needs always had a central role in theories of SLA. Learners who like social and cultural customs of native speakers (integrative motivation) and also those who have a strong instrumental need to learn L2 (instrumental motivation) are more successful language learners than those with no motivation to learn the language. The role of motivation has examined in the work of Gardner and Lambert (cited in Ellis, 1986) in the context of bilingual education in Canada.

Personality is the third individual factor, based on Ellis's taxonomy, which influence the language learning process. There are different types of personality among learners. For example, based on Brown (2007), some of them are extroverts and are prepared to take more risks and exposure to L2. In contrast, some learners are introvert who likes to be quiet and first think about something and then express it. As to the relationship between these two types of personality and language proficiency, some studies like Neiman et al. (as cited in Ellis, 1986) found no significant relationship between extroversion/introversion personalities and language proficiency.

Rate and success of SLA are also influenced by the age of learners. Burstal (as cited in Ellis, 1986) reviewed the result of teaching French in primary schools. He concluded that the achievement of skill in a foreign language is primarily as a result of the amount of time spent studying that language. In fact, children who studied French in primary school outperformed those who started it in secondary school.

Finally, the cognitive style of language learners can also affect the language performance of individuals. Cognitive style is a notion referring to the way in which people perceive, conceptualize, organize, and recall information. The dichotomy which has received the greatest attention in SLA is field dependence and independence category. A number of hypotheses about the role of field dependence/ independence in SLA have been made. Herman Witkin conducted much of the original research in this area in the 1950s. A field-dependent person, according to him, has difficulty in finding a geometric shape that is embedded or hidden in a background with similar

(but not identical) lines and shapes. The conflicting patterns distract the person from identifying the given figure. However, a person who is field-independent can easily identify the geometric shape, regardless of the background in which it is set.

Traditionally metaphor was considered to be a figure of speech, restricted to poetry and rhetoric and not a property of ordinary language. Furthermore, compared to literal meaning, it was taken to be a secondary and deviant means of expressing thoughts. These well established beliefs have been gradually falling out of favor since the publication of Lakoff's and Johnson's influential *Metaphors we live by* (1980). The two researchers made clear, that metaphor is pervasive in our everyday thought, an intrinsic element of conventional language and moreover, it plays a central role in organization and functioning of the human conceptual system (Lakoff and Johnson, 1980: 3).

Different researchers posed different definitions for metaphor. Jensen (2006) explains that metaphors have filled our language, literature, and art. Moreover, Lakoff and Johnson (1980) go far beyond this and contend that "metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature." (p. 4)

Given that metaphor is of essence, Kövecses (2002) defines it as understanding one conceptual domain in terms of another conceptual domain. An example regarding this definition include when we talk and think about life in terms of journey and we say the metaphorical sentence of "Life is a journey". The last point with regard to metaphor is that whenever we read a written discourse, we discover the metaphorical uses of language, especially idioms, in abundance. However, it is a truism that in order to master a language, it is a necessity for language learners to learn and comprehend idioms.

In the classical research about metaphors, it is possible to find two traditions: Associationism and transformational linguistic. Associationism proposes that words are associated with an array of elemental ideas, concepts, images, and that a probability can be assigned to each of these links. Metaphors are viewed as accidental, low-probability associations, governed by the usual laws of conditioning and transfer. It also says that metaphor involves the substitution of a response for one that is more typical and appropriate. Verbrugge and McCarrell (1977)present the following example: The sentence "The baritone's voice was heavy" might be spoken in response to hearing a singer's voice, due to the strong associations between low pitched voice, large body, heavy, loud, etc., in prior experience. In the second tradition, held mainly by Katz and Fodor (1963), sentence constituents were indexed in a lexicon by grammatical category, a set of distinctive semantic features, and selection restrictions which defined the contexts in which a term could appear. In this tradition metaphor is a semantic violation; its identity

and interpretation is to be characterized without reference to the intentionality, nonlinguistic knowledge or processing strategies of language users. In a discussion of these two traditions, Verbrugge and McCarrell maintain that the transformational linguistic approach is "similar to traditional associationism, except that a highly constrained structural organization of features is proposed." (p. 497).

And finally, from a psychological point of view, metaphor highlights the phenomenon of semantic creativity, the capacity of language users to create and understand novel linguistic combinations that may be literally nonsense. Accordingly, metaphorical competence includes the ability to detect the similarity between disparate domains and to use one domain to talk about or to understand something about another domain.

As it was already mentioned, one of these individual factors which may influence the learning and performance of language learners is the type of their cognitive style. The cognitive styles of Field Dependence/Independence have been studied frequently in various aspects. However, there are still some areas of language which need to be inspected with regard to the FD/FI. Metaphoric competence is among these areas. To be more detailed, this study is, in fact, an attempt to investigate if FD/FI has any effect on students' performance on idiom tests. To put another way, there are three research questions that the study tries to investigate:

- 1) Does FD/FI make a difference in relation to the students' performance in idiom tests?
- 2) Do FD/FI students have better performance in idiom tests which are designed in discrete sentences?
- 3) Do FD/FI students have better performance in idiom tests which are designed in the form of reading?

The outcomes of the present study can pave the way for the better teaching of idioms to students on the basis of the type of style they have. Besides, in reviewing the literature the author noticed a gap. There were some researches concerning the method of teaching to teach grammar, vocabulary, listening and writing, but there was no mention about idioms and how FD/FI deals with that. Moreover, it is axiomatic that it is not possible to separate idiom from our speaking and it is an integral part of our daily speech.

#### 2 Method

## 2.1 Participants

The subjects participating in this study were 30 randomly selected students majoring English translation at Shahrekord Azad University. They were both male and female, aged from 19 to 26. All of them had studied the book *Idiom* 

*Organizer*, a book which is considered as a comprehensive inventory of the most commonly-used English idioms, and passed it in the last two terms. Their degree of FD/FI was assessed by (GEFT), and their degree of proficiency was obtained by administering a language proficiency test.

#### 2.2 Instruments

The tests used in this study were 1) The Group Embedded Figure Test (GEFT) and 2) a language proficiency test.

The Group Embedded Figure Test (GEFT) was used to identify participants' FD/FI cognitive styles. The GEFT instrument has been developed by Witkin, Raskin, and Oltman (1971). They reported a Spearman-Brown reliability coefficient of 0.82 for their instrument. In their study, Witkin, et al. (1971) reported a mean GEFT score of 12.0 for males (N=155) and a mean of 10.8 for females (N=242). The grand mean of participants in their study was 11.3.

In 1980, Panek, Funk, and Nelson reanalyzed data from a previous investigation to determine the reliability and validity of the Group Embedded Figures Test (GEFT). They found that GEFT had adequate split-half reliability.

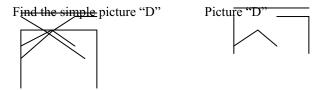
This test is, in fact, a pencil-and-paper test consisting three sections. The first section is intended for the purpose of practice and takes two minutes. The second and third sections consist of 18 items, each having nine items, and they are both 5 minutes long (the test totally lasts 12 minutes). In this kind of test, the subjects have to break the pattern to search for features of an embedded target shape.

The second test employed in the present study was a language proficiency test a sample of which is available in the appendix section. This test which was based on *Idiom Organizer book*, is, in fact, a multiple-choice test consisting of 15 idiom tests in the form of discrete sentences and a reading comprehension which has idioms in its body. Students must read the text and then answer 7 questions base on reading. Every correct answer has one score and total score for test is 22. There is not any negative score for the wrong answers. Furthermore, the reliability of the test was measured by Cronbach alpha formula and it turned out to be 0.75.As for the validity, the test was looked into by some professors and experts and was confirmed to be valid for the study.

#### 2.3 Data collection and analysis

In order to gather the required data, first, the author distributed GEFT among the participants. The cut-off point for ascertaining the FD and FI students was 11 (based on the earlier researchers). Based on the obtained scores from GEFT, 19 students were judged as FD and 11students as FI. One of the

patterns and the shape which students have to find is provided below as an example:



Having the GEFT, the idiom tests were distributed among them. The allocated time for answering the test was 20 minutes.

After collecting the desired data, the data was subjected to the statistical analysis in general and Independent t-test in particular to explore the probable effect of FD/FI on the subject's performance in idiom tests and also to compare FD/FI performance in idiom tests which are designed in discrete sentences and in idiom tests in the form of reading.

#### 3 Result and Discussion

Regarding the first hypothesis in this research, it was intended to see if there is any relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests in discrete sentences and in reading. In fact, the author wanted to check whether FD/FI is a considerable factor in performance of students in idiom tests. So, the first independent t-test was run to compare the performance of FD in the overall idiom test (idiom which are in discrete sentences and reading) and also the performance of FI in that kind of test. The result of the study is in Table 1.

Table 1. Independent Samples Test

Levene's Test for Equality of Variances				
F	Sig. (2-tailed)	uı		
6.177	.511	28		

Looking at the sig. value of the table, and because it is more than .05, it can be concluded that the first null hypothesis of the study cannot be rejected. That is, there is no relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests in discrete sentences and in reading.

As to the second hypothesis in this research, the author intends to see if there is any relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests which are designed in discrete sentences. To do so, the second independent t-test was run to compare the performance of FD and FI students in the idiom tests

which are designed in discrete sentences. The result of the study is shown in Table 2.

Table 2. Independent Samples Test

Levene's Test for Equality of Variances					
F	Sig. (2-tailed)	di			
5.35	.879	28			

Based on the data presented in this table, like the first case, there is no relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests which are designed in discrete sentences.

And finally, regarding the third hypothesis in this research, that is, to see if there is any relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests which are designed in the form of reading, the third independent t-test was run to compare their performance. Based on the provided results reported in Table 3, like the two previously-mentioned cases, there is no relationship between achievement of FD/FI students (represented by GEFT) and their performance in idiom tests which are designed in the form of reading.

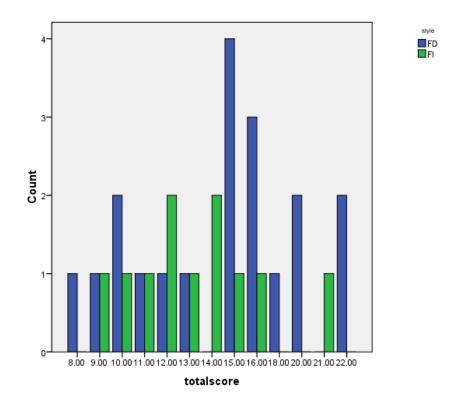
Table 3.Independent Samples Test

Table 5. macpendent Samples Test					
Levene's Test for Equality of Variances					
F	Sig. (2-tailed)	ui			
.299	.115	28			

On the whole, it can be inferred that, based on the reported results provided on the basis of the collected data, the styles of FD/FI of the students have no role in their performance on the idiom part of the English language. The conclusions of the study are detailed in the following section.

Another piece of information which could be brought here is the histogram representing the distribution of the participants' scores. As the diagram shows, though the FD and FI students have gained almost similar scores, the FD ones had totally better performance on the test than the FI participants.

Figure 1. Distribution of participants scores



#### 4 Conclusion

The main purpose of the study was to investigate if the FD/FI styles of language learners may be considered as a factor which can influence their performance on the idiom part of the English language. Now in this part the already-cited research questions are brought one by one and are answered in detail.

1. Does FD/FI make a difference in relation to the students' performance in idiom tests?

As it was already discussed, the results of the data analysis indicated that there is no relationship between the performance of the students on idiom tests designed in discrete sentences and in reading format. In other words, being an FD or FI student causes no such a remarkable difference in the score of the students on the idiom test.

- 2. Do FD/FI students have better performance in idiom tests which are designed in discrete sentences?
  - The main result gained from the first research question is now broken into two separate research questions. The first is about any probable effect of being an FD or FI which may influence their performance on the idiom tests constructed in the format of separate sentences. It was understood from the study that this feature (being FD/FI) causes no significant difference in the students' score on discrete sentence-constructed idiom tests.
- 3. Do FD/FI students have better performance in idiom tests which are designed in the form of reading?

  And finally, as to this question that whether the cognitive styles of FD/FI have any influence on the students' performance on the idiom tests constructed in the reading format, the analysis of the gathered data revealed that no noticeable effect has these features on the students' performance.

All in all, although the cognitive styles of FD/FI have been of central concern in many studies, they proved not to be important in this study. In other words, the outcome of the research did not reject any of the null hypotheses. Therefore, it can be concluded that there is not any relationship between the types of personality that students have and their performance in idiom tests. In fact, this conclusion of the present study stays along with the previously-conducted studies on the same issue like that by Ellis (1986) who concluded that FD/FI does not have any effect on students' performance.

Another conclusion derived from the results of the study is that because there was proved no significant link between the cognitive style of the students (that is, FD/FI) and their performance on the idiom tests, therefore, it could be inferred that first, idioms, which are an integrated part of teaching in the classroom and teachers can teach them freely (as they wish) in the class.

Although the author went through the fire in order to do a complete and faultless study, some limitations can be assigned to it. One limitation is related to the participants of the study. That is, one reason that there was inferred no relationship between the cognitive styles of FD/FI may be assigned to the sample used for the research. That is, if the same study was replicated with larger sample, the results may reveal opposite findings. Another limitation which can be cited for the study is that the employed language proficiency test was not long enough to draw more reliable findings.

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# Appendix

A sample of the idiom test used in the study.

# **Idiom Tests**

A. Choose the Best Answer	Time: 20 Minutes
1) Sorry I am not able to get that book for yo	ou. I
a) run out of time	b) waste the time
c) afford the time	d) value the time
2) Sorry, I can't right now. I've got a p	plane to catch.
a) waste the time	b) afford the time
c) value the time	d) make the time
3) I think the boss is in a bad mood. Just get	on with your work and
a) keep your head down	b) set our sights on
c) let battle commence	d) take a lot of flak
4) Luke was late again this morning. He's careful, he'll get the sake. He's his	
a) own battle	b) own worst enemy
c) marching orders	d) minefield
5) It took a long time to persuade Pete, but h	ne finally
a) saw past the end of his nose	b) saw the point
c) saw reason	d) saw through
6) My boss is really selfish and small-minde	ed. He can't
a) make himself perfectly clear	b) see past the end of his nose
c) see through	d) see the point
7) I can never understand his explanations, on No, they are	can you?
a) very short-sighted views	b) eyes wide open
c) as clear as mud	d) through my eyes
8) I've been doing the same job for 15 years	. I think I'm
a) in a rut	b) side-tracked
c) on the road to recovery	d) coming or going
9) I think the company is having a bad year,	from what I've heard.

Well,	we'll	just	have	to	work	that	bit	harder.	We	usually	do
when											
	ere is a would		_		on it			chips ar play our			
10) Why o						to ma	ke th	e speech	?		
	ask me ainst al			• • • • •	• • • •	h	) at s	toko			
	the car		odus				_	luck of	draw		
11) When Never	you sta		gotiatir	ng, l	et the o	ther p	ersoı	n make tl	ne firs	t offer.	
			1			b	) blu	ff your v	vav		
	<ul><li>a) show your hand</li><li>c) take your chances</li></ul>					d) hit the jackpot					
12) We ca	n't dec			_		day th	is ye	ear.			
	the car		Spain	anu	mary.	h	) at s	take			
	oss-up	<b>u</b> s					_	luck of	the dra	ıw	
13) I've p job for	assed 1							nd been	offere	d a fant	astic
a) hit	the jac	kpot				b	) too	k my cha	ances		
c) she	owed m	ny har	nd			d	) blu	ffed my	way		
14) Look, enough!				be	treated	l like	this	any lon	ger. I	've had	bad
	down										
	ere's go	_			-			ı't rock t			.1
rocks	unchart	ed ter	ritory	tor i	1S	d	l) th	ey're ju	ist ab	out on	the
a) its b) the c) we	you heaveryone like ratere's go are just ought	e's try ts leav oing to st goir	ving to ving a so be a n	get sinki muti ave	out. ing ship ny to weat	)			st staff	s have g	one.
B. Read t	he Pass	sage a	nd Cl	1008	e the B	est A	nswe	er.			

When I entered the room, my dad was talking to my mom. He said: "it was obvious that Charles, our older son, was angry. He came storming into the room after party, threw the contract on the table and demanded to know why

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he had not been consulted. But it was obvious from the way Peter, our younger son, breezed in this morning that Mary had said yes to his proposal." Because I had drunk too much last night at dinner, I was feeling a bit under the weather. Also when I wanted to come home my car broke down. I was two hours late for Sunday dinner. I got a rather frosty welcome. I had a shot at it and entered the room. My parents were having a heated argument. So I decided to leave the room as I didn't want to get caught in the crossfire. That night I decided to get rid of the dead-wood in my company.

	• •
<ul><li>1. How did Peter feel upon coming home?</li><li>a) angry</li><li>c) sad</li></ul>	b) happy d) excited
How was author's parents' behavior with     a) they behaved warmly     c) they didn't talk with him him	him when he came home? b) they behaved coldly d) they didn't pay attention to
<ul><li>3. What does <i>crossfire</i> mean?</li><li>a) heated discussion</li><li>c) unfriendly relation</li></ul>	b) fight d) battleship
<ul><li>4. Before entering the room, author felt</li><li>a) hesitant</li><li>c) tolerant</li></ul>	b) decisive d) moody
<ul><li>5. Coming stormy into room means</li><li>a) coming while shouting</li><li>c) coming with a lot of noise</li></ul>	b) coming angrily d) coming suddenly
6. The author <i>felt under the weather</i> . So we a) he was healthy c) he did feel well	understand that b) he was sick d)he had headache
7. From the last line we understand that auth a) friendly c) easygoing	b) hard working d) good for nothing