# EXPLORING THE MINDSETS OF ESP STUDENTS IN THE LIGHT OF LOCUS OF CONTROL

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#### **Abstract**

People act according to their beliefs and conceptions. Being aware of these conceptualizations can help us make sound educational decisions. Metaphor analysis is one of the ways in which we can uncover individuals' hidden beliefs. This study aims at investigating the metaphors for language teachers and learners used by students of humanities and students of engineering and the sciences. It attempts to account for the variation in choice of metaphors in terms of variation in locus of control (LOC). One hundred and forty four university students who were taking their ESP courses participated in this study. The metaphors were classified based on the taxonomy developed by the scholars in the field. The results showed that there is a marked difference between the choice of metaphors by the two groups of students and that LOC can explain this difference. The pedagogical implications of these findings are discussed.

**Keywords:** beliefs, humanities, non-humanities, metaphor analysis, locus of control, internalizers, externalizers

#### Introduction

People's thoughts and actions are based on the way they conceptualize the world. These beliefs and conceptualizations have been formed throughout their lives and are under the influence of numerous factors (Pishghadam & Navari, 2010). Those who embark on the burdensome task of learning a foreign language develop their own beliefs and ideas about the language they learn, the process of language learning and teaching, and the learning environment. Unfortunately, language learners are not fully aware of all of their beliefs and ideas about language learning. Finding out these hidden conceptualizations is by no means easy. If language teachers and learners become cognizant of their beliefs about the process of language learning and teaching and their role in

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this process, a good deal of the problems they face in learning a foreign language will be overcome.

Identifying these hidden conceptualizations is far from easy. One of the ways to isolate language learners' and teachers' latent beliefs is to analyze the metaphors they use with regard to language learning and teaching. Abrams (2005) defined metaphor as using a word or expression which denotes one kind of thing in the literal usage to refer to a totally different kind of thing. We can analyze the metaphors used by learners and teachers to understand their hidden beliefs and ideas about learning and teaching, recognize unhelpful metaphors and suggest more constructive ones.

The study of individual differences has been a featured research area in second/foreign language learning studies. Individual characteristics of language learners affect both the way they learn a second language and the outcome of this process (Williams, & Burden, 1997). There is a considerable variation among language learners in terms of their ultimate achievement in learning a second language (Dornyei, 2005). One of these individual differences, which is cognitive by nature, is locus of control (LOC). During the past two decades the construct of locus of control has received great attention. According to Jarvis (2005), LOC refers to a person's beliefs about control over what happens to him or her. This concept has been widely researched in the area of psychology (Basgall & Snyder, 1988, Phares, 1979, Anderman & Mindgly, 1997, and Carden, Bryant, & Moss, 2004). There is also a large body of literature regarding the relationship between LOC and academic achievement (Galjes & D'Silva, 1981, Gifford, Mianzo, & Briceno-Perriott, 2006, Wood, Saylor & Cohen, 2009, and Hadsell, 2009). Nonetheless, LOC has not been widely explored in the EFL context of Iran, although Ghonsooly and Elahi (2010) have investigated its association with General English achievement and Hosseini and Elahi (2010) have examined the relationship between LOC and L2 reading achievement and the use of language learning strategies.

At Iranian universities, English for Specific Purposes (ESP) courses are held for students majoring in different fields. These university students may have negative or unhelpful metaphors for language learning and teaching that reflect their negative attitudes toward these issues. Their negative ideas about language learning can have a negative impact on their performance in their ESP courses. By means of metaphor analysis

we can find out these students' hidden beliefs regarding language learning, teach them to put aside their negative metaphors, and encourage positive metaphors. This study aims at investigating what metaphors students of humanities (history and sociology) and students of non-humanities (civil engineering and chemistry) use for language learner and language teacher. In addition, this research attempts to find out whether these two groups of university students are different in terms of LOC, and if so, to explain the variation in the choice of metaphors by the two groups of students in the light of variation in their LOC.

Another justification for this research is that it investigates ID variables in the world of ESP. Most of the research projects in this area have focused on discourse analysis, rhetorical structures and generally, linguistic analysis. Affective factors and individual differences have hardly been investigated in this domain. This research aims at examining ESP learners' mindsets and their control orientations

#### Literature Review

Hutchinson and Waters (1987) have asserted that in the area of ESP, factors involved in learning have been ignored. The emphasis in ESP research and materials has been on the analysis of language. Learning factors, if studied at all, are investigated only after a thorough analysis of language. It should be noted that the key to a proper understanding of language is delving into human thought processes. In other words, "language learning is conditioned by the way in which the mind observes, organizes, and stores information" (Hutchinson, & Waters, 1987, p. 39). Successful language learning and teaching calls for a full exploration of the mind and its processes.

Human beings have thoughts, but they also have feelings. They have fears, prejudices, foils, likes and dislikes. Human beings are not machines. Even ESP learners are human beings and learn like them, though some of them may study systems and machines. The association between cognitive and affective factors is of crucial importance in order to achieve optimum success in language learning in general and in ESP practices in particular. For example, Hutchinson and Waters (1987) hold that the concept of motivation as an affective factor should not be underestimated in the ESP world. It is not enough to assume that ESP learners are sufficiently motivated just because the language material

is related to their experience. Sometimes a degree of creativity, fun and a sense of accomplishment must be added to ESP courses in order to increase ESP learners' motivation (Hutchinson and Waters, 1987).

According to Lakoff and Johnson (1980), many people consider metaphor as a poetic device which is solely a feature of language. However, metaphor is prevalent in everyday life, not only in our language, but also in our thoughts and actions. Our ordinary thoughts and actions are based on a system of concepts which is basically metaphorical (Lakoff & Johnson, 1980). Nevertheless, we are not aware of our conceptual system. For most of the things we do every day, "we simply think and act more or less automatically" (Lakoff & Johnson, 1980, p. 4). Martinez, Sauleda and Huber (2001) have emphasized that metaphors should not be regarded just as figures of speech. They are an important mechanism of human mind. Huang and Ariogul (2006) contend that metaphors are more than a linguistic feature, they are "a thinking process and a phenomenon"(p. 226).

Lakoff and Johnson (1980) have defined metaphor as "understanding and experiencing one kind of thing in terms of another" (p. 5). Comparing ARGUMENT to WAR is a conceptual metaphor. This metaphor has influenced the way we perceive and perform argument. Cognitive linguistics indicates that people understand and talk about abstract concepts, such as morality, feelings, politics, and the self, under the influence of conceptual metaphor (Gibbs, & Cameron, 1994, cited in Pishghadam, 2010). Huang and Ariogul (2006) have mentioned that "human beings (and so teachers) understand their lives, store information, and report their lives in terms of stories, images, and metaphors" (p. 226).

Kovesces (2002) places metaphors into two groups: conceptual metaphors and linguistic metaphors. A conceptual metaphor has two conceptual domains "in which one domain is understood in terms of another" (p. 4). For example, we think about theories in terms of buildings. The metaphorical linguistic expressions express conceptual metaphor in terms of words or other linguistic devices. ARGUMENT IS WAR is an abstract concept belonging to the first group, whereas I won the argument is the linguistic manifestation of this concept which belongs to the second group (Lakoff & Johnson, 1980).

Gaining insight into how metaphor is used by human beings may help us find out "how people think, how they make sense of the world and each other, and how they communicate" (Cameron, 2003, p. 2). Despite Lakoff and Johnson's (1980) observation that our thoughts and actions are based on a metaphorical system of concepts, we are not aware of our conceptual system. We can use language to identify our conceptual system because linguistic communication is on the same system of concepts. Martinez, Sauleda, and Huber (2001) observe that metaphors have a great effect on analysis and planning in education. We can uncover hidden beliefs and attitudes of teachers and learners, encourage them to think about these beliefs and attitudes, and bring about changes in them by means of metaphor analysis (Cameron, 2003). Sumsion has also asserted that metaphors can offer revealing insights into the changes in teachers' and learners' thoughts over time (cited in McGrath, 2006). An important function of metaphor that differentiates it from other forms of research is that it can inform us about the beliefs and attitudes of participants without using direct questioning. Since beliefs and ideas are usually latent, metaphor is a useful device to make them explicit and to offer opportunities for reflection, analysis and modification of these beliefs (Pishghadam, Askarzadeh, & Navari, 2009). Moser (2000) has mentioned that metaphors are dependable and useful ways to operationalize implicit knowledge because they are its linguistic manifestation (cited in Pishghadam, Askarzadeh, & Navari, 2009). Cameron and Low (1999) note that metaphor analysis involves gathering instances of linguistic metaphors, identifying the conceptual metaphors they represent, and then isolating thought patterns underlying our beliefs and actions (cited in Pishghadam, Askarzadeh, & Navari, 2009). Ellis (2008) has explained that a common approach to learner beliefs is to use questionnaires or interviews; however, there are two problems with this self-report approach. The first problem is that students may not provide an accurate report of their beliefs; they may mention what they think the researcher likes to hear. The second problem with this approach is that learners are not fully aware of their beliefs. To solve these problems we can analyze the metaphors learners associate with learning (Ellis, 2008).

The beliefs and attitudes about language learning and teaching that teachers and learners have in their minds have a great influence on the way they teach and learn (Pishghadam & Navari, 2010). Ellis (2002) has pointed out that learners' attitudes regarding language learning can include the language they wish to learn, the most appropriate and efficient way for acquiring it, the importance attached to that language in their

particular culture, and how much they expect to succeed in learning it. So, the attitudes of language learners towards the language and the experience of learning it have a great effect on the strategies they employ, the ability they show in learning the language, their interaction with their teacher and peers, the way they participate in classroom activities, and their level of achievement (cited in Pishghadam, & Navari, 2010).

Horwitz (1987) posits five types of learner beliefs: (1) beliefs regarding the difficulty of language learning; (2) "aptitude for language learning"; (3) learning and communication strategies"; (4) "the nature of language learning"; and (5) "motivation and expectation" (cited in Ellis, 2008, p. 9). Benson and Lor (1999) drew a distinction between conceptions and beliefs. Conceptions reflect what learners think are the aims and processes of learningwhile beliefs are what the learners assume to be true about the aims and processes of learning (cited in Ellis, 2008). Little, Singleton and Silvius (1984) are of the view that past experiences of general education and particularly of language learning have a salient role in forming beliefs about language learning (cited in Ellis, 2008). It is possible that learner beliefs are under the influence of cognitive style and personality traits. Learner beliefs are "situation specific and dynamic" (Ellis, 2008, p. 11).

Dornyei (2001) asserts that we develop a value-system which is made up of beliefs, attitudes and feelings concerning the world and our place in it. Our upbringing and previous experiences shape our value-system, which in turn has a great influence on our tendencies and approaches. Mercer and Steghen (2009) have defined mindsets as "some of the basic assumptions individuals make about various human attributes such as intelligence or personality" (p. 437). Some people consider these mindsets as static, that is, as fundamental traits that cannot be changed. Others believe that individuals can change their basic traits. Mercer and Steghen (2009) have concluded that learners' mindsets exert a great influence on 'learners' approach to language learning, their goals, and ultimately their success and level of attainment" (pp. 443-444).

Some of the learners' beliefs concern the way they perceive themselves as language learners. These beliefs are deeply rooted in their past experiences in learning, particularly in language learning (Pishghadam & Navari, 2010). Williams and Burden (1997) suggest that learners' selfconcept exerts a great influence on their language learning. A student who has a low opinion of himself or herself has a negative self-concept.

Therefore such a student may be partially embarrassed in the classroom and may not have the risk-taking ability needed to participate in classroom activities. Conversely, a learner who has a positive self-concept is more optimistic, more active in the classroom, and runs more risks because he or she has more motivation than others.

Martinesz, Sauleda, and Huber (2001) have categorized metaphors for learning based on three perspectives of learning: the behaviorist, cognitive and situative perspectives. Behaviorism considers learning as a process of habit formation; as the result of creating new connections between stimulus and response. Based on this view, neither the individual nor the collaboration between individuals is of much importance. From the cognitive perspective, learning is the process of creating new schemata. Here the mind is considered "problem-oriented and interpretive" (p. 967). According to the situative or socio-historic point of view about learning, knowledge and artifacts such as computers and books, as well as the media are distributed among people in a community when individuals participate in the activities of their community.

Leavy, McSorely, and Bote (2007) explain that metaphors related to behaviorism "reflect learners as passive recipients, teachers as transmitters of knowledge, and learning as a process of individual growth by the acquisition of knowledge in the form of new associations". Metaphors reflecting the cognitive perspective of learning regard knowledge as interconnected schemata which are actively or individually constructed by transferring old schemata into new ones or by inductively developing new schemata from a series of different experiences. Finally, metaphors related to the situative perspective of learning reflect the view that learning is situated in the context in which it is constructed.

Pishghadam and Navari (2010) observe that while there is a large body of research on language teachers' beliefs about their teaching, the number of research projects on learners' conceptions is rare. Their review is not exhaustive, but they cite some of the studies dealing with language learners' metaphors about language teaching and learning. Oxford (2001) investigated some of the narratives written by language learners to pinpoint the metaphors they used for three approaches to teaching (cited in Pishghadam & Navari, 2010). Oxford et al. (1998) collected learners' metaphors for the concept of teacher (cited in Pishghadam & Navari, 2010). Ellis (2002) investigated the diaries of some beginner learners of L2 to

determine their metaphors for themselves, their teacher, and the language they wish to learn. Pishghadam and Navari (2010) examined the metaphors used by language learners in Iranian high schools and language institutes. In order to do this they compared the metaphors utilized by language learners in some high schools and language institutes in Mashhad, Iran. The results showed a remarkable difference between the two groups of learners in terms of metaphors they used regarding language learners and teachers. In fact, language institute learners were superior to high school learners in terms of their conception of English education. Kezen (2010) explored Turkish FEL learner' metaphors for course books. The findings of the study indicated that "for most of the learners, language course books are perceived as a planet, foreign country, secret garden, and space, which indicates uncertainty and enigma experienced by the learners" (Kezen, 2010, p. 108).

#### Method

## 1. Participants

The participants of this study were two groups of undergraduate students. The first group comprised 72 students of the humanities who were studying history (37 students) and sociology (35 students). The second group consisted of 72 students of the sciences who were studying chemistry (42 students) and civil engineering (50 students). All 144 students are enrolled at Ferdowsi University of Mashhad. The participants are both male and female. All the students are native speakers of Persian. The sample may thus be considered representative of Iranian EFL students of the same age.

#### 2 Instrument

The Persian version of the Internal Control Index (Ghonsooly & Elahi, 2010) was used to measure the participants' locus of control. In addition, a checklist of metaphors developed by Pishghadam and Navari (2010) was used to gather information about participants' choice of metaphors.

#### 2. 1. Internal Control Index

The Persian version of the *Internal Control Index* (Ghonsooly & Elahi, 2010) was used in this study to measure the participants' locus of control. The English version of the Internal Control Index (Duttwieler, 1984) was developed to measure where a person expects to gain reinforcement. This scale has 28 five-pint Likert-type items that produce a possible range of scores from 28 to 140. Higher scores represent internal LOC and lower scores represent external LOC. Ghonsooly and Elahi (2010) calculated Cronbach's alpha to check the reliability of the translated questionnaire. The result was a coefficient of 0.83. In order to ensure the construct validity of the instrument, they used a principle component analysis which yielded eight factors with eight values greater than 1. The factors include the need to be encouraged, reliance on one's attitude, interest in administrative jobs, effort to reach desirable goals, undecidedness, the need to consult in making decisions, being responsible for desirable events, and selfexpression (Hosseini & Elahi, 2010).

# 2.2 Checklist of Metaphors

It consists of two parts. The first part asks participants to give their opinions regarding a language teacher in both current and ideal situations. This part includes 27 metaphors. These metaphors fall into 3 categories representing three important paradigms in psychology: behaviorism, cognitivism and situative learning. There are 27 metaphors for teachers: 8 behaviouristic metaphors, 7 cognitivist metaphors, and 12 others reflecting situative learning. The second part of the checklist asks participants to give their opinion about a language learner. In this part there are 18 metaphors: 9 behaviouristic metaphors, 6 cognitive metaphors, and 4 others for situative learning. This checklist was translated by the second researcher. In order to validate the translated checklist, two separate copies of the checklist were presented to two professors of translation at Ferdwois University of Mashhad.

# 3. Data collection and Analysis

After seeking permission from the instructors, the researchers visited the classes in order to administer the questionnaire and the checklist.

The students were assured that the results would remain confidential and that their instructors would not see the results of the questionnaires and the checklists. They were administered in one session under standard conditions. The directions were Persian; however, the second researcher explained them once more to the participants so that they would have a clear understanding of what they were supposed to do. The guidelines for scoring the Internal Control Index are available in Hosseini and Elahi (2010). The metaphors were randomly used in the checklist. After categorizing metaphors on the basis of the perspectives suggested by Martinez, Sauleda and Huber (2001), the frequency of metaphors in the two groups and in the two contexts were measured. Finally, a Chi-square was ran to see whether the differences are meaningful. The results of the Internal Control Index were further analysed using the Statistical Package for Social Sciences. A t-test was calculated to see whether the difference between LOC in the two groups of students is meaningful or not.

#### Results

The results of this study are presented in three parts. The first part is concerned with the metaphors students of the humanities and students of the non-humanities have selected. These metaphors include metaphors for the language teacher and the language learner in both current and ideal situations. In this part, a chi-square was ran to find out whether the differences are significant. The second part deals with the metaphors for ideal situations most frequently selected by students of both groups. In the third part the researchers compared locus of control (LOC) between students of the humanities and the non-humanities. In order to do this, an independent t-test was calculated. The purpose was to see whether there is a significant relationship between students' choice of metaphors and their LOC

# 5.1. Metaphor Analysis

- 5 1 1 Students of the Humanities
- 5.1.1.1 Metaphors for Teachers

Table 1: The results of the chi-square for metaphors for teachers in a Current situation selected by students of the humanities

| Variable      | Observed | Expected | df | x <sup>2</sup> | Sig |
|---------------|----------|----------|----|----------------|-----|
|               | N        | N        |    |                |     |
| Behavioristic | 131      | 101.3    | 2  | 16.61          | .00 |
| Cognitive     | 73       | 101.3    | 2  |                | •   |
| Situative     | 100      | 101.3    | 2  | 1              |     |

Table 1 shows that there is a significant difference ( $x^2 = 16.61 \text{ p} < .05$ ) among the metaphors for language teachers in a current situation selected by students of the humanities. This table also shows that behaviouristic metaphors have been selected more often by these students for language teachers in current situations. It means that in their opinion language teachers mostly adhere to behaviouristic principles.

behaviouristic > situative > cognitive

*Table 2*: The results of the chi-square for metaphors for teachers in ideal situations selected by students of the humanities

| Variable       | Observed | Expected | df | x <sup>2</sup> | Sig |
|----------------|----------|----------|----|----------------|-----|
|                | N        | N        |    |                |     |
| Behaviouristic | 171      | 112.6    | 2  | 46.59          | .00 |
| Cognitive      | 75       | 112.6    | 2  |                |     |
| Situative      | 92       | 112.6    | 2  |                |     |

As demonstrated in Table 2, there is a significant difference ( $x^2 = 46.59$ ) among the metaphors for language teachers in an ideal situation selected by students of the humanities. Another point this table demonstrates is that these students have a great preference for behaviouristic metaphors for language teachers in an ideal situation. This indicates that students of the humanities prefer their language teachers to teach according to behaviouristic principles.

behaviouristic > situative > cognitive

# 5.1.1.2. Metaphors for Learners

Table 3: The results of the chi-square for metaphors for learners in a current situation selected by students of the humanities

| Variable       | Observed | Expected | df | x <sup>2</sup> | Sig |
|----------------|----------|----------|----|----------------|-----|
|                | N        | N        |    |                |     |
| Behaviouristic | 90       | 55.6     | 2  | 35.03          | .00 |
| Cognitive      | 48       | 55.6     | 2  |                |     |
| Situative      | 29       | 55.6     | 2  |                |     |

Table 3 illustrates a significant difference ( $x^2 = 35.03 \text{ p} < .05$ ) among the metaphors for language learners in a current situation chosen by students of the humanities. Besides, this table shows that the behaviouristic metaphors have more often been selected by these students (N=90). These metaphors are much more than the expected number (55.6). These results imply that students of the humanities perceive language learners from behaviouristic perspectives.

behaviouristic > situative > cognitive

Table 4: The results of the chi-square for metaphors for learners in an ideal situation selected by students of the humanities

| Variable       | Observed<br>N | Expected N | df | x <sup>2</sup> | Sig |
|----------------|---------------|------------|----|----------------|-----|
| Behaviouristic | 76            | 62         | 2  | 14.06          | .00 |
| Cognitive      | 72            | 62         | 2  |                |     |
| Situative      | 38            | 62         | 2  |                |     |

According to Table 4, a significant difference ( $x^2 = 14.06 \text{ p} < .05$ ) exists among the metaphors for language learners in an ideal situation chosen by students of the humanities. This table also indicates that the behavioristic metaphors (N=76) outnumber what is expected (N=62). Thus, students of the humanities believe that in order to succeed in learning a second language, it is best for language learners to stick to behaviouristic guidelines.

behaviouristic > situative > cognitive

#### 5.1.2. Students of Non-humanities

## 5.1.2.1. Metaphors for Teachers

Table 5: The results of the chi-square for metaphors for teachers in a current situation selected by students of the non-humanities

| Variable       | Observed<br>N | Exxected N | df | x <sup>2</sup> | Sig |
|----------------|---------------|------------|----|----------------|-----|
| Behaviouristic | 96            | 110        | 2  | 24.93          | .00 |
| Cognitive      | 82            | 110        | 2  |                |     |
| Situative      | 152           | 110        | 2  |                |     |

Table 5 reveals a significant difference ( $x^2 = 24.93 \text{ p} < .05$ ) among the metaphors for language teachers in a current situation selected by students of the non-humanities (civil engineering and chemistry). Based on this table, situative metaphors (N=152) greatly outnumber what is expected (110). Students of the non-humanities have chosen situative metaphors more often than other metaphors. Therefore, these students hold that language teachers follow the guidelines of the situative paradigm more than any other perspectives in language teaching.

situative > behaviouristic > cognitive

*Table 6*: The results of a chi-square for metaphors for teachers in ideal situations selected by students of the non-humanities

| Variable       | Observed<br>N | Expected N | df | $x^2$ | Sig |
|----------------|---------------|------------|----|-------|-----|
| Behaviouristic | 117           | 132        | 2  | 41.18 | .00 |
| Cognitive      | 89            | 132        | 2  |       |     |
| Situative      | 190           | 132        | 2  |       |     |

Table 6 exhibits a significant difference ( $x^2 = 41.18 \text{ p} < .05$ ) among the metaphors for language teachers in ideal circumstances chosen by students of non-humanities (civil engineering and chemistry). This table also shows that situative metaphors (N=190) have been selected more often than expected (N=132). As a result, students of the non-humanities prefer the kind of language teachers who act in accordance with the guidelines of situative learning.

situative > behaviouristic > cognitive

## 5.1.2.2. Metaphors for learners

Table 7: The results of a chi-square for metaphors for learners in current situations selected by students of the non-humanities

| Variable       | Observed | Expected | df | x <sup>2</sup> | Sig |
|----------------|----------|----------|----|----------------|-----|
|                | N        | N        |    |                |     |
| Behaviouristic | 59       | 76.6     | 2  | 9.62           | .00 |
| Cognitive      | 97       | 76.6     | 2  |                |     |
| Situative      | 80       | 76.6     | 2  |                |     |

Table 7 demonstrates that there is a significant difference ( $x^2 = 9.62$ p<.05) among the metaphors for language learners in current situations selected by these students. This table also indicates that cognitive metaphors (N=97) greatly outnumber what is expected (N=76.6). These results suggest that students of the non-humanities perceive language learners from cognitive perspectives.

cognitive > situative > behaviouristic

Table 8: The results of a chi-square for metaphors for learners in ideal situations selected by students of the non-humanities

| Variable       | Observed<br>N | Expected N | df | x <sup>2</sup> | Sig |
|----------------|---------------|------------|----|----------------|-----|
| Behaviouristic | 61            | 76         | 2  | 7.34           | .00 |
| Cognitive      | 94            | 76         | 2  |                |     |
| Situative      | 73            | 76         | 2  | 1              |     |

Based on Table 8, there exists a significant difference among the three learning perspectives in non-humanities students' metaphors for ideal language learners ( $x^2 = 7.34 \text{ p} < .05$ ). In addition, this table indicates the situative metaphors (N=94) are more than expected (N=76). As a result, non-humanities students hold the view that in order to learn a second language it is best to join the situative learning pool.

cognitive > situative > behaviouristic

# 5.2. The Most Frequent Metaphors for Ideal Situations

In this part, the most frequent metaphors selected by the two groups of students are reported. Table 9 shows the metaphors for language teachers in ideal situations selected by the two groups of students:

**Table 9:** The frequency distribution of metaphors for language teachers in ideal situation

| Students of History and Sociology<br>Engineering and Chemistry |     |        | Students of     |           |            |  |  |
|--|-----|--------|-----------------|-----------|------------|--|--|
| Metaphors Frequency Percentage                                 |     |        | Metaphors       | Frequency | Percentage |  |  |
| Leader   | 35  | 10.35% | Friend          | 42        | 10.60%     |  |  |
| Providers  | 29  | 8.57%  | Challenger      | 44        | 11.11%     |  |  |
| Preacher   | 35  | 10.35% | Innovator       | 35        | 8.83%      |  |  |
| Other metaphors  | 239 | 70.71% | Other metaphors | 122       | 69.46%     |  |  |
| Total  | 338 | 100%   | Total           | 226       | 100%       |  |  |

Total number of metaphors for teachers in ideal situations = 27

As Table 9 shows, among metaphors for teachers in ideal situations (27 metaphors) three behaviouristic metaphors are more frequently chosen by students of history and sociology. They include: TEACHER AS LEADER (N=35, 10.35%), TEACHER AS PROVIDER (N=29, 8.57%), and TEACHER AS PREACHER (N=35, 10.35%). Thus, 3 metaphors, out of 27 metaphors, constitute 28.67% (10.35%+8.57%+10.35%) of all metaphors for language teachers in ideal situations selected by students of

history and sociology. It indicates that these students mostly expect their language teachers to be like a leader, a provider or a preacher.

Table 9 also demonstrates three situative metaphors for teachers in ideal situations that are more often selected by students of engineering and chemistry. They include: TEACHER AS FRIEND (N=42, 10.60%), TEACHER AS CHALLENGER (N=44, 11.11%) and TEACHER AS INNOVATOR (N=35, 8.83%). The rest (24 metaphors) constitute 69.46% of metaphors chosen by these students. One can conclude that these students expect their language teachers to be like a friend, a challenger or an innovator

Table 10: The distribution of metaphors for language learners in ideal situations

| Students of History and Sociology<br>Engineering and Chemistry |           | Students of |                    |           |            |  |
|--|-----------|-------------|--------------------|-----------|------------|--|
| Metaphors  | Frequency | Percentage  | Metaphors          | Frequency | Percentage |  |
| Recipient  | 40        | 17.69%      | Friend             | 45        | 19.56%     |  |
| Employee   | 35        | 15.48%      | Constructor        | 38        | 16.52%     |  |
| Raw material   | 29        | 12.83%      | Partner            | 29        | 12.60%     |  |
| Other metaphors  | 122       | 53.98%      | Other<br>metaphors | 118       | 51.30%     |  |
| Total  | 226       | 100%        | Total              | 230       | 100%       |  |

Total number of metaphors for language learners in ideal situations =18

According to this table, the language learner as RECIPIENT (N=40, 17.69%), as EMPLOYEE (N=35, 15.48%) and as RAW MATERIAL (N=29, 12.83%) are the most frequent behaviouristic metaphors chosen by students of history and sociology. The rest of the 15 metaphors (N=122) constitute 53.98% of the metaphors for language learners in ideal situations selected by these students. In their opinion, an ideal language learner should be like a recipient, an employee or raw material.

Also based on Table 10, the language learner as a FRIEND (N=45, 19.56%) is the most frequent metaphor for language learners in ideal situations selected by students of engineering and chemistry. The language learner as a CONSTRUCTOR (N=38, 16.52%) and as partner (N=29, 12.60%) are other frequent metaphors selected by these students. The rest, 15 metaphors, constitute 51.30% of the metaphors selected by these students.

### 5.3. Locus of control

In order to examine the possible relationship between students' choice of metaphors and their LOC, first, LOC mean scores of both groups are compared. Table 13 demonstrates the mean scores of the two groups.

Table 13: Descriptive statistics: A comparison of LOC in students of the humanities and those of the non-humanities

# **Group Statistics**

| Std. Error<br>Mean | Std.<br>Deviation | Mean     | N  | Group                        |
|--------------------|-------------------|----------|----|------------------------------|
| 1.20546            | 102.8056          | 94.7222  | 72 | History and Sociology<br>LOC |
| 1.05031            | 8.91215           | 10.22868 | 72 | Engineering and Chemistry    |

As it is shown above, the mean score in LOC in students of the humanities is 94.72 and the mean score in LOC of students of the non-humanities is 102.80. Table 14 shows whether this difference in mean score is significant or not.

Table 14: Determining the significance of the mean score difference in LOC

# **Independent Samples T-Test**

|  |          |                          |                    |                    |    |      | Leven<br>Test fo<br>Equali<br>Variar | r<br>ty of |                 |
|--|----------|--------------------------|--------------------|--------------------|----|------|--------------------------------------|------------|-----------------|
| 95% Confi<br>Interval of<br>Difference | the      | Std. Error<br>Difference | Mean<br>Difference | Sig.<br>(2-tailed) | df | t    | Sig.                                 | F          |                 |
| Upper                                  | Lower    |                          |                    |                    |    |      |                                      |            |                 |
| -                                      | -        | 1.59884                  | -                  | .000               | 1  | -    | .672                                 | 180        | Equal variances |
| 4.92227                                | 11.24393 |                          | 8.08333            |                    | 4  | 5.05 |                                      |            | assumed<br>LOC  |
| 3                                      | 93       | 84                       | 33                 |                    | 2  |      |                                      |            |                 |
|  |          |                          |                    | .000               |    |      |                                      |            |                 |
| -                                      | -        | 1.598                    | 1.598              |                    | 1  |      |                                      |            |                 |
| 4.922                                  | 11.224   | 84                       | 84                 |                    | 4  |      |                                      |            |                 |
| 2                                      | 44       |                          |                    |                    | 2  |      |                                      |            |                 |

As Table 14 demonstrates, the difference between the two mean scores is significant at p<.05 ( $t_{observed}$  = 5.056,  $t_{observed}$  >  $t_{critical}$ ), and students of civil engineering and chemistry (non-humanities) have higher scores in LOC. In other words, students of these disciplines are more internally controlled than students of history and sociology (humanities). In summary, students of the humanities, who had external LOC, had behaviouristic metaphors for language teacher and learner. On the other hand, students of the nonhumanities, who had internal LOC, had situative and cognitive metaphors for language teacher and learner.

#### **Discussion**

One of the findings of this study was that students of the humanities have external LOC while students of the non-humanities have internal LOC. This is in agreement with Ghonsooly and Elahi (2010). Students of the humanities have probably experienced more educational failures. Bender (1995) held that if a student tries hard at school tasks, but frequently fails to get good grades, he or she will develop an external LOC over time. In Iran, studying the humanities is less socially valued and those students who are not quite successful at school are somehow forced to study the humanities at high school. It is certainly fair to say that most of these students are not sufficiently interested in what they study. This lack of sufficient interest also may adversely influence their academic success at the university. Ghonsooly and Elahi (2010) found that students of the humanities are less successful in their General English courses in comparison with students of engineering and students of the sciences. As a result, it is understandable to claim that students of the humanities have developed an external LOC. These students hold the view that they cannot control outcomes, so they do not accept responsibility for their learning. In contrast, students of the non-humanities (civil engineering and chemistry) have an internal LOC. Similarly, it is in line with Ghonsooly and Elahi (2010) who found that students of engineering and the sciences are internalizers. It can be inferred that because more social value is attached to what they study, they are more motivated to study as hard as they can. This will lead to more success, which in turn, generates more motivation. Consequently, these students have developed an internal LOC over time. Unlike students of the humanities who are externalizers, students of the non-humanities believe that they can control outcomes, so they accept responsibility for their learning.

As it was mentioned, students of the humanities have external LOC. These students ascribe their success and failure, in education in general and in language learning in particular, to external causes such as luck or task/test difficulty. As a result, they hold on to the belief that they have no control over their process of learning. Consequently, they do not take on the responsibility for their language learning. In the light of these notions, we can arrive at the conclusion that students of the humanities assume a passive role for themselves in the process of language learning. Since they do not accept responsibility for their language learning, they think it is not necessary to play an active role in the language classroom. In addition, they do not try to take charge of their language learning by adopting suitable language learning strategies. Similarly, Hosseini and Elahi (2010) found that externalizers (students of the humanities are externalizers) use

all types of language learning strategies (identified by Oxford (2002)) less frequently than internalizers, except memory strategies. Therefore, it is quite natural that they expect their teachers to do everything including devising the objectives of the course, preparing teaching materials, presenting the materials and being the only managers and organizers of what happens in the class. In this situation, the teacher becomes an authoritative figure who determines all that happens in the classroom. He or she specifies who to speak, when to speak, and how to speak.

The results of metaphor analysis showed that students of the humanities selected metaphors for current situations reflecting behaviouristic guidelines of learning. Their choice of metaphors revealed that in their opinion the current situation of teaching and learning English is within the framework of the behaviouristic perspective of education. Metaphors like employee, viewer and raw material represent the conceptual metaphor LEARNER AS RECIPIENT, suggesting a passive role for the language learner (Pishghadam & Navari, 2010). It is quite in agreement with what we discussed about LOC in students of the humanities. Since these students have external LOC, they play down the importance of having an active role in the process of language learning. In their opinion, success in language learning does not necessitate accepting the responsibility for their own learning. Hence, they consider a passive role for themselves in the quest of mastering a foreign language. Paying attention to the most frequent metaphors they have selected for the language learner in an ideal situation is helpful. Recipient, employee and raw material are metaphors most frequently selected by these students for language learner in ideal situation. This is another illustration for the assumption that they prefer a passive role for language learners. Similarly, metaphors such as leader, provider, preacher, moulder and nurturer that represent the conceptual metaphor TEACHER AS CONDUIT or TEACHER AS PROVIDER OF KNOWLEDGE suggest that a language teacher is holder, provider and transmitter of knowledge (Pishghadam & Navari, 2010). These metaphors indicate that students of the humanities assume that their teachers should play a leading and managerial role in the classroom. This assumption is also in line with the discussion on LOC in these students. Students of the humanities, who are externally controlled, expect their teachers to do everything for them. In other words, they perceive a teacher-dominated atmosphere as normal. Leader, provider and preacher are the most frequent metaphors chosen by students of the humanities for the language teacher in ideal situations. This clearly indicates that in their opinion it is best for the language teacher to play a central and active role in the classroom.

Leavy, McSorely and Bote (2007) maintained that metaphors belonging to the behaviouristic paradigm of learning represent learners as passive recipients, teachers as transmitters of knowledge, and learning as a process of forming new associations between stimulus and response. It is to be expected that students of the humanities, who have external control orientations, place heavy reliance on memorization in their language learning. This supports Hosseini and Elahi's (2010) conclusion that memory strategies were found to be the most frequent ones adopted by externalizers. "May be the easiest way for them to do the process of learning is memorization" (Hosseini & Elahi, 2010, p. 39). Furthermore, in their study students with external LOC were reported to use metacognitive strategies far less frequently than students with internal LOC. They explained that "externalizers do not bother themselves to plan, organize, and evaluate what they want to learn" (p. 39).

The results of this study also demonstrated that students of chemistry and civil engineering (non-humanities) have internal LOC. They attribute their success and failure, in education in general and in language learning in particular, to internal factors like their effort and ability. Consequently, they hold the view that they can exercise control over their process of learning. Therefore, they accept the responsibility for their language learning. Considering these notions, we can conclude that students of the non-humanities believe that they can play an active role in their language learning. In fact, they attempt to play an active role in the language classroom and in their journey to acquire a second language because they shoulder the responsibility of language learning. Furthermore, they try to pursue effective language learning strategies. This point supports Hosseini and Elahi's (2010) claim that internalizers employ language learning strategies, identified by Oxford (2002), more frequently than externalizers. These learners are by no means passive in their learning; "rather, they are actively involved in making sense of the tasks or problems with which they are faced in order to learn" (Williams & Burden, 1997, p. 144). Internalizers are probably considered as selfregulated learners who "seek to accomplish academic goals strategically

and manage to overcome obstacles using a battery of resources" (Winne, Randi, & Como, 2000, as cited in Dornyei, 2005, p. 163). It is logical to say that with internalizers the atmosphere of the classroom is far from teacher-dominated.

Metaphors representing the situative or socio-historical perspective reflect the belief that learning is situated in the context of its construction (Leavy, McSorely, & Bote, 2007). By choosing metaphors like traveler and partner for language learners in current situations, and metaphors such as challenger, researcher and travel guide for language teachers, students of the non-humanities opted for the situative paradigm of learning to obtain more knowledge from the interaction between them and their teacher and more opportunities for practice in using the second language. These metaphors represent conceptual metaphors of LEARNER AS INTERACTOR and TEACHER AS SCAFFOLDER, suggesting an active role for language learners (Pishghadam & Navari, 2010). It is in line with our discussion on LOC in students of the non-humanities. Since these students have internal LOC, they feel responsible for their learning. This prompts them to be active in the language class and also to employ efficient language learning strategies. This sense of responsibility may motivate them to take part in choosing the techniques (or at least some aspects of them) to be used in the class, and in determining how to achieve the goals of the techniques.

Paying attention to the most frequent metaphors these students have selected for language teacher and learner in ideal situations is also illuminating. Constructor and partner are metaphors most frequently selected by these students for language learners in ideal situations. The language learner as a partner is a metaphor which suggests that language learners need to engage in authentic interactions and activities of a community in order to construct knowledge. Here the language classroom is a community of participants. The language learner as a constructor is a metaphor that reflects the cognitive paradigm of learning. Based on this view, knowledge is composed of interrelated schemata which are constructed by transferring old schemata into new ones or by developing new schemata. Therefore, the mind is involved in problemsolving and interpretation (Martinez, Sauleda, & Huber, 2001). Hence, these students preferred an active role for themselves as language learners by selecting this metaphor. The language teacher as friend, challenger and *innovator* are the most frequent metaphors selected by students of the non-humanities for language teachers in ideal situations. These metaphors illustrate the fact that these students, who are internally controlled, do not wish their language teachers to dominate the class. Instead, they expect their teachers to encourage them to construct their own version of knowledge. They want to "enjoy the privilege of facilitator teacher whom they can befriend" (Pishghadam, & Navari, 2010, p. 93).

Students of the non-humanities predominantly chose situative metaphors. This indicates that these students prefer to construct knowledge from the interaction between them and teachers. This calls for playing a more active role in the learning process. In addition, these students have internal LOC and believe that they can have control over their learning. As a result, they may resort more frequently to metacognitive strategies. It is compatible with Hosseini and Elahi's (2010) conclusion that metacognitive strategies were the most frequent ones used by internalizers.

#### Conclusion

The results of this research showed that students of the humanities (history and sociology) who have external LOC chose behaviouristic metaphors for language teacher and learner. In contrast, students of the non-humanities (civil engineering and chemistry), who are internally controlled, selected mostly situative and cognitive metaphors. ESP practitioners may pay special attention to these findings. Locus of control is a dynamic construct rather than a fixed one. Noer et al. (1987) hold that individuals with external LOC can be taught to develop internal LOC. The most effective way to apply attribution theory is reattribution training (Hastings, 1994, cited in Hosseini & Elahi, 2010). Therefore, teachers of ESP courses should help university students, especially students of the humanities, change their attributions, so that these students ascribe their failure to controllable factors such as their effort and ability rather than to uncontrollable factors like difficulty or chance. Based on Neurolinguistic programming, the behavior and strategies of successful people can be duplicated (Richards, & Rogers, 2001). Consequently, strategies and suggestions used by internalizers can be introduced to externalizers. They can be stimulated to emulate these strategies and suggestions.

The analysis of metaphors for language teacher and learner can provide us with insights into the way language learners conceptualize their language learning process. Exploring these conceptualizations can deepen our understanding about learners' implicit beliefs. Some of these hidden beliefs are constructive for the language learning process, whereas others are detrimental to this process. Drawing learners' attention to the metaphors they have selected, and encouraging them to reflect on these metaphors can be quite helpful. Learners can identify their problematic ideas that have a baneful influence on their learning process, refine these ideas, and decide to carry out appropriate actions to improve their education in general and L2 learning in particular (Pishghadam & Navari, 2010). Students of the humanities should not only try to develop internal LOC, but also pay attention to their ideas regarding language learning which are not rewarding for them. Having behaviouristtic attitudes towards learning makes them passive in language classes and also in ESP courses. ESP practitioners should help these students to rectify their mistaken assumptions.

Conducting any kind of research project is fraught with some limitations. First of all, this study was carried out with a relatively small sample. Another limitation of this study was that its scope was rather limited. Only students of Ferdowsi University of Mashhad participated in this research. Other studies with larger samples and at different universities in Iran can be done to ensure the external validity of these findings. In addition, further research can investigate the impact of learners' metaphors on their strategy use. Moreover, future research can explore students' metaphors for course books.

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