The Relationship between Iranian EFL Learners’ Sensory Learning Style and Their Autonomy Level

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Abstract
Autonomy in learning and teaching plays a pivotal role for language acquisition and by knowing learners VAK strategy (visual, auditory, kinesthetic), teachers can perform better. Also, such teachers who are aware of learners’ preferences in learning styles are successful in their teaching. Therefore, this study aimed at investigating the relationship between EFL learners’ autonomy and their sensory learning style. To meet the above purpose, a number of 50 male and 50 female students participated in the present study. After homogenizing them with TOEFL and Nelson tests and taking the VAK and Learner Autonomy Questionnaire (LAQ), the correlation of learners’ autonomy and sensory learning was calculated according to Spearman correlation coefficient. The result showed that the language autonomy in two universities is not equal whereas both universities are equal in sensory learning skills. That is, the language autonomy of Hormozgan University students is more than Islamic Azad University, Bandar Abbas Branch. And Islamic Azad University, Bandar Abbas Branch students’ sensory learning styles affect their language autonomy.

Keywords: language teaching, learner autonomy, language learning strategy, teacher autonomy

INTRODUCTION
Having knowledge of language especially English which is the international language, is a main tool of communicate with other people. So, many language institutes began to work around the world and language learning became a global need for everyone for business, communication, and commercial affairs. And it, according to Block and Cameron (2002), is a vital commodity in the globalized world. The services/information-based economy makes increasing demands on one’s language skills; new technologies and media change the cultural landscape; migration produces more linguistically diverse populations worldwide. These developments change the conditions in which languages are learned and thought. In relation to globalization and language teaching, the issues of globalization is a necessity for second language learning and teaching.

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Kumaravadivelu (2006) pointed out that language itself permeates every aspect of human experience and reflects images of that experience. Without language, it is almost impossible to imagine human life. He considered three conceptual vantage points for language such as: language as system, language as discourse, and language as ideology. It is worth to note that any individual has its own learning style. According to Skoda and Doudlik, it is "a particular individually specific way of learning which a learner prefers in a particular period of his/her life and commonly uses in different situations". And “the identical instruction” is “effective for some students and ineffective for others” is directly related to the existence of different learning styles. (Dunn & Dunn, 1993).

In case of learner autonomy, its basis is taking responsibility for one’s own learning and its development depends on that responsibility to understand what, why and how one is learning with what degree of success. Therefore, based on this definition, 1) learners cannot help but do their own learning, 2) learning will be more efficient when learners are critically aware of goals and methods, and 3) learning is through the development of such critical awareness that learners are empowered to transcend the limitations of their learning environment (Cotterall & Crabbe, 1999). In brief, the trends in language teaching has recently moved toward making learners more autonomous and shifting the responsibility toward the learner (Wenden, 1998).

**METHODOLOGY**

**Participants**

The participants of this study are selected from a group with an intermediate-high proficiency level of English. They are 100 students (50 male and 50 female) of Hormozgan and Islamic Azad University, Bandar Abbas Brach whose mother tongue is Persian. They all passed Entrance Exam and are proficient enough to understand and answer the questions of VAK and autonomy questionnaires.

In fact, the data were collected from intact classes of Hormozgan University, department of foreign language and Islamic Azad University, Bandar Abbas branch. They are BA students majoring in TEFL, with an age between 19-27 years old.

**Design of the Study**

The design of the present study is correlational as it aims to determine the percentage and range of Autonomy and VAK strategies of EFL learners of Islamic Azad University, Bandar Abbas Branch and Hormozgan University according to their language proficiency.

In other words, this study aims at finding out the learners’ learning strategies, their preferences, and their autonomy level and investigating the relationship between their learning style and autonomy level. Therefore, this study is a quantitative research as the quantitative data will be collected through two questionnaires of the students’ autonomy level and VAK strategies which identify the learners’ autonomy in learning and their VAK strategies.
Instruments

In order to accomplish the purpose of the study, the following instruments will be used.

Learner autonomy questionnaire (LAQ) which is designed by Zhang and Li (2004) for self-assessment of students also administered to see how autonomous the participants were in learning English as a foreign language. It is worth to note that this questionnaire was used in many theses such as “on the effect of language proficiency on learners’ autonomy and motivation” by Zarei (2015), university of Imam Khomeini, “The Relationship Between Teacher Autonomy and Learner Autonomy Among EFL Students In Bandar Abbas” by Saljoughi (2015), Islamic Azad University, Bandar Abbas Branch, and “The Relationship among EFL Learners’ Autonomy, Tolerance of Ambiguity, Reading Strategies, and Reading Comprehension” by Shakeri (2012), Islamic Azad University, Central-Tehran Branch.

VAK model which is designed by Fleming (2001). According to this model of learning style, most people possess a dominant or preferred learning style and some people have a mixed of these three styles. The questionnaire consists of randomly arranged sets of 5 statements on each of the four learning style preferences (visual, auditory, kinesthetic, and learning). And this questionnaire was used in many theses such as “Learning Styles And E-Learning” by Kanninen (2009), Tampere University of Technology, “An Exploratory Study Of Learning Styles in the Elementary Music Classroom” by Biedenbender (2012), University of Michigan, and “The Impact of Undergraduate Students’ Learning Preferences (VAK Model) on Their Language Achievement” by Moayyeri (2015), Islamic Azad University, Sistan and Baluchestan, Zahedan Branch.

Data analysis

Learner Autonomy Questionnaire (LAQ) and VAK questionnaire will be chosen as the main tool for data collection and assessing data from pupils. So this questionnaire will be distributed to the students of Hormozgan University and Islamic Azad University, Bandar Abbas Branch. To do so, the researcher provided instructions on how they complete the questionnaire. To obtain the data reliability, they will be informed that there is not any right or wrong answer. Then the obtained data will be analyzed in terms of Spearman correlation coefficient in the form of correlational statistics which indicates the degree and direction of a correlation or relationship between two variables and spearman is a correlation analysis used for ordinal data or with interval data when converted to ranks.

In fact, in this study, there are two main variables so the correlation coefficient for analyzing the data can be used that researcher suppose it can be the best one for analyzing the data.

A correlation coefficient indicates both the direction (i.e. positive or negative) and the strength (i.e. the size or magnitude) of the relationship. For example, if students received quite similar scores on two tests, their scores would have a high positive correlation. If their scores on one test were the reverse of their scores on the other,
their scores would have a high negative correlation. If their scores on the two tests were not related in any predictable way, their scores would have a zero correlation. The closer and absolute value of the correlation coefficient is to 1.00, the stronger the relationship between two variables is regardless of the direction of its correlation coefficient.

RESULTS

In this chapter, the findings and results are presented in the following sections within the framework of the research questions supported by tables and figures to illustrate the findings clearly.

The analyses were done in terms of the research questions as follow:

1. Is there any relationship between learners’ sensory learning and their autonomy level?
2. Which method of VAK strategies is more preferable to the learners of Islamic Azad University, Bandar Abbas Branch and Hormozgan University: visual, auditory or kinesthetic?
3. Do students’ learning skills of these two universities effect on their language autonomy?
4. Are there any statistical differences between Islamic Azad University, Bandar Abbas Branch and Hormozgan University students’ use of learning strategy and their autonomy level?

The learners’ learning strategy

In this section, learning styles are compared. In first table, as it is obvious, many students of both universities have skill A (Auditory) and after this skill, they have K (Kinesthetic) and then, V (Visual) skills alternatively.

<table>
<thead>
<tr>
<th>Learning style</th>
<th>Uni.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Azad</td>
<td>Hormozgan</td>
</tr>
<tr>
<td>A</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>V</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>K</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>AK</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>VK</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>AVK</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>27</td>
</tr>
</tbody>
</table>

In other words, from this analysis, the researcher can conclude that Islamic Azad University, Bandar Abbas Branch University students are more likely than Hormozgan University students to use auditory strategy for learning.
According to the above table (Table 1) and figure (Figure 1), the results showed that Auditory Strategy is the more frequently used strategy and Visual Strategy is the less frequently used strategy by the students of both universities. It is worth to mention that the blue column belongs to Islamic Azad University, Bandar Abbas Branch and the red one belongs to Hormozgan University. As it is obvious, AK (Auditory-Kinesthetic) skill bar in Hormozgan University is taller than Azad University bar.

Table 2. Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>2.630 a</td>
<td>5</td>
<td>.757</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>3.298</td>
<td>5</td>
<td>.654</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the above table, as it is expected, regarding to the significant level of Chi-Square Tests (0.757) that is more than 0.05, the learning skills in both universities are similar. As there are trivial differences between Azad and Hormozgan University, this result cannot be significant; therefore, the researcher concludes that both universities are equal in sensory learning skills.

Table 3. T-Test

<table>
<thead>
<tr>
<th></th>
<th>Uni</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lang. autonomy</td>
<td>Azad</td>
<td>28</td>
<td>3.1463</td>
<td>.32606</td>
<td>.06162</td>
</tr>
<tr>
<td></td>
<td>Hormozgan</td>
<td>23</td>
<td>3.3313</td>
<td>.30541</td>
<td>.06368</td>
</tr>
</tbody>
</table>

The below table, the independent samples test (Table 3) was carried out to see whether there were any statistical differences between Islamic Azad University, Bandar Abbas Branch and Hormozgan University students’ use of learning strategy and their autonomy in learning. According to this table, language autonomy was carried out and
studied in two University of Azad and Hormozgan then, the results were obtained by T-test in two independent situation.

Table 4. Independent Samples Test

<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>Equal variances assumed</td>
<td>.472</td>
<td>.495</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.088</td>
<td>48.114</td>
</tr>
</tbody>
</table>

The first table shows the descriptive information (Mean, Variance, and ...) in two universities of Islamic Azad University, Bandar Abbas Branch and Hormozgan and the comparison result is shown in second table. Regarding significant level of Levene’s Test for Equality of Variances (0.495>0.05), it is conceded that the variances are equal and then, the T-test findings were obtained from the first column. As it is obvious, the level of test signification (0.043) is less than 0.05; therefore, the result shows that the test is significant. Therefore, language autonomy in two universities is not equal. In terms of the Mean of these two universities, the conclusion is that the language autonomy of Hormozgan University students is more than Islamic Azad University, Bandar Abbas Branch university students.

Relation between Learners’ Autonomy Level and their learning Strategies

In this part, the researcher investigating whether students’ learning skills of these two universities effect on their language autonomy. So, this assumption was studied by One-way test which its result is shown below. The one-way analysis of variance is used to determine whether there are any significant differences between the means of two or more independent (unrelated) groups. Also, it is important to realize that the one-way is an omnibus test statistic and cannot tell you which specific groups were significantly different from each other; it only tells you that at least two groups were different. In other words, in statistics, one-way analysis of variance is a technique used to compare means of three or more samples (using the F distribution). This technique can be used only for numerical data.

For each university, the descriptive information in table 1 and the test result in table 2 are shown as follow:
According to the above table related to Islamic Azad University, Bandar Abbas Branch, the mean of students with auditory strategy is 3.1126, the mean of students with visual strategy is 3.3988, the mean of students with kinesthetic style is 2.9683, the mean of students with auditory-kinesthetic (AK) learning strategy is 2.7143, and the mean of students with auditory-visual-kinesthetic (AVK) strategy is 3.0714. That is, students with visual learning style have the highest language autonomy and the students with auditory-kinesthetic (AK) style have the lowest language autonomy.

According to the above table related to Hormozgan University, the mean of students with auditory strategy is 3.3571, the mean of students with visual strategy is 3.1714, the mean of students with kinesthetic style is 3.2000, the mean of students with auditory-kinesthetic (AK) learning strategy is 3.5238, and the mean of students with auditory-visual-kinesthetic (AVK) strategy is 3.8571. That is, Hormozgan University students with auditory-visual-kinesthetic learning style have the highest language autonomy and the students with visual style have the lowest language autonomy (V=3.1714).

The above table shows that the mean of students with auditory strategy is 3.3571, the mean of students with visual strategy is 3.1714, the mean of students with kinesthetic style is 3.2000, the mean of students with auditory-kinesthetic (AK) learning strategy is 3.5238, and the mean of students with auditory-visual-kinesthetic (AVK) strategy is 3.8571. That is, Hormozgan University students with auditory-visual-kinesthetic learning style have the highest language autonomy and the students with visual style have the lowest language autonomy (V=3.1714).

### Table 5. One-way Test for Azad University

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>11</td>
<td>3.1126</td>
<td>.26536</td>
<td>.08001</td>
<td>2.9343</td>
<td>3.2908</td>
<td>2.81</td>
</tr>
<tr>
<td>V</td>
<td>8</td>
<td>3.3988</td>
<td>.25190</td>
<td>.08906</td>
<td>3.1882</td>
<td>3.6094</td>
<td>3.05</td>
</tr>
<tr>
<td>K</td>
<td>6</td>
<td>2.9683</td>
<td>.33356</td>
<td>.13618</td>
<td>2.6182</td>
<td>3.3183</td>
<td>2.67</td>
</tr>
<tr>
<td>AK</td>
<td>1</td>
<td>2.7143</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>AVK</td>
<td>2</td>
<td>3.0714</td>
<td>.50508</td>
<td>.35714</td>
<td>-1.4665</td>
<td>7.6094</td>
<td>2.71</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>3.1463</td>
<td>.32606</td>
<td>.06162</td>
<td>3.0198</td>
<td>3.2727</td>
<td>2.67</td>
</tr>
</tbody>
</table>

### Table 6. Descriptive statistics of Hormozgan University

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>3.3571</td>
<td>.2696</td>
<td>.09438</td>
<td>3.1340</td>
<td>3.5803</td>
<td>2.95</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>3.1714</td>
<td>.24652</td>
<td>.11025</td>
<td>2.8653</td>
<td>3.4775</td>
<td>2.81</td>
</tr>
<tr>
<td>K</td>
<td>5</td>
<td>3.2000</td>
<td>.18257</td>
<td>.08165</td>
<td>2.9733</td>
<td>3.4267</td>
<td>2.90</td>
</tr>
<tr>
<td>AK</td>
<td>1</td>
<td>3.5238</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>AVK</td>
<td>1</td>
<td>3.8571</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>3.3048</td>
<td>.27088</td>
<td>.06057</td>
<td>3.1780</td>
<td>3.4315</td>
<td>2.81</td>
</tr>
</tbody>
</table>

### Table 7. ANOVA for language autonomy of Hormozgan University students

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.519</td>
<td>4</td>
<td>.130</td>
<td>2.223</td>
<td>.116</td>
</tr>
<tr>
<td>Within Groups</td>
<td>.875</td>
<td>15</td>
<td>.058</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.394</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
And finally, as it is shown in the above tables, considering the significant level of F test in Azad University (0.048 < 0.05), the learning skills effect on language autonomy but this test are not significant in Hormozgan University (0.116 > 0.05).

**DISCUSSION**

It is taken for granted that most of the students are interested in learning English and due to various factors that mentioned in the present study most of students of two universities prefer to use auditory strategy, so professional teachers by considering learners’ preferences in learning can facilitate their language learning. Also, amateur teachers and tutors by providing the questionnaires which were used in this study can find their students’ features and their way of learning and apply the appropriate teaching strategies.

In addition, the EFL teachers by encouraging their students to become more conscious and autonomous about their best learning styles could paved their way of learning a foreign language.

Moreover, this study could be beneficial for syllabus designers who have a fundamental role to make the process easier. By inserting relevant training hints regarding learners’ VAK strategies and by incorporating of autonomy in learning and the students’ sensory learning strategies in their courses, the syllabus designers can make the learning process easier and more interesting. And learners through using their special strategies can overcome their learning difficulties. As a result, EFL teachers with relevant training motives which were inserted in appropriate parts of a course book can improve their teaching activities.

**CONCLUSION**

According to Reinfried (2000) the content of learner-centeredness is individualization learning and autonomy of learner. So a teacher in order to learn about the students learning styles by watching, listening, and asking questions can find their feature and learning styles and regarding these, change his/her classroom practice. Moreover, autonomy in learning and teaching plays a pivotal role for language acquisition and by knowing learners VAK strategy, teachers can perform better. Also, such teachers who were aware of earners’ preferences in learning styles are successful in their teaching. And (Fahim & Samadian, 2011, pp. 644- 651) pointed out that:

"As the goal of any teacher is to better meet the individual needs of their students, then it seems that the only way would be to address the diversity that is felt in the classroom, and better prepare students for their classroom language learning experiences by working with learning styles and applying concepts regarding learning styles available. The teacher is in an ideal position to aid students become more comfortable with learning approaches they have not previously experienced. Students need to know that their individual needs will not be accommodated at all times, and that even sensitive teachers must make informed decisions about which instructional approach will most efficiently transmit the material to be covered. Leading students to a more critical
awareness of their individual learning strengths and challenges results in empowering them to fully realize their potential in academic settings and need to assume more learner responsibility. Teachers may use a variety of activities to provide structured opportunities for students to explore their individual learning styles.”

Therefore, based on the findings of the present study by comparing two universities it can be concluded that the learning skills in both universities are similar as the level of Chi-Square Tests (0.757) is more than 0.05 and both universities were equal in sensory learning skills. Regarding language autonomy, it is not equal in two universities as the test was significant i.e. the level of Levene’s Test for Equality of Variances was 0.495 which was more than 0.05 so the variances were equal.

In the present study, students with visual learning style in Islamic Azad University, Bandar Abbas Branch, had the highest language autonomy and the students with auditory-kinesthetic (AK) style had the lowest language autonomy. But in State University of Hormozgan, AK (Auditory-Kinesthetic) skill is the more frequently used strategy. In other words, Auditory Strategy is the more frequently used strategy and Visual Strategy is the less frequently used strategy by the students of both universities.

Therefore, by using ANOVA (Analysis of Variance), it could be said that Islamic Azad University, Bandar Abbas Branch students’ sensory learning styles affect their language autonomy as $F=2.672$, $df=4$, $Sig=0.048<0.05$. And Hormozgan State University students with auditory-visual-kinesthetic learning style (AVK) have the highest language autonomy and the students with visual style have the lowest language autonomy ($V=3.1714$).

**SUGGESTIONS FOR FUTURE RESEARCH**

The present study only focused on the relation between Iranian EFL learners’ sensory learning style and their autonomy level. The researcher suggests the following areas worth to investigate with regard to the subject matter:

1. The relationship of the EFL teachers’ autonomy and language teaching can be done.

2. The relationship of the constructivism and learners’ autonomy in second language teaching and learning also can be done.

3. The Relationship of EFL Learners’ Autonomy can be done with their Tolerance of Ambiguity, Reading Strategies, and Reading Comprehension and also further studies may investigate the interference between these strategies.

**REFERENCES**


