Perceptual Learning Style Preferences of English Major Libyan University Students and their Correlations with Academic Achievement

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ABSTRACT

Exploring perceptual learning style preferences and their relationships with academic achievement is important to success in teaching and learning language. The aim of this study, therefore, was to investigate the perceptual learning style preferences of Libyan EFL University students majoring in English at Omar Almukhtar University and to check whether there is a significant relationship between students’ perceptual learning style preferences and their academic achievement. A total of 75 fourth year English major students were participated in this study. A self-reporting learning style questionnaire developed by Kinsella (1994) was used to collect data and final semester examination scores were used to determine the average academic achievement for each participant. The findings showed that tactile style was the most dominant learning style among the students followed by auditory style while kinesthetic style was the least favoured learning style. The findings also revealed that there was a significant relationship between students’ learning style preferences and their academic achievement; the strongest correlation ($r=0.30, P<.01$) was found between the auditory learning style and academic achievement. The findings are discussed in this study with implication for university instructors to identify their students’ perceptual learning style and match them with their teaching style to influence students’ achievement, and deliver their lectures by using different approaches and techniques to ensure that the learning process is effective and efficient for a great number of their students. This study contributed to the EFL field in Libya by providing clear information on students’ learning style preferences and their correlation with academic achievement.

INTRODUCTION

Learning English as a foreign/second language has been influenced by many factors. Among these factors are perceptual learning style preferences, methods by which a learner uses one or more of his/her senses to understand and remember information and experience (Reid, 1987). They are considered as the most popular styles used in educational research and have become a fertile area for a great number of researchers. Oxford and Anderson (1995) state that it is optimal for instructors to understand their students’ learning styles for language progress. The understanding and awareness of the learners’ individual differences such as perceptual learning styles should be borne in mind if instructors want to provide their students with an effective instruction to assist them improve their learning (Oxford & Ehrman, 1995).

Several studies (Chen and Hung, 2015; Naserieh and Sarab,2013; Reid, 1987) have investigated the perceptual learning style preferences around the world. Other studies have examined the relationship between perceptual learning styles and academic achievement (Ali, 2017; Tizazu & Ambaye, 2017). Few studies, however, have identified the correlation of perceptual learning style preferences of Libyan university students (Kibasan and Singson, 2016; Ghwela, Mustaffa & Noor, 2017). In fact, contradictory findings were found in these studies. For instance, Kibasan and Singson (2016) found that Libyan students majoring in English in the Faculty of Languages in Tripoli preferred visual learning styles, whereas English major students at Alasmaria University in Ghwela, Mustaffa and Noor (2017) study favoured auditory and kinesthetic learning styles.

The inconsistency of findings on perceptual learning style preferences of Libyan tertiary students suggests that more studies are needed in this regard. This study, therefore, aimed to investigate the perceptual learning style preferences of Libyan EFL students at Omar Al-Mukhtar University. It was also conducted to check whether there was a possible relationship between students’ perceptual learning style preferences and their academic achievement, as there was no literature available to do so in the Libyan context. It is hoped that the findings of the present study can be significant to Libyan researchers and teachers who want to understand the kinds of perceptual learning styles students employ when...
Learning English as a foreign language and their correlation to academic achievement.

LITERATURE REVIEW

Learning styles have been defined in different ways, depending upon one’s perspective. Oxford & Lavine (1992) defines learning styles as methods that learners used in acquiring a new language. Celcia-Murcia (2001) defines learning styles as the general approaches—for example, global or analytic, auditory or visual—that students use in acquiring a new language or in learning any other subject. Learning style is sometimes defined as the characteristic cognitive, affective, social, and physiological behaviours that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment” (MacKeracher, 2004, p. 71).

While a number of at least 20 style dimensions have been identified, only eight of them would be particularly important for second language learning as singled out by Oxford and Anderson (1995). Of the 20 style dimensions, perceptual learning style preferences are considered as the most popular one used in educational research.

Reid (1995) considers perceptual learning style preferences as one of the important factors in her framework for investigating second language acquisition. Perceptual learning style preferences include visual, auditory, kinaesthetic, and tactile. According to Reid (1995), visual learners tend to acquire information more efficiently through their eyes. They prefer to read contents from books or watch teachers’ lectures. Auditory learners acquire knowledge more effectively through their ears and prefer oral-aural teaching. They enjoy discussing, communicating, and working with peers in the classroom and have better performance when teachers use blackboards or textbooks. Kinaesthetic learners learn more effectively through their body, especially movement. Tactile learners tend to learn more effectively through touch or hand-on activities. They enjoy making models related to particular knowledge content in class.

Based on this, several studies around the world have investigated the perceptual learning style preferences (Chen and Hung, 2015; Ghwela, Mustaffa & Noor, 2017; Kibasan and Singson, 2016; Naserieh & Sarab, 2013; Reid, 1987) and the relationship between such perceptual learning styles and academic achievement (Ali, 2017; Tizazu & Ambaye, 2017). Reid (1987) can be considered as the first researcher to measure perceptual learning style preferences in L2 field. She investigated perceptual learning style preference among 1,234 native and normative speakers who were studying English in the United States. Her results revealed that EFL students preferred kinesthetic and tactile learning styles more than native speakers, and most EFL students, including Spanish, Japanese, Korean, Chinese, Thai, and Indonesian ones, disfavoured group learning. Particularly, Arabic and Chinese students had higher preferences in visual and auditory learning styles than students from other country did. Korean students preferred visual learning style to a more significant level than did American and Japanese students. Thai, Malay, and Spanish students reported a high preference for auditory styles, while Japanese students were the least auditory.

Naserieh and Sarab (2013) identified the perceptual learning style preferences of 138 graduate students at Shahid Beheshti University, Tehran, Iran. The results indicated that the participants preferred kinesthetic and tactile learning styles and had a negative preference for group learning style. In their study of investigating perceptual learning styles among 1,105 ESP (English for Specific Purposes) learners from 10 schools at undergraduate level in Taiwan, Chen and Hung (2015) found that ESP university students in Taiwan favoured kinesthetic and auditory learning styles.

In Libyan context, to our knowledge, only two studies conducted to identify perceptual learning style preferences of tertiary Libyan students in the west of Libya. Kibasan and Singson (2016) investigated the perceptual learning style preferences of Libyan college students majoring in English at the University of Tripoli. Their result revealed that the participants favored visual learning style. Ghwela, Mustaffa, and Noor (2017) found different results that Libyan EFL university students majoring in English at Alasmaria University, Zliten, Libya had strong preference for auditory and kinesthetic learning styles.

The choice and use of the perceptual learning style preferences can be influenced by many factors and academic achievement is one of them. Achievement is defined as measurable behaviour in a standardized series of tests (Simpson and Weiner, 1989). Many teachers have attempted to spur academic achievements of their students in several ways (Abidin, Rezaee, Abdullah & Singh, 2011). Identifying student’s learning styles is one of the ways, as stated by Abidin et al. (2011), to determine strengths for academic achievement. The students’ preferred learning style may have a positive or negative impact on the success of the student in the foreign language classroom. The mismatch between learning and teaching styles can cause academic failure, frustration, and demotivation (Reid, 1987).

Few researches have been therefore conducted to investigate the relationship between learning style and academic achievement. Tizazu and Ambaye (2017) found a significant relationship between Ethiopian students’ learning styles and their academic achievement. They discovered that students who preferred auditory style were more successful in their academic achievement than the students with the other learning style preferences. In contrast, Ali (2017) reported that Ethiopian students’ learning style preferences had a negative correlation with their academic achievement.

According to this review of studies on the investigation of perceptual learning style preferences especially in Libyan context, it is found that the findings of these studies were inconsistent (See, e.g. Kibasan and Singson, 2016; Ghwela, Mustaffa, and Noor, 2017). In addition to this, studies, in non-Libyan context, investigating the relationship between learning style preferences and academic achievement reported contradictory findings (See, e.g. Ali, 2017; Tizazu and Ambaye, 2017).

These inconsistent findings on learning style preferences confirmed what Oxford and Anderson (1995) have neces-
sitated is more research on learning styles should be replicated in other parts in order that more consistent information become available within and across population. Hence, the aim of the present study was to investigate the perceptual learning style preferences of Libyan EFL students at Omar Al-Mukhtar University at the east of Libya. It was also conducted to check whether there was a significant relationship between students’ perceptual learning style preferences and their academic achievement, as there was no literature available in the Libyan context in this regard. It is hoped that the findings of the present study can be significant to Libyan researchers and teachers who want to understand the kinds of perceptual learning styles students employ when learning English as a foreign language and their correlation to academic achievement.

RESEARCH QUESTIONS
The present study aimed at investigating the perceptual learning style preferences of Libyan EFL students at Omar Al-Mukhtar University at the east of Libya and checking whether there was a significant relationship between students’ perceptual learning style preferences and their academic achievement. Using a quantitative research, the present study was designed to answer the following questions:
1. What are the perceptual learning style preferences employed by EFL Libyan university learners when learning English language?
2. Is there a significant relationship between perceptual learning style preferences and academic achievement of EFL Libyan students?

METHOD
Participants
The participant in this study were 75 EFL university students in the Faculty of Arts and Science at Omar Almukhtar University in Libya. All the participants are fourth-year students majoring in English in the academic year 2018/2019, and their mother tongue is Arabic. Their educational background is similar, and they all have spent 10 years of learning English since preparatory school.

Instruments
Two instruments were used to collect students data. One was questionnaire, another one was final semester examination scores. The questionnaire was the Perceptual Learning Preferences Survey (PLPS; Kinsella, 1994). This self-reporting questionnaire consists of 32 statements with eight in each of the four learning styles to be looked at (tactile, kinesthetic, visual, and auditory). Students are asked to consider such statements as “I remember information well by listening to tapes”, and “To remember a new word, I must hear it and say it”. They respond to each statement by using a three-point value: usually=3points, sometimes=2points, and rarely=1point. To ensure the reliability of Perceptual Learning Preference Survey, the Cronbach Coefficient Alpha test was adopted, and the overall reliability of the scale was 0.80 which is very good. The second instrument was the final semester examination scores taken from the record office of the university in order to determine the average academic achievement for each participant. The grading system followed in Libyan universities is as follows: Excellent (85-100), Very Good (75-84), Good (65-74), and Pass (50-64).

Data Collection and Analysis
The questionnaire was given to the participants by the researchers themselves. The participants were informed of the purpose of the survey and of the fact that there was no right or wrong answer and their participation is voluntary. The participants were able to complete the survey in about 30 minutes. Each completed questionnaire was manually examined, and all of 75 questionnaires were usable and used for statistical analysis. The data from the PLPS questionnaire sheets were analyzed with SPSS 21.0 to measure the Perceptual Learning Style Preferences. Descriptive statistics was carried out to explore the participants’ general pattern of perceptual learning style preferences favoured. Correlation analysis was conducted to examine the relationship between perceptual learning style preferences and academic achievement of students.

FINDINGS AND DISCUSSION
Perceptual Learning Styles Preferences (PLSP) of Libyan University Students
To identify the perceptual learning style preferences of 75 Libyan university students, descriptive statistics (percentages) were used. The findings are shown in Figure 1.

As indicated in Figure 1, tactile style was the most favoured learning style among the students (31.10%), followed by auditory learning style (28.42%), and visual learning style (25.66%), while kinesthetic learning style was the least favoured learning style (14.82). This shows that most participants (31.10%) enjoy learning through touching, exploring the world around them, and experiments. Tactile learners may get distracted during lectures or discussions required long periods. The findings of this study are in disagreement with that of Kibasan and Singson (2016) who found that English major Libyan students at the University...
of Tripoli favoured visual learning style, and of Ghwela, Mustaffa, and Noor (2017) who found that Libyan EFL university learners majoring in English at Alasmaria University, Zliten had strong preference for auditory and kinesthetic learning styles. One possible explanation for the inconsistent findings of perceptual learning styles among Libyan university students could be related to different context, as these studies were done in different universities around Libya.

In addition, the findings revealed that some of the participants (28.42%, See Figure 1) preferred auditory learning style. They learn best through listening or hearing. They favoured a style of learning that engaged them in class discussion or conversations. They remember and understand information well through reading or taking notes of lectures (Reid, 1995).

Kinesthetic learning style, however, was the least preferred style for university Libyan students. This finding differ significantly from those by Ghwela, Mustaffa, and Noor’s (2017) study who found that auditory and kinesthetic learning styles were highly preferred styles by English major Libyan university students. It is likely that the kinesthetic learning style being least preferred by Libyan students in this study is that in teaching style in Libyan schools, students sit in their seats and listen to their teachers while delivering the lesson.

In general, the findings showed that the English major Libyan university students participated voluntarily in the present study have multiple learning style preferences with strong preference for tactile mode (See, Figure 1). This indicate that university Libyan students learn effectively, as the students who use multiple learning styles or a combination of different learning styles are able to learn effectively and thus be successful learners (Abidin et al., 2011).

### Correlation between Perceptual Learning Style Preferences and Academic Achievements

Pearson correlations were used to determine the relationship between the students’ perceptual learning style preferences and their academic achievement.

Correlations between the perceptual learning style preferences and academic achievement were significant as shown in Table 1. The strongest correlation (r=0.30, P<.01) was between the auditory learning style and academic achievement, whereas the correlation between tactile style and academic achievement was the weakest. This means that the English major Libyan students who use auditory learning style are more successful in their academic achievement compared with the students who use visual (r=0.27), kinesthetic (r=0.22), and tactile (r=0.21) learning style preference (See, Table 1). This finding is reported in Tizazu and Ambaye’s (2017) study who revealed that auditory learners scored better in their academic achievement than those students who prefer visual and tactile learning style preferences. This result can be explained by saying that teaching styles in Libyan universities are highly dependent on auditory style where teachers use whiteboards, textbooks and sheets. We can conclude that a match between teaching style and learning style have a positive impact on students’ achievement in their language learning.

### CONCLUSION

The aim of this study was to explore the perceptual learning style preferences and their correlation with academic achievement of 75 EFL Libyan students majoring in English at Omar Almukhtar University, using Perceptual Learning Preferences Survey (PLPS; Kinsella, 1994) and final semester examination scores. The findings reported above show that the participants have multiple learning styles with a higher preference for tactile learning style followed by auditory and visual learning styles. However, the participants show a low preference for kinesthetic learning style. With regard to the relationship between perceptual learning styles and academic achievement, a highly significant correlation was found between the auditory learning style and academic achievement.

The findings indicate that matching teaching styles with the learners’ learning styles can have a positive impact on the success of EFL students. As Ellis (1989) and Reid (1987) state that the incompatibility between students learning style and instruction may have a negative effect on the academic achievement of language learners. Therefore, university instructors themselves should identify their own style preferences and their students’ preferred learning styles to enhance learners’ achievement. It is also recommended that university instructors should deliver their lectures by using different approaches and techniques to ensure that the learning process is effective and efficient for a great number of their students.

Even though the present study has produced important findings in identifying the Libyan EFL learners’ pre-

### Table 1. Correlation Matrix between PLSP and academic achievement of Libyan Students

<table>
<thead>
<tr>
<th>No</th>
<th>PLSP</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tactile</td>
<td>17.30</td>
<td>3.66</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auditory</td>
<td>18.00</td>
<td>2.82</td>
<td>0.40**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Visual</td>
<td>17.45</td>
<td>2.84</td>
<td>0.45**</td>
<td>0.29**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Kinesthetic</td>
<td>17.00</td>
<td>4.04</td>
<td>0.53**</td>
<td>0.33**</td>
<td>0.22*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Academic Achievement</td>
<td>75.00</td>
<td>9.71</td>
<td>0.21*</td>
<td>0.30**</td>
<td>0.27*</td>
<td>0.22*</td>
<td>1</td>
</tr>
</tbody>
</table>

*P<0.05 **P<0.01
ferred learning styles and their relationship with academic achievement, these findings are subject to at least two limitations. The first major limitation of the study is that the study was confined to 75 fourth English major students at Omer Almukhtar University. The findings, therefore, cannot be generalized across all English major students from all Libyan universities. Further studies, with larger numbers of participants from a broad range of universities and colleges, are needed to provide more consistent findings. In addition to this, the present study only investigated the perceptual learning style preferences and their correlation with academic achievement. More studies are in need of investigating learning styles in relation to gender, discipline, age, personality type, and language strategies in basic and higher education.

REFERENCES