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The Correlation between Iraqi EFL Preparatory School Students⁷ Language Learning Styles and Language Proficiency

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ABSTRACT

Learning styles usually viewed as having a direct impact on foreign language learning. Knowing of students' learning styles contributes significantly to the development of the level of students in the foreign language where they deal with language inputs differently and each student has a different learning style. Accordingly, foreign language teachers should be aware of the students' individual differences in general and learning styles in particular.

This study aims to find out:

- 1. Iraqi EFL preparatory school students' learning styles.
- 2. Iraqi EFL preparatory school students' level of language proficiency.
- 3. The correlation between Iraqi EFL preparatory school students' learning styles and level of language proficiency.
- 4. Which of the learning styles do contribute to the interpretation of variation in language proficiency of Iraqi EFL preparatory school students.

This study is a correlational research in which the population consists of 325 students from different Iraqi preparatory schools during the academic year 2020/2021. The data is gathered by employing a questionnaire to assess students' learning styles and an English language proficiency test to assess students' proficiency represented by language skills. After their validity and reliability are verified, the instruments are applied to the research sample.

The results of the statistical manipulation showed the following:

- 1. Iraqi EFL preparatory school students show weak level of language proficiency.
- 2. The dominant learning styles of Iraqi preparatory school students are random/intuitive style, followed by impulsive/reflective, while the sequential learning style comes third. While the use of closure/open oriented and deductive/inductive learning styles are not statistically significant.
- 3. Iraqi EFL preparatory school students' learning styles are statistically correlated with their English language proficiency.
- 4. The visual, auditory, impulsive/reflective, and synthetic/analytic styles contribute to participants' language proficiency more than the other styles do.

According to the results achieved, a set of conclusions and recommendations is put forward.

Key Words: Learning Style, Language Proficiency and Preparatory School

THE PROBLEM

EFL students have a variety of sensory, personality, and cognitive learning styles, which may have a direct impact on the process of language learning. In EFL, learner-specific variables distinguish one individual from another. Learners are typically diverse in terms of learning styles, techniques, gender, language competence, personality, and encouragement. Learning styles considered critical in FLL as they decide how each individual views his or her own unique language learning process. That is to say, individual variables with social, cognitive and affective dimensions are expected to shape learners' approach to language and the steps they take during this phase (Ellis, 1999:100).

Teachers may be able to fully understand teaching practices and decide what types of class activities will be appropriate with students in the classrooms if they are relevant to students' learning styles, while, students' awareness of their learning styles may allow them not only to be more informed for learning but also to be more analytical about the learning styles they use (Reid, 1995:14)

The knowing of learning styles, according Lohri-Posey (2003:54), reflects students' styles for various types of information, multiple ways of sensing information, and the pace at which they

comprehend information. Teachers are more likely to use successful learning techniques if they have a decent knowledge of their students' learning styles. Students that have a correspondent learning style to the teacher's teaching techniques are stated to attain and retain knowledge better and are more enthusiastic to learn. According to Fatt (2000:38), students do not benefit from teaching strategies that are not in harmony with their learning styles. So, teachers should have a classroom environment that fits the specific learning styles of students, allowing them to learn more often and feel more at ease with their own learning styles.

Manochehri & Young (2006:314) believe that learning style is a good predictor of student's desired learning process. Having a teacher that identifies students' learning style may help to minimize learning challenges. Concerning learning styles, many researches usually assert that there is a strong relation between students' learning styles and the level of language mastery (Brown et al., 1996; Busato et al., 2000; Chamorro—Premuzic & Furnham, 2003; Behnam and Fathi's, 2009; Marzulina's et al., 2019; Foroozadehfar & Famil's 2019). While, others show that there isn't correlation between students' learning styles and their language proficiency

(Sharp, 2009; Chen, 2013; Gappy, L. L. (2013). Soozandehfar & Souzandehfar, 2011; Fahrudin & Nugroho, 2015)

According to numerous reports, Iraqi EFL students develop a low mastery of English and usually perform poorly in the various language skills (Ugla, 2017; Chalil, 2018; Tawfeeq, 2018). Such a deficient results in low **English** proficiency, which is likely to impede their ability to communicate, present, and participate in class might be partly attributed to the unmatched teachers' teaching techniques and students' learning styles (Al-Fahdawi, 2014).

Accordingly, there is an urgent need to examine the correlation between learning styles and English proficiency of Iraqi EFL preparatory school students. However, the problem of the study is clarified as it is curried to answer the following questions:

- 1) Is there a correlation between Iraqi EFL students' learning styles and English language proficiency?
- 2) Which learning styles contribute more to students' progress in English language proficiency?

Aims

This study aims to find out:

1. Iraqi EFL preparatory school students' learning styles.

- 2. Iraqi EFL preparatory school students' level of language proficiency.
- The correlation between Iraqi EFL preparatory school students' learning styles and level of language proficiency.
- Which of the learning styles do contribute to the interpretation of variation in language proficiency of Iraqi EFL preparatory school students.

Limits

The study is limited to:

- 1. EFL Preparatory school students in Baghdad governorate.
- 2. The academic year 2020-2021.

Value

This study is likely to be of value to all those who are associated with the process of teaching English as a foreign language at all levels of education, specifically students, teachers, and teaching materials developers. Students may benefit from the intellectual of the analysis by familiarizing themselves with specific LSs in order to determine the suitability of each style in general and in studying EFL in particular. Teachers may be assisted to increase their awareness of how to effectively manage the diversity of students if they are aware

of their LSs. This will allow them to set new regulations for how to better assist them in achieving successful results in the EFL classroom. Teachers are required to be familiar with their students' learning styles and to appropriately modify their teaching methods and techniques in light of these styles in order to improve students' progress. The analytical part of the current study and the findings could provide an acceptable source for adapting and developing certain materials to best reflect the teaching processes and produce greater benefits for teaching material developers. Furthermore, this study may assist researchers in general as a reference for the use of information, findings, recommendations, and future studies in the English language teaching methods.

THEORETICAL BACKGROUND

Learning Styles

Learning styles in psychological science refers that Learners' chosen method of learning, which general involves the method of acquiring, analyzing, and storing new knowledge (Dictionary.Com, 2012). The word learning styles refers to a language learner's major approach to language learning in the field of second language learning studies. The Student Learning Style Scale (Riechmann & Grasha, 1974), the Learning Style Inventory (Kolb, 1976; 1984), the Productivity Environmental Preference Survey (Dunn, Brown, & Bearsall, 1991), and the Embedded Figures Test (Witkin, Oltman, Raskin, & Karp, 1971) are only a few examples of measures used to assess learners' learning styles. Some, such as the Perceptual Learning Style Questionnaire (Reid, 1987), Learning the Perceptual **Preferences** (Kinsella, Survey 1993), the Style Analysis Survey (Oxford, 1993) and Learning Style Questionnaire (Willing, 1987) explicitly develop for second/foreign language testing .In addition, learning styles consider a major focus of research in the field of language learning since it is generally accepted that they are important in foreign language learning. Learning styles can be classified in a variety of ways. Some learning styles definitions are described as follows:

Scholars in the field of ELT are concerned with defining term of learning styles. Learning styles are described by Dunn and Dunn (1979, as cited in Reid, 1987: 89) as differences among learners in how they use one or more perceptions to comprehend, absorb and organize information. The concept is also described by Claxton and Ralston (1978:7) as a learner's coherent way to respond and using stimulus in the scope of learning. styles Learning are also cognitive,

affective, and behavioral characteristics that are relatively stable indicators of how learners perceive, interact with, and respond to classroom contexts, according to Keefe (1979:4). Dun et al (1989 as cited in Clenton, 2002:56) refers that learning styles consist of various variables such as "individual responses to sound, light, temperature, design, perception, intake, chronobiological highs and lows, mobility and persistence, ...motivation, needs. responsibility (conformity) and need for structure...". In addition,(Galloway & Labarca ,1990:13) adds that Environmental and perceptual factors affect our physical and sensing desires and needs; cognitive variables decide how we perceive, conceptualize, and organize our globe; and thoughts and feelings emerge from cognitive, personality, and affective influences and form our attitudes and behaviors in learning situations and process.

Most qualitative psychologists classify learning styles into four broad categories: cognitive, affective, physiological/sensory, and behavioral (Oxford, Hollaway, & Hortin-Murillo, 1992; Wallace & Oxford, 1992; Willing, 1988). The alternative modes of mental processing are referred to as cognitive styles as well as Field-independent/field-dependent learning styles, analytic/global learning styles, and reflective/impulsive

learning styles are all examples cognitive styles. Affective styles are styles behaviors that determine individuals focus on in a learning process (Oxford, 2003). Moreover, the ability to explore experiences and environments that are consistent with one's own learning habits is referred to as behavioral styles. perceptual tendencies of individuals conducted are covered and in physiological/sensory learning styles, which are generally investigated in EFL studies.

Similar to the definitions learning styles, different scholars have different views towards the structure of these learning styles. Keefe (1982) says that learning styles are comparatively stable when individuals interact with the learning situations and contexts. Ehrman and Oxford (1990) point out that learning styles are based traits which are retained and used in the despite of the teaching methods and classroom atmospheres. styles Learning are also used unconsciously by individuals for retaining, understanding and analyzing new information (Reid, 1998). However, Ehrman and Oxford (1990) add that new learning styles can be developed over time, and that existing styles can be modified when individuals take notice of them. Sternberg (1994:174) says that learning styles "are not permanently determined at

birth". Learning styles can change in different situations and stages of life, and environmental reinforcement can result in shaping of learning styles. For example, rewarding learners who use certain styles can lead to develop these learning styles. Furthermore, developing learning activities that are better addressed with these styles will lead to learners preferring those styles. He also claims that creation of learning styles socialization is linked to one's value system. Learning styles, according to Kinsella and Sherak (1998), are neither set nor entirely inherent. They discovered that classroom roles and values can support individuals' learning styles, and that individuals prefer the methods to which are most frequently exposed, particularly when they achieve academic success. That is to say, learning styles are a reflection of how individuals acquire information in previous. Learning styles, according to some scholars, are genetically defined and the consequences of one's "genetic makeup." Dunn (1999:3), for example, claims that learning styles are a biologically and developmentally implemented collection of traits. In her study, she discovered that three-fifths of learning styles are biologically put into effect. Other variables, such sociocultural environmental and influences. to connected the are

development of learning styles, according to Dunn (1990).

In academic studies, the terms learning style and cognitive style are often synonymously. used To prevent misunderstanding, Ellis (2008) suggests that the terms learning style and cognitive style be distinguished. Allport (1937) defines cognitive styles as a person's preferred method of mental processing, which involves problem solving, thought, perceiving, and analyzing. Learning style, on the other hand, is associated with the use of cognitive style in education (Riding & Cheema, 1991). Riding and Cheema (1991) add that cognitive style can be defined in terms of bipolar dimensions (e.g., wholist-analytic, impulsivereflective, concrete-abstract), while learning style can involve a variety of nonexclusive components (visual, oral and kinesthetic styles). Cognitive learning style may also be thought of learning style. Rayner (2000) differentiates learning and cognitive styles based on the consistency in which they interpret knowledge in various situations and contexts. They describe cognitive style as a consistent method of information processing that is related to other affective, behavioral, and behavioral influences. Other theorists, on the other hand, believe that learning styles can shift with experience or circumstance, and that they can also be trained (Cassidy,

2004; Holec, 1987; Little & Singleton, 1990).

English Language Proficiency

In Ramelan, Mariani and Mu'in (2007:3)Finocchioro cited Wardhraugh (1984) Language is a set of arbitrary verbal symbols that allow all members of a culture, or those who have acquired the culture's system, to communicate and interact. Language is an arbitrary system of articulated sounds used by a group of people to conduct the activities of their community. . Similarly, In Oxford Advanced Learner's Dictionary (2015:848), language is defined as the tool of communication and exchanging ideas among people in a particular context or area, and it is also defined as the use by individuals with a system of sounds and words to communicate. Language, according to Gumperz in Mariani and Mu'in (2007:3), is a system of rules that enable communicators convert information from the outside world into speech.

The scope of language proficiency in English listening, speaking, reading, and writing is referred to as English proficiency. The way we think about language proficiency has a great influence on a lot of legal and hypothesized problems in learning (Allen, Swain, Cummins and Harley, 1990:7). Proficiency

is characterized as a person's ability to communicate or act in a learned language. Language proficiency is described by Chamber (2007: 88) as the ability to communicate in a foreign language. As a result. English proficiency described as the ability to comprehend spoken and written English. In addition, the ability to do something in a language and the understanding of it are also included in the concept of language proficiency in a second language. As a consequence, language proficiency includes the communicative ability, knowledge structures, and skills of a learner or user (Canale, 1983:44-45).

According to Stern (1991: 539-542), the purpose of foreign language instruction is to assist students in achieving language proficiency in the target language. In his approach, describing and conceptualizing proficiency is a vital step in a foreign language learning. He proposes following level of English language proficiency: elementary proficiency, limited working proficiency, minimum professional proficiency, and maximum professional proficiency: and the ability to communicate in a native or bilingual manner. He goes on to say that a number of foreign language individuals' English language proficiency varies from lower level to full - language proficiency. The lower level is incomplete since it is

contextual. Learners consider as second language learners since they speak at least one other language. Brumfit (1984: 540-543) introduced fluency, rather than proficiency, as the most powerful operation of the language system so far acquired by the speaker.

Research papers in the educational system, similar to applied linguistics, results in a new way of comprehending language proficiency in terms of Communicative Academic Language Proficiency and **Basic** Interpersonal Communication. Skills. It denotes academic knowledge and language skills are acquired or taught through formal instruction. As a result, it is a skill that is required to complete academic tasks such assessing. Basic Interpersonal Communication Skills, on the other hand, the skills refers to required communicate with others in everyday situations. These two levels of language proficiency suggest that language proficiency in formal school settings is described as an explicit mastery of language aspects, and it can be measured by various language tests such as language proficiency test (Claudia, 2017:251).

Speaking Skill

In the oral mode, speaking is the most productive skill. It's more complex than it seems at first, and it entails more

than just pronouncing terms, as with the Speaking, skills. according Chastain (1998:330-358), is a productive ability that includes multiple elements such grammar, strategy, psycholinguistics, and discourse; for him, speaking entails more than just selecting the appropriate sounds, choosing the right constructing words, and correctly sentences.

Writing Skill

scholars characterize Several writing as a higher cognitive activity. Raimes (1994:164) describes it as a challenging, anxiety-inducing task. Writing in a second language, according to Silva (1993:669), differs from writing in a first language in essential strategic and linguistic ways. However, one of the most foreign language critical goals of instruction is to improve writing skills. As a result, a significant amount of research has been dedicated to understanding and developing what else is in writing, particularly in academic perspectives. Students' ability to organize sentences and intelligibly, paragraphs use accurate vocabulary and syntax, punctuate and spell correctly, and consider continuity and coherence are all part of writing proficiency (Lines, 2014:83).

Listening Skill

Listening skill is the most important receptive languages skills that means ability to understand the other language speakers naturally. Along with reading, writing, and speaking, one of the four Basic English skills is listening. Students need to be able to listen in order to pass both local and national **English** examinations that are administered in written form, so listening should be taught from kindergarten onwards. Listening is the practice of paying attention to the speaker and attempting to understand what is being said (Underwood (1989:1). The listener will then learn language created by others, and he or she will react to what they say and their purposes. Language learners would be effective if they master the language to the point that they can communicate using it. Littlewood (1981: 1) supports this theory, stating that learners must always be able to grasp grammatical features, but also be able to use language in real-life situations.

Reading Skill

In foreign language teaching, Richards and Schmidt (2002:190-194) say that reading is very important since it can enhance students' general language skills in English; assisting students to think in English, enlarging students' English vocabulary, improving their writing, and it

can be a good way to obtain about new ideas, facts and experiences. Therefore, on the basis of this opinion, the reading skill has been viewed as something that can help students to enrich their insight in English language.

According to Harmer (2003) reading is one of the receptive skills of English. Yet, the four language skills are closely related to each other. The ability to read texts in English is important as a bridge to understand the textbook. If students continue their studies to the senior high school and university, they are required to understand many books written in English.

METHODOLOGY

Population and Sample

The population in this study is Iraqi EFL preparatory school students at Baghdad governorate during the academic year 2020/2021.

The sample of this study includes six preparatory schools from the six directorates of education in Baghdad governorate. The total number of sample is 325 male students.

Instruments of the Study Learning Styles Questionnaire

With eleven different learning styles and 65 items total, the Learning Style Questionnaire is designed to assess three

major aspects of learning styles (sensory, personality, and cognitive styles). The first category of sensory styles consists of three styles (visual, auditory, and kinesthetic), each of which is indicated by five items, The second category consists of four (the personality types extroverted/ introverted style with ten items), (random/intuitive type with five items), (sequential style with five items), and (closure / open oriented style with six items). The third type, which represents the cognitive styles, comprises four ones; impulsive/reflective, fieldindependent/field-dependent, synthetic/analytic, deductive/inductive. and each style contains six items. In terms of the questionnaire's practical application, each indicator in the questionnaire is given five alternatives (never, rarely, sometimes, often and always).

English Proficiency Test

A four-part English proficiency test is designed by the researcher. Each part is designed to assess students' proficiency in one of the language skills. Accordingly, the test includes listening, reading comprehension), speaking, and writing parts.

Validity

To insure validity of the two instruments in this study, they subjected to

a jury of experts in ELT, Applied Linguistics, Statistics, and Educational Psychology. Both instruments are found 100% valid by the jury members according to whom few modifications are regarded in the final version of the questionnaire.

Pilot Administration

A sample of 30 students (not included in the main sample) are randomly chosen from Iraqi preparatory schools in Baghdad to conduct a pilot study in which both instruments are administered to the pilot sample. This procedure is carried out to:

- check the clarity of items included in the scale and test.
- estimate the time required by participants to respond to the instruments.

According to the pilot administration results, no ambiguity is reflected in the instruments' items. It is also found that 35 minutes time is enough for participants to respond to the learning style scale, while the time required for the English proficiency test is determined to be 25 minutes for each of the listening and reading parts, 30 minutes for writing, and 4 minutes is found to be adequate for each student to be tested in speaking.

Reliability

Learning Styles Questionnaire

Cronbach's Alpha equation, which is an equation used to assess internal consistency statistically, can be used to determine the questionnaire's reliability. The Cronbach's Coefficient should range between 0 and 1 so as for the reliability to be accepted (Cohen et al, 2007:506). Table (1) below shows the reliability coefficients of each style in the learning style scale.

Table (1): Reliability Coefficients of Learning Styles Scale by Using Alpha – Cronbach Equation

| Learning Style | The Reliability Coefficient |
|---|-----------------------------|
| Visual style | 0.81 |
| Auditory style | 0.85 |
| Kinesthetic style | 0.84 |
| Extroverted and Introverted style | 0.83 |
| Random – Intuitive style | 0.87 |
| Sequential style | 0.79 |
| Closure and Open oriented style | 0.80 |
| Impulsive and reflective style | 0.83 |
| Field – independent and Field – dependent | 0.85 |
| Synthetic and Analytic style | 0.84 |
| Deductive and Inductive style | 0.83 |

According to the results shown in the previous table, all learning styles domains in the scale are acceptable and consistent.

English Proficiency Test

In order to determine the reliability of the English proficiency test, Chronbach's Alpha is also used. The test's reliability coefficient is found 0.87 indicating that it is extremely accurate and reliable.

Results of the Study

Results Related to the First Aim

The first aim of the study reads "finding out Iraqi EFL preparatory school students' learning styles". After the application of the learning styles scale on the study sample, the mean score and standard deviation are computed for each learning style separately, and t-test for one - sample is used to determine the significance of the difference between the arithmetic and theoretical means of each learning style. The results are shown in the table (2) and figure (1).

Table (2): Arithmetic mean, standard deviation and t- test values of the learning styles

| Learning Styles | Sample | Mean | SD | Theoretical Mean | T – Test | | Significant |
|----------------------|--------|--------|---------------------|------------------|----------|-------------|----------------------------|
| , | - | | | | Computed | Tabulated - | (0.05) |
| | | | | | Value | Value | |
| | | | | | | | |
| Visual | 325 | 12.092 | 3. <mark>646</mark> | 10 | 10.345 | | S <mark>i</mark> gnificant |
| Auditory | 325 | 15.000 | 4 <mark>.021</mark> | 12 | 13.451 | | S <mark>i</mark> gnificant |
| Kinesthetic | 325 | 12.098 | 3.581 | 10 | 10.564 | | S <mark>i</mark> gnificant |
| Extroverted and | 325 | 25.468 | 6.127 | 20 | 16.088 | 1.96 | <mark>Si</mark> gnificant |
| Introverted | | | | | | | |
| Random - | 325 | 13.788 | 3.747 | 10 | 18.187 | | Significant |
| Intuitive | | | | | | | 1 |
| Sequential | 325 | 13.557 | 3.756 | 10 | 17.073 | | Significant |
| Closure – open | 325 | 10.178 | 3.992 | 12 | 8.281 | | Significant in |
| oriented | | | | | | | favor of the |
| | | | | | | | theoretical |
| | | | | | | | mean |
| Impulsive and | 325 | 16.329 | 4.475 | 12 | 17.439 | | Significant |
| Reflective | | | | | | | |
| Field – | 325 | 14.966 | 4.120 | 12 | 12.978 | | Significant |
| independent and | | | | | | | |
| field – dependent | | | | | | | |
| Synthetic and | 325 | 15.689 | 4.151 | 12 | 16.021 | | Significant |
| analytic | | | | | - | | |
| Deductive and | 325 | 8.655 | 4.021 | 12 | 6.725 | | Significant in |
| Inductive | | | | | | | favor of the |
| | | | | | | | theoretical |
| | | | | | | | mean |

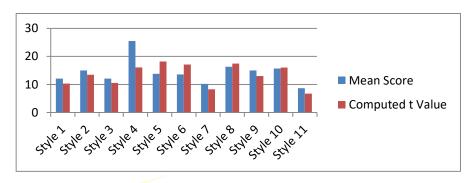


Figure (1) Arithmetic and Theoretical Means of the Learning Styles

Table (2) above shows that the samples arithmetic means are ranging between 8.655 – 25.468 with standard deviations that are ranging from 3.581 to 6.127. The computed t-values are found to swing between 6.725 – 18.221, all of which are greater than the tabulated value 1.96. Since all the arithmetic means of the learning styles are greater than their theoretical means, except for two styles namely; the closure/open oriented and deductive/inductive styles. This reflects the idea that all of the learning styles indicated in the scale are employed by the sample of the study except for the two above mentioned styles.

To determine the prevailing learning style among the participants, the total scores of students in each learning style is converted into percentages then the arithmetic means and standard deviations of these percentages are calculated as illustrated in table (3)

Table (3): Percentage of students' learning styles

| Mean Score | SD |
|------------|--|
| 0.6046 | 0.18230 |
| 0.6250 | 0.16753 |
| 0.6049 | 0.17905 |
| 0.6367 | 0.15317 |
| 0.6894 | 0.18738 |
| 0.6778 | 0.18779 |
| 0.5908 | 0.16634 |
| 0.6804 | 0.18648 |
| | 0.6046 0.6250 0.6049 0.6367 0.6894 0.6778 0.5908 |

| Field – independent and field – dependent | 0.6236 | 0.17168 |
|---|--------|---------|
| Synthetic and analytic | 0.6537 | 0.17297 |
| Deductive and Inductive | 0.5828 | 0.18227 |

In order to use the one-way analysis of variance (ANOVA) of repeated measures, Mauchly's test is conducted first to determine the suitability of Sphericity Assumed Test. Table (4) shows the results.

Table (4): Values of Sphericity Assumed of Mauchly's Test

| Mauchly's Test | Degree of Freedom | The Level of Significance | | |
|---------------------|-------------------|---------------------------|--|--|
| 0.001 | 54 | 0.07 | | |
| 0.89 <mark>1</mark> | 54 | 0.07 | | |

As shown in table (4), Mauchly's value is found 0.891 at significance level of 0.07 which is not significant as it is greater than that of 0.05. Accordingly, Sphericity Assumed Test can be used to verify the statistically significant differences in the sample's learning styles.

Table (5): The Results of ANOVA of repeated measures of Learning Styles

| Variance | Sum of | Degree of | Average of | Computed f- | Level of |
|-----------|---------|-----------|------------|-------------|--------------|
| | squares | freedom | squares | value | significance |
| Subjects | 54.29 | 324 | 0.168 | | |
| Treatment | 4.526 | 10 | 0.453 | 26.64 | Significant |
| Residual | 56.601 | 3240 | 0.017 | | |
| Total | 115.417 | 3574 | 0.638 | | |

As illustrated in the above table (5), the computed f value is statistically significant at level of significance 0.05 which indicates that there are statistically significant differences in the participants' learning styles. Accordingly post Hoc comparisons can be done by using Sidak test. Table (6) shows the post comparisons.

Table (6): Results of the Sidak's Post Hoc - Comparisons

| Learnin g style | Means | A2 | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 |
|--------------------|--------|------|------|-------|-------|-------|-------|-------|-------|----------------------|-------|
| | | | | | | | | | | | |
| A1 | 0.6046 | 0.02 | 0.00 | 0.03 | *0.08 | *0.07 | 0.01 | *0.07 | 0.02 | *0.05 | 0.02 |
| A2 | 0.6250 | | 0.02 | *0.05 | *0.11 | *0.09 | 0.01 | *0.10 | *0.04 | *0.07 | *0.04 |
| A3 | 0.6049 | | | *0.03 | *0.08 | *0.07 | 0.01 | *0.07 | 0.02 | *0.05 | 0.02 |
| A4 | 0.6367 | | | | *0.05 | *0.04 | *0.05 | *0.04 | 0.01 | 0.02 | 0.01 |
| A5 | 0.6894 | | | | | 0.01 | *0.10 | 0.01 | *0.07 | *0.04 | *0.06 |
| A6 | 0.6778 | | | | | | *0.09 | 0.003 | *0.05 | 0.02 | *0.05 |
| A7 | 0.5908 | | | | | | | *0.09 | *0.04 | * <mark>0</mark> .06 | *0.03 |
| A8 | 0.6804 | | | | | | | | *0.06 | 0.03 | *0.05 |
| A9 | 0.6236 | | | | | | | | | *0.03 | 0.001 |
| A10 | 0.6537 | | | | | | | | | | 0.029 |
| A11 | 0.5828 | | | | | | | | | | |

When comparing each learning style with the others (excluding the closure/open oriented and deductive/inductive styles), the following results are revealed:

- 1. There are statistically significant differences between the visual style and the random/intuitive, sequential, impulsive/reflective and synthetic/analytic learning styles only. The differences are in favor of the latters.
- 2. There are statistically significant differences between the auditory style and the other styles. The differences are also in favor of the other styles.
- 3. There are statistically significant differences between the kinesthetic style and the extroverted/introverted, random/intuitive, sequential, impulsive/reflective and synthetic/analytic learning styles only. The differences are in favor of the kinesthetic style.

- 4. Statistically significant differences are also found between extroverted/introverted style and the random/intuitive, sequential, and impulsive/reflective learning styles. The differences are in favor of the latter learning styles.
- 5. Statistically significant differences are found between random/intuitive style and the rest of the learning styles and in favor of the former.
- 6. There are statistically significant differences between the sequential style and field independent/field dependent and deductive/inductive styles. The differences are in favor of sequential style.
- 7. There are statistically significant differences between impulsive/reflective style with the field independent/field dependent and deductive/inductive learning styles. The differences are in favor of the former.
- 8. There are statistically significant differences between field independent/field dependent style and synthetic/analytic style. The differences are in the favor of the later.

Based on the above findings, the dominant learning styles of Iraqi preparatory school students are random/intuitive style, followed by impulsive/reflective, while the sequential learning style comes third. This is illustrated in the figure (2).



Figure (2): The dominant Learning Styles of the Study Sample

Results Related to the Second Aim

To achieve the second aim of the study which is "finding out Iraqi EFL preparatory school students' level of language proficiency". The results achieved by the proficiency test show that the arithmetic mean of the sample on the test is (50.468) degrees with a standard deviation of (6.013) degrees, and to determine the significance of the difference between the arithmetic and hypothesized mean of (55) degrees, the researcher has used t- test for one

sample. As a result, the difference is found to be statistically significant at 0.05, with the computed t- value (31.386) greater than the tabulated t- value of 1.96, with degree of freedom (324). Since the significance is in favor of the theoretical mean, it is indicated that Iraqi preparatory school students have a weak level of language proficiency. The findings are shown in the table (7).

Table (7): Arithmetic Mean, Standard Deviation and T- Test Values

| Variable | Sample | Mean | SD | Theoretical | T – Test values | | Significance |
|-------------------------|--------|--------|-------|-------------|-----------------|-------------|--------------|
| | | | | Mean | | | (0,05) |
| | | | | | Computed T - | Tabulated - | |
| | | | | | value | T– value | |
| Language Proficiency | 325 | 50.468 | 6.013 | 55 | 31.386 | 1.96 | significant |

Results Related to the Third Aim

The third aim of this research is to find out if there is a correlation between student learning styles and language proficiency in the Iraqi preparatory schools. Students' responses to the learning style scale and language proficiency test are analyzed using Pearson's coefficient, and the findings are as shown in table (8)

Table (8): The Correlation between Iraqi EFL Preparatory School Students' Learning Styles and Level of Language Proficiency

| Learning Style | Sample | Correlation | T – test value | | Significance |
|-----------------------|--------|-------------|----------------|-----------|--------------|
| | | coefficient | Computed | Tabulated | |
| | | | T – value | T – value | |
| | | | | | |
| Visual | 325 | 0.335 | 6. 442 | 1.96 | Significant |
| Auditory | 325 | 0.279 | 5.264 | 1.96 | Significant |
| Kinesthetic | 325 | 0.407 | 7.980 | 1.96 | Significant |

| Extroverted and Introverted | 325 | 0.291 | 5.490 | 1.96 | Significant |
|---|-----|-------|-------|------|-------------|
| Random – Intuitive | 325 | 0.254 | 4.704 | 1.96 | Significant |
| Sequential | 325 | 0.311 | 5.868 | 1.96 | Significant |
| Closure – open oriented | 325 | 0.181 | 3.291 | 1.96 | Significant |
| Impulsive and Reflective | 325 | 0.169 | 3.073 | 1.96 | Significant |
| Field – independent and field – dependent | 325 | 0.306 | 5.773 | 1.96 | Significant |
| Synthetic and analytic | 325 | 0.299 | 5.641 | 1.96 | Significant |
| Deductive and Inductive | 325 | 0.178 | 3.236 | 1.96 | Significant |

Table (8) above shows that the value of the correlation coefficient between the learning styles in question and language proficiency are found to range between 0.169- 0.407. In order to determine the significance of the correlation, t-test is used and the computed t- test value is found to range between 3.073-7.980 all of which are greater than the tabulated value (1.96) at the level of significance (0.05) and the degree of freedom (323). This shows that there are positive correlations between all the studied styles and language proficiency.

Results Related to the Fourth Aim

The fourth aim in this study is finding out the extent to which the learning styles involved contribute to the interpretation of variation in language proficiency among Iraqi students in preparatory schools.

To achieve this aim, regression coefficient is calculated to determine the contribution of the independent variable (learning styles) in the dependent one (language proficiency). The

regression coefficient and regression coefficient square are found to be 0.489 and 0.239 respectively.

Regression analysis is employed to determine the effects of the variables considered among each other, and the findings for the contrast analysis of regression are shown in table (9).

Table (9): Results of Regression Factor

| Variance | Sum of Square | Degree of | Mean square | F – value | Significant |
|------------------|---------------|-----------|-------------|-----------|-------------|
| | | freedom | | | |
| Regression value | 2802.737 | 11 | 254.794 | | |
| Residual value | 8910.173 | 313 | 28.467 | 8.951 | Significant |
| Total value | 11712.911 | 324 | | 0.731 | |

Table (9) shows that the F - value of the computed regression analysis ratio 8.951 is greater than that of the F - tabulated value ratio 1.83 at the level of significance 0.05 and degree of freedom 11, 313 degrees. This means that there is a different effect of the variables considered. The beta values (B), the standard error and the beta value of the normative relative contribution, as well as partial correlation coefficients (PART), are computed to estimate the relative contribution of each variable in the analysis of the correlation between the variables. t-value is also computed to demonstrate how the independent variable contribute to the dependent one, as seen in the table (10).

Table (10): Contribution of independent variable to the total variation of the dependent variable in the research sample

| Non – standard factors | | Beta | PAR | Т – | Significance |
|------------------------|--------------------|--|---|---|---|
| Beta | Standard Error | Coeff | Т | value | 0.05 |
| 48.083 | 1.623 | - | - | 29.625 | Significant |
| | | | | | |
| 0.235 | 0.103 | 0.143 | 0.112 | 2.282 | Significant |
| .4980 | 0.116 | 0.297 | 0.212 | 4.291 | Significant |
| | Beta 48.083 | Beta Standard Error 48.083 1.623 0.235 0.103 | Beta Standard icient 48.083 1.623 - 0.235 0.103 0.143 | Beta Standard Coeff icient 48.083 1.623 0.235 0.103 0.143 0.112 | Beta Standard icient Coeff icient T value 48.083 1.623 - - 29.625 0.235 0.103 0.143 0.112 2.282 |

| Kinesthet | 0.007 | 0.115 | 0.004 | 0.003 | 0.058 | Not |
|-------------------|--------|-------|-------|-------|--------|--------------------|
| ic | | | | | | Significant |
| Extrovert | -0.005 | 0.069 | 0.005 | 0.004 | -0.073 | Not |
| ed and | -0.003 | 0.007 | - | - | -0.073 | Significant |
| Introvert | | | | | | O |
| ed | | | | | | |
| Random | 0.148 | 0.102 | 0.092 | 0.072 | 1.457 | Not |
| - | | | | | | Significant |
| Intuitive | | | | | | |
| Sequentia | 0.199 | 0.107 | 0.124 | 0.091 | 1.854 | Not |
| 1 | | | | | | Significant |
| Closure – | 0.019 | 0.107 | 0.013 | 0.009 | 0.179 | Not |
| open | | | | | | Significant |
| oriented | | | | | | |
| Impulsive | -0.229 | 0.099 | 0.170 | 0.114 | -2.306 | Significant |
| and | | | - | - | | |
| Reflective | | | | | | |
| Field – | 0.143 | 0.104 | 0.098 | 0.068 | 1.377 | Not |
| independe | | | | | | Significant |
| nt and | | | | | | |
| field – dependent | | | | | | |
| | | | | | | |
| Synthetic and | 213.0 | 107.0 | 147.0 | 098.0 | 984.1 | Significant |
| analytic | | | | | | |
| | | | | | | |
| Deductive and | 073.0 | 108.0 | 049.0 | 033.0 | 0.670 | Not Significant |
| and Inductive | | | | | | Significant |
| . 200 | | | | | | |

Table (10) above illustrates that, other than the constant term, four learning styles have significantly contributed to language proficiency, as discuss below:

- 1. The Constant Term: The result indicates that the B-value is 48.083 degrees, and the calculated t- value 29.625 is greater than the tabulated value 1.96 at the significance level (0.05), and the degree of freedom (323). This reflects that there are other variable(s), not covered by the current study, that have impact on language proficiency.
- 2. The effect of the visual style in the interpretation of the variation in language proficiency independently of other styles is found to be 0.112 as shown by the partial correlation (PART). The square (PART) is 0.0125 which indicates meaning that (1.25%) of the variation in language proficiency is due to the effect of the visual style. Since the computed tvalue 2.282 is greater than the tabulated one 1.96, this effect is statistically significant the significance level (0.05) and the degree of freedom is (323). This means that the use of visual learning contributes style positively in promoting language proficiency.
- 3. The **auditory style** effect in interpreting the variation in language

- proficiency independently of the other styles is found 0.212 as shown by the partial correlation (PART). The square (PART) is 0.0449 which means that (4.49%) of the variation in language proficiency is due to this style effect. This effect is statistically significant at the level (0.05) and the degree of freedom is (323) since the computed t-value 4.291 is greater tabulated than the one 1.96 indicating that the use of auditory learning style obviously contributes positively in developing students' language proficiency.
- 4. The effect of the impulsive/reflective style in interpreting the variation in language proficiency independently of the other styles is found 0.114 as shown by the partial correlation (PART). The square (PART) 0.0129 indicates that 1.29% of the variation in language proficiency is due to the effect of this style which statistically significant at the level (0.05) and the degree of freedom is (323) since the computed t-value 2.306 is greater than the tabulated one 1.96 indicating that the use of this style also contributes positively in reinforcing students' language proficiency.

5. The synthetic/analytic style effect on the interpretation of variations in language proficiency independently from other variables is found 0.098 as shown by the partial correlation (PART), while the square (PART) is 0.0096. This means that 0.96% of the variation in language proficiency is due to the effect of this learning style which is statistically significant at level of significance 0.5, since the calculated t - value 1.984 is greater than the tabulated t - value 1.96 in degree of freedom (323). This shows that the use of this style contributes positively to promote students' language proficiency.

CONCLUSIONS

The following conclusions can be drawn from the current study's findings:

- Iraqi EFL preparatory school students show weak level of language proficiency.
- 2. The dominant learning styles of Iraqi preparatory school students are random/intuitive style, followed by impulsive/reflective, while the sequential learning style comes third. While the use of closure/open oriented and deductive/inductive learning styles are not statistically significant.

- 3. Iraqi EFL preparatory school students' learning styles are statistically correlated with their English language proficiency.
- 4. The visual, auditory, impulsive/reflective, and synthetic/analytic styles contribute to participants' language proficiency more than the other styles do.

RECOMMENDATIONS

In view of the findings and conclusions reached, the current study recommends the following:

- The weak language proficiency of Iraqi preparatory school students may be partly attributed to the mismatch of their learning styles with the teachers' teaching Accordingly, techniques. Iraqi preparatory school teachers should work hard to be aware of their students' learning styles and match them in their instructional procedures.
 - Since it is found that the weak language proficiency of Iraqi preparatory school students may be partly attributed to the mismatch of their learning styles with the teachers' teaching techniques, and there are other factors that may play a significant role in the

- weakness, extensive studies should be conducted to determine such factors and the possible remedial actions.
- Students' learning styles may be identified and used to guide the collection of instructional methods and resources that will help them learn more effectively. Students' learning can be used to lead an educational organization for particular groups of students who have similar learning preferences.
- Teachers should promote students' achievement by using different methods of presenting knowledge because students' learning styles are prone to change due to the fact that different learning styles play a key role in their academic achievement.
- Since learning styles are essential in any learning situation and at all levels of education, education systems should encourage the recognition of learners' learning

- styles at the beginning of the academic year. This is likely to aid teachers not only in employing suitable instructional procedures, but also to select appropriate extra tasks and activities and facilitate the promotion of students' engagement.
- Since preparatory school students prefer to use a variety of learning styles, a parallel variety of materials and activities should be used in the EFL classroom to help students better handle the various linguistic tasks.
- EFL teacher training courses should train teachers not only to use different instructional techniques, but also to achieve different methods of investigating students' individual differences in general and learning styles in particular.



REFERENCES

- 1. Al- Fahdawi, S.,(2014). The Relationship between Iraqi EFL University Students' Learning Styles, Motivation, Multiple Intelligence, and Proficiency. Unpublished Ph.D. Dissertation, University of Baghdad.
- 2. Allen, P., Swain, M., Cummins, J., & Harley, B. (1990). The development of second language proficiency. Newyork, NY:Cambridge University Press
- 3. Allport, G. W. (1937). Personality: A psychological interpretation. New York, NY: Holt, Reinhart and Winston.
- 4. Brumfit, C. (1984). Communicative methodology in language teaching. Cambridge: Cambridge University Press.
- 5. Canale, M. (1983). On Some Dimensions of Language Proficiency. In J.W.Oller: Issues in Language Testing Research. MA: Newburry House, 42-333
- 6. Cassidy, S. (2004). Learning styles: An overview of theories, models, and measures. Educational Psychology, 24(4), 419-444.
- 7. Chastain, K. (1998). Developing Second Language Skills. (2nd Ed.). Chicago: Harcourt Brace Publishers.
- 8. Chen, T.-H. (2013). An investigation of the relationship between personality, anxiety and foreign language oral communication achievement in Taiwanese technology university students. In K
- 9. Claudia, H., (2017). Proficiency. ELT Journal, 71 (2), pp.250-253.
- 10. Cloud, N. Genesee, F. Hamayan, E.(2000) Dual Language Instruction. Boston, MA: Heinle and Heinle
- 11. Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education: routledge
- 12. Dictionary.Com, 2012.Learning Styles /Definition. Retrieved from Dictionary . Com:http://dictionary. Reference.com/browse/learning+style
- 13. Dunn, J., Brown, J., & Beardsall, L. (1991). Family talk about emotions, and children's later understanding of others' emotions. Developmental Psychology, 27, 448-455
- 14. Dunn, R. (1990). Rita Dunn answers questions on learning styles. Educational Leadership, 48(2), 15-19.
- 15. Dunn, Rita. (1999-2000). Learning styles: Theory, practice, and research. National Forum of Applied Educational Research Journal, 13(1), 3.

- 16. Ellis, R. (1999). Understanding second language acquisition. Oxford: Oxford University Press.
- 17. Ellis, R. (2008). The study of second language acquisition (2nd ed.). Oxford: Oxford University Press
- 18. Fahrudin, Muhammad (2015). The correlation between students' learning styles and students' speaking achievement. Faculty of Languages and Arts, English department, State University of Surabaya.
- 19. Fatt, J. P. (2000). Understanding the learning styles of students. International Journal of Sociology and Social Policy, 20(11), 31-45. Retrieved May 23, 2012, from http://dx.doi.org/10.1108/01443330010789269
- 20. Galloway, V., & Labarca, A. (1990). From student to learner: Style, process, and strategy. In D. W. Birchbichler (Ed.), New perspectives and new directions in foreign language education (pp. 111-158). Lincolnwood, IL: National Textbook Co and ACTFL
- 21. Harmer, J. (2003a). How to teach English. London: Longman.
- 22. Holec, H. (1987). The learner as manager: Managing learning or managing to learn? In A. Wendon and J. Rubin (Eds.), Learner strategies in language learning. New Jersey: Prentice-Hall.
- 23. Keefe, J. W. (1982). Assessing student learning styles. In J. W. Keefe (Eds.), Student learning styles and brain behaviour, 1-18. Reston, VA: National Association of Secondary School Principals.
- 24. Keefe, J.W. (Ed). 1979 "Learning Style: An Overview. "Student learning styles: Diagnosing and prescribing programs. Reston, VA: National Association of Secondary School Principals: 1-17
- 25. Kinsella, K. & Sherak, K. (1998). Designing ESL classroom collaboration to accommodate diverse work styles. In J. M. Reid (Ed.), Understanding learning styles in the second language classroom. Upper Saddle River, NJ: Prentice Hall Regents.
- 26. Lines, H. E. (2014). It's a matter of individual taste, I guess: Secondary school English teachers" and students conceptualizations of quality in writing. PhD thesis. Exeter: University of Exeter.
- 27. Littlewood, W. (1981). Communicative Language Teaching. London: Cambridge University Press
- 28. Lohri-Posey, B. (2003). Determining Learning Style Preferences of Students. Nurse Educator, 28(2), 54. Retrieved May 26, 2012.

- 29. Manochehri, N. (., & Young, J. I. (2006). The Impact of Student Learning Styles with Web-Based Learning or Instructor-Based Learning on Student Knowledge and Satisfaction. The Quarterly Review of Distance Education, 7(3), 313-316. Retrieved May 23, 2012.
- 30. Mariani, Nanik and Mu'in, Fatchul. 2007. An Introduction to Linguistics, Teaching and Learning Material, First Printing. Banjarmasin: PBS FKIP Universities' Lambung Mangkurat.
- 31. Oxford, R. L. (2003). Language learning styles and strategies: Concepts and relationships. International Review of Applied Linguistics in Language Teaching, 41, 271-277.
- 32. Raimes, A. (1994). Language proficiency, writing ability, and composing strategies: A study of ESL College Student Writers. In A. H. Cumming (Ed.), Bilingual performance in reading and writing (pp. 164). Ann Arbor, Michigan: Research club in language learning, distributed by John Benjamins Publishing Company.
- 33. Rayner, S. G. (2000). Reconstructing style differences in thinking and learning: Profiling learning performance. In R. J. Riding & S. G. Rayner (Eds.), International perspectives on individual differences, Volume Cognitive style (pp. 115-177). Westport, CT: Bergin & Garvey
- 34. Reid , J. M. (Ed.). (1995). Preface. In J. Reid (Ed.). Learning styles in the ESL/EFL classroom. (pp. viii- xvii). New York: Heinle and Heinle Publishers.
- 35. Reid, J. (1987). The learning style preferences of ESL students. TESOL Quarterly, 21, 87-
- 36. Richards, J.C. and Schmidt, R. (2002) Longman Dictionary of Language Teaching & Applied Linguistics (3rd edition). Essex: Pearson Education Limited.
- 37. Riding, R. & Cheema, I. (1991). Cognitive styles an overview and integration. Educational Psychology, 11(3-4), 193-215.
- 38. Sharp, A. (2009). Personality and second language learning. Asian Social Science, 4(11), p.17.
- 39. Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing: the ESL research and its implications. TESOL Quarterly, 27, 665-77
- 40. Soozandehfar, S. M., & Souzandehfar, M. (2011). The effects of field dependent/field-independent cognitive styles and gender on second language speaking performance. California Linguistic Notes, 36(2).
- 41. Stern, H.H. (1991). Fundamental Concepts of Language Teaching. Hong Kong: Oxford University Press

- 42. Sternberg, R. J. (1994). Thinking styles: Theory and assessment at the interface between intelligence and personality. In R. J. Sternberg, & P. Ruzgis (Eds.), Personality and intelligence (pp.169-187). New York, NY: Cambridge University Press.
- 43. Underwood. (1989). Teaching Listening. New York. Longman
- 44. Williams, E. 1996. Reading in the Language Classroom. Malaysia: Modern English Publications.

