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The level of Verbal Intelligence for EFL Iraqi University Students

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المستخلص

في السنوات الأخيرة، اهتم الأكاديميين من مختلف الاختصاصات العلمية بنظريات المواهب الإداركية والذاكرة والذكاء, الدراسة الحالية مهتمة بالذكاء اللغوي اللفظيإنّ الهدفَ من هذه الدراسة يكمنُ في: أولاً ايجاد مستوى الذكاء اللفظي لطلبه الجامعات العر ا قيين دارسي اللغة الإنكليزية لغة اجنبيه. المشاركون في الدراسة الحالية تضمنت) ٢١٠ (طالب اختيروا عشوائيا من طلاب المرحلة الثانية أقسام اللغة الإنكليزية لكليات التربية في جامعة بغداد)كلية التربية / ابن رشد(والجامعة العراقية)كلية التربية للبنات(للعام الد ا رسيّ ٢٠٢١ / ٢٠٢٢ . حيث استخدمت اداة لتحقيق أهدافِ هذهِ الدراسة هي استبيان للذكاء اللفظي. حيث اظهرت النتائج ان الطلبة المشاركون لديهم مستوى متوسط من الذكاء اللفظي وقد تم بعد ذلك طرح الاستنتاجات والتوصيات والاقتراحات

Abstract

In recent years, academic specialists from different scientific fields have been attached with cognitive talents,, memory and intelligence , theories.
The current study is concerned with presenting the linguistic variable of verbal intelligence.
A critical objective of the current study is to present an accurate meaning for the variable and the importance for the field of English language learning.
The aim of this study is to find out Iraqi EFL university students' level of verbal intelligence.
Contributors to the current study encompassed (210) randomly selected 2nd- year students in English Language Departments of Colleges of Education in Baghdad University (College of Education/Ibn Rushd) and Al Iraqia University (College of Education for Women) for the academic year 2021/2022. one instrument is used to achieve the aim of this study: the verbal intelligence questionnaire
The current study's findings declare that the sample has a medium level of verbal intelligence. Finally, conclusions, recommendations, and suggestions are put forward.

.١ Introduction

English language learning is a challenging for its learners because of the individual differences. "individual differences may lead to academic success or failure in the area of foreign or second language learning" (Salahzade & Lashkarianm, 2015).
Language learning is mainly defined as developing the ability to communicate in a second/ foreign language (Ortega,2011). In recent studies for adult learners based on cognitive theory, language educational achievement explores the predictive power of multiple kinds of intelligence and working memory. The current study sheds light on verbal intelligence since it is the kind of intelligence that is too connected and needed in the field of FLL, together with working memory. Verbal intelligence is characterized as one of language learners' single characteristic differences. According to Gardner (2011), "verbal intelligence is an individual difference influencing how much a language learner learns a second or foreign language." In learning English as a foreign language, verbal intelligence plays an essential. It is the ability to understand and reason using concepts framed in words. More broadly, it is linked to problem-solving, abstract reasoning, and working memory. (Luwel et al.,2013). Therefore, the idea of working memory is prioritized in the foreign language learning process. Language and working memory are two interconnected systems.

.٢ Literature Review

٢،١ The Concept of Verbal Intelligence

Among Gardner's various theories of multiple intelligences, there is a theory that leads to one's language skills, namely the theory of verbal-linguistic intelligence (Word Smart). Gardner (2000) characterized linguistic intelligence as a person's sensitivity to spoken and written language, ability to utilize language to achieve objectives, and capacity to acquire new languages. Additionally, he defined Linguistic intelligence as the ability to communicate in a language (1). strong command of the English language and sensitivity to both the literal and metaphorical meanings of words (2). Superior oral and written communication abilities (3). Knowledge of grammatical rules and when to break them.(٤)

Sensitivity to the melodic and rhythmic aspects of words (5). Knowledge of the many functions of language, including persuasion, information, and pleasure (Skourdi et al., 2012, 291). Gardner considers writers, poets, attorneys, and speakers to have a high level of language intelligence (Gardner, 1993, cited in Samiyan, 2013, 89). According to Gardner's hypothesis, which is stated in Rahimi (2014), Linguistic Intelligence is a sensitivity to both spoken and written language. Language usage may serve specific purposes, such as improving one's capacity to learn new languages.

It refers to an individual's capacity to comprehend both spoken and written language and their ability to communicate verbally and in writing. In a practical sense, linguistic intelligence refers to an individual's ability to utilize written and spoken language to accomplish objectives (Martinez, Zablotskaya & Minker, 2012, p.9807).

Additionally, Chapman and Freeman (2015, p. 563) said that individuals with high Linguistic Intelligence are often adept at learning vocabulary, encouraging them to read books, get immersed in them, and present well in English courses.

٢,١,٢Linguistic Intelligence Development and the Influencing Factors

Individuals' varied types of intelligence may grow and evolve in response to their biological and environmental experiences. Consequently, some students have a high degree of intelligence in particular areas and a low one in others.

However, other research indicates that intelligence is produced via practice and exposure to stimuli. The second aspect that contributes to intelligence development is one's life history, which includes interactions with parents, teachers, classmates, and friends, as well as individuals who either Linguistic intelligence, like other forms of intelligence, may be trained to a sufficient degree of competence

(Armstrong, 2009). Gardner (Prescott, 2001) added that intelligence might be fostered or nourished. There is no self-contained intellect. For example, individuals aspiring to be musicians must have a highly developed musical intelligence, whereas those aspiring to be linguists must grow along unique developmental routes.

Additionally, as evidenced by Gardner's recommended definition of intelligence, Gardner underlines the effect of cultural influences on human intellect. In other words, several aspects significantly impact the growth of any intellect, including the environment in which the student lives, the culture he absorbs, and the people with whom he interacts. for a reason above, some bits of intelligence grow while others do not exist in the same learner. While everyone is born with the gift of language intelligence, some may need additional work to acquire it via linguistic intelligence-related activities. Gardner thinks that by training and practice, any individual can alter or enhance any intelligence (Richards & Rodgers, 2001, 115).

According to Trianto (2014) and Duhigg (2012), the following factors impact the development of linguistic-verbal intelligence in humans.

A. urging them to speak since he is a newborn; the infant has excellent hearing, so it is highly suggested that everyone connect with and stimulate an infant via speaking.

B. introducing the alphabet while playing may begin as early as infancy, such as playing the letters stand paper (amplas). They learn to identify letters by sight and touch and hear each letter uttered by parents or instructors.

C. reads out to children tales and storytelling before going to sleep or at any moment in conformity with applicable laws and regulations.

D. Story constructing; before children can read, they prefer to "read the images." Give them the shots and let them voice their thoughts on the image.

E. Urging children to act out a situation from a previous experience, such as a visit to the doctor. Role-playing may assist them in experiencing the numerous social observed roles.

F. supports youngsters in building a reading habit by using habits from the psychological pattern named "habit loop," a three-part process. First, a cue or trigger tells the brain to go into automatic mode and let a behaviour unfold. "Then there is the routine, which is the behaviour itself," The third step is the reward: something the learner's brain likes that helps it remember the "habit loop" in the future.

Neuroscientists have traced humans' habit-making behaviours to a part of the brain called the basal ganglia, which also plays a vital role in developing memories, pattern recognition, and emotions.

٢,١,٢,٢ Indicators of Linguistically Intelligent Students

Every individual has linguistic intelligence. The fact that individuals have various degrees of aptitude in listening, speaking, reading, and writing demonstrates this (Gardner, 2011; Lunenberg & Lunenberg, 2014). This idea relates to the first point of multiple intelligence, which claims that each individual has all eight bits of intelligence to varying degrees and expresses them individually (Armstrong, 2009). Each human has a unique blend of these eight intelligence bits, contributing to their individuality (Gardner, 2011). Everyone has a unique approach to linguistic intelligence. Nobody performs identically, not even identical twins (Gardner, 2011).

Thus, linguistic intelligence may be shown not only via the ability to talk rhetorically (through debate and public speaking) but also through the ability to write attractively (such as by writing poems, journals, and novels).

Students with linguistic intelligence have exceptional hearing talents and are often interested in Reading, writing, and word games. Additionally, they are adept at remembering names, dates, and locations and prefer to conduct word processing on a computer. They may possess a strong, developed vocabulary and the ability to communicate fluently, correctly, and phonetically (Teele, 2000).

According to Laughlin in 1999 (quoted in Sayed Abdallah, 2018, 26), a person with highly developed verbal/linguistic intelligence often has the following characteristics:

A. Listens and reacts to the spoken word's tone, rhythm, colour, and diversity.

B. Acquires knowledge via listening, Reading, writing, and conversing.

C. Effectively listens, comprehends, paraphrases interprets, and recalls what is stated.

D. Effectively reads, talks, comprehends, summarizes, interprets, or explains, and retains information that has been read.

E. Demonstrates the capacity to acquire more languages and communicates, discusses, explains, and persuades via listening, speaking, writing, and reading.

After debating the various theories, it can be concluded that linguistic intelligence is the ability to use language correctly and beautifully, whether in spoken or written form, as in listening and speaking, or in written form, as in Reading and writing, and the ability to use it to accomplish goals, as well as the ability to learn new languages. International Montessori Schools and Child Development Center

(٦٧ ,٢٠١٤)defined some characteristics of linguistically clever persons as follows:

(١)a passion for Reading, writing, speaking, and listening; (2) a proclivity for often speaking what they have read. (3) Excellent command of spelling patterns,

(٤)Adhering to grammatical norms, (5) Enjoys word games such as puzzles and poetry. (6) Taking care of a book collection, (7) Possess an excellent memory for general knowledge, and (8) They have an innate ability to recall quotations and famous sayings. 9) Organizing and methodical.

٢ .٢Verbal Intelligence in English Classroom

linguistic intelligence is "the capacity to utilize and organize words effectively in spoken or written form." Arifuddin (2010) Linguistic intelligence is associated with the ability to use and create language in general, whether spoken or written.

Armstrong (2000, p.14) said that education necessitates the application of verbal intelligence, which provides learners with a more excellent opportunity to build language intelligence. Therefore, Armstrong (2000) recommends joint exercises for linguistic students in ELT classrooms. They include the following: (1) group discussions, (2) completing worksheets, (3) giving presentations, (4) listening to lectures, (5) reading, (6) brainstorming, (7) tape recordings, (8) school journal writing and publication, (9) writing essays/reports, (10) taking and giving dictation, and (11) memorizing linguistic facts.

Golubtchik (www.teachersnetwork.org) suggests the following activities for teachers: (1) creating a real or imagined correspondence between historical or contemporary characters, (2) journal writing, (3) composing scripts depicting historical events, (4) writing newspapers from the different period, (5) complete with then-current events, fashion, entertainment, and feature items, and(٦)

interviewing a famous person with knowledge of a topic or whose accompanies a famous person.

Additionally, Göebakan (2003, p.21) offers the following exercises to include in linguistic intelligence lesson plans:

a. Learning about great painters and art history via Reading and writing.

b. Composing a brief fictitious tale about a particular artist or group of artists from the past, present, or future.

c. Writing a screenplay or story for a significant art event's program, speech, or host.

Additionally, Bratcher (2014) cites the following extended conventional methods of teaching using linguistic intelligence.

.١ Before writing, engage in oral activities such as storytelling, discussion, and interviewing.

.٢ Reading to generate ideas for writing

.٣ Establishing a link between literary studies and writing

.٤ Using vocabulary terms to complete crossword puzzles.

.٥ Participating in games such as Scrabble or Boggle

.٦ Utilize electronic resources, such as libraries, desktop publishing, and word processing.

Linguistic intelligence often interacts complexly with other bits of intelligence (Armstrong, 2009). Gardner (2011, p.344) concurred, believing that no intellect lives in isolation from other bits of intelligence in nature. When people are motivated by multisensory activities, they acquire many bits of intelligence in a

sophisticated fashion concurrently. For example, while cooking, someone may utilize linguistic intelligence to read a recipe, logical/ mathematical intelligence to split it in half, interpersonal intelligence to create a meal that meets the demands of his or her family, and intrapersonal intelligence to satisfy one's hunger.

Classroom activities often engage several bits of intelligence. The Educational Broadcasting Corporation (2014) provides the following examples of classroom activities that include multiple intelligences, especially in English language teaching activities that use linguistic intelligence are diverse. These activities are often diverse and engage not just verbal intellect but also other bits of intelligence:

A. Writing a report or essay engages linguistic intelligence.

B. Group conversation stimulates the development of linguistic, interpersonal, and social intelligence.

C. Journaling helps to develop intrapersonal and linguistic intelligence.

D. Producing video engages logical-mathematical, musical, verbal, interpersonal, and spatial intelligence.

E. Choreography is an art form that incorporates musical, linguistic, and interpersonal intelligence.

F. The act of song composition benefits musical and linguistic intelligence.

G. The act of graphing engages both logical-mathematical and spatial intelligence.

H. Performing a play fosters the development of musical, verbal, interpersonal, and spatial intelligence.
I. Poster design combines verbal and spatial intelligence.

.٣ Methodology

The design of this Study is a descriptive type of research methodology. This type of research involves gathering information to see quantifiable variable (Mills & Gay, 2019).

٣,١ Population

As defined by Blankenship (2010), the population is; a group of individuals and organizations that could be involved in the Study. Best and Kahn (2006) define the population as "any group of individuals that has one in common feature or more , and that is of interest to the researcher."

The whole population of this Study comprises Iraqi EFL university students at English department Education colleges. According to Mills & Gay (2019) accessible population is the population from which the researcher can realistically select subjects. The accessible population of this Study is second-year students in the English departments at the College of Education/ Ibn Rushd for Human Sciences at the University of Baghdad and the College of Education for Women at Al-Iraqia University. Second-year students are chosen as the access of the demographic since they have previously finished around two years of English studies at their colleges. Students are advanced enough at this level to answer the working memory test and the verbal intelligence questionnaire. The total number of the population is (460) students, as shown in table(١-٣)

Table(١-٣)

The population of the Study

Level	College of Education Ibn Rushd Baghdad University	College of Education For Women Al- Iraqia University	Total
٢nd Stage	٢٦٤	١٩٦	٤٦٠

٣,٢ The Sample

Sampling is the process of examining a portion of a larger cluster of possible participants to use the results to produce statements that would apply to the population (Salkind, 2010). According to Krejcie, R & Morgan. (1970), the sample of this study is (210) students selected randomly, as shown in table.(٢-٣)

Table (3-2) Sample Selection

	٢nd year EFL Students in College of Education Ibn Rushd for Human Sciences	٢nd year EFL Students in College of Education Al-Iraqia University	Total Number
Total Sample	١٢٠	٩٠	٢١٠

٣,٣ Instrument of The Study

٣,٣,١ Verbal Intelligence Questionnaire

The instrument is Verbal Intelligence Questionnaire, adopted from Vakili (2013) as an instrument used to measure students' verbal intelligence. It consists of 20 items. The rating scale comprises a five-point Likert scale, and each item has five responses (see Appendix C). The scores that are given to each response are: strongly agree (5) scores, agree (4) scores, undecided (3) scores, disagree (2) scores, and strongly disagree (1) scores. Thus, the high degree of the scale is 100, and the minimum is 20, with a hypothetical average of 60.

.٤ Results

Presentation of Results

The suitable analytical methods are used to fulfil the objectives of the current study, and the following result is revealed:

Results Related to the Aim of the Study

The aim was to find "The level of Iraqi EFL university students' Verbal Intelligence" so that a test was administered to the sample of the study (210) students. To achieve this aim, a t-test for one independent sample is used to compute students' mean scores compared to their theoretical mean.

The mean score of students' verbal intelligence is found to be (90.876) with a standard deviation (of 47.126) meanwhile, and the theoretical mean of performance (is 90). Accordingly, the computed t-value is found to be (27.944), which is higher than the critical t-test value (1.96) when the level of significance is (0.05), and the degree of freedom is (209). This shows a significant difference between the two means in the Iraqi EFL university students' verbal intelligence level in favour of the mean score. This means that the level of verbal intelligence is good among students, and Table (4.3) shows that.

Table(٣-٤)

Mean, Standard Deviation, and One Sample t-test for the Level of EFL University Students' Verbal Intelligence

Variabl e	No	Mean	Standar d deviatio n	theoretic al mean	t-test	Level of significanc e
Compute d	Critica l		٠,٠٥			
workin g memor y		٢١				
٠						
٩٠,٨٧						
٦		١٠,٨٨٥٩٠		٢٧,٩٤٤١,٩٦	Significant	

.٥ Conclusion

The following results are drawn from the findings of the study:

.١ Iraqi EFL university students have a good working memory.

.٢ EFL university students have a high degree of verbal intelligence.

.٣ EFL university students' primary ability is visual-spatial working memory.

.٤ Working memory and verbal intelligence of EFL university students have a strong association.

.٥ In terms of information storage, it has been determined that errors often occur in the middle of a list, with the first and last pieces of chunks or objects being accurately repeated.

.٦ Suggestions for Further Studies

The following ideas are suggested:

.١ A related investigation into the relationship between students' working memory and intellect aspects such as oral or written results may be conducted.

.٢ Further studies determine the relationship between students' verbal intelligence and essential components of working memory, such as verbal or reading span working memory.

.٣ A correlational analysis is recommended to correlate students' verbal intelligence with other cognitive factors such as aptitude or language proficiency.

.٤ Further study into the relationship between EFL university students' working memory and academic performance seems to be required.

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