Exploring Iraqi EFL University Students' Linguistic Intelligence: A Descriptive Study

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استكشاف الذكاء اللغوي لدى طلبة الجامعة العراقيين دارسي اللغة الإنجليزية دراسة أجنبية : دراسة وصفية

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Abstract

The study explores the level of linguistic intelligence among Iraqi EFL university students and the gender differences. A sample of 100 fourth-year students from the English language department at the College of Education/ Ibn Rushd for Human Sciences at Baghdad University is selected for the academic year2024/2025. The linguistic intelligence test constructed by the researcher is employed in this study. The results show a moderate level of linguistic intelligence, with significant differences between males and females, primarily favoring females. The study ends with conclusions and recommendations.
Key words: Intelligence, Linguistic intelligence, EFL learners, Descriptive Study.

المستخلص

تستكشف الدراسة مستوى الذكاء اللغوي بين طلبة الجامعة العراقيين دارسي اللغة الإنجليزية كلغة أجنبية والفروق بين الجنسين(ذكور واناث).تم اختيار عينة من ١٠٠ طالب وطالبة في السنة الرابعة من قسم اللغة الإنجليزية في كلية التربية/ ابن رشد للعلوم الانسانية جامعة بغداد للعام الدراسي ٢٠٢٤/٢٠٢٥. تم استخدام اختبار الذكاء اللغوي الذي بناه الباحث في هذه الدراسة. تُظهر النتائج مستوى معتدلاً من الذكاء اللغوي، مع اختلافات ملحوظة بين الذكور والإناث، تفضل الإناث بشكل رئيسي. تنتهي الدراسة بالخاتمة والتوصيات.
الكلمات المفتاحية: الذكاء، الذكاء اللغوي، متعلمو اللغة الإنجليزية كلغة أجنبية، دراسة وصفية

Introduction

The traditional one-way classroom and learning process have evolved to recognize students as unique individuals with unique needs, difficulties, flaws, and strengths (Brown, 2001; Cook, 2001). Students exhibit unique skills, capacities, preferences, and methods of learning, leading to distinct learning styles and knowledge representation (Rahimi & Sadighi, 2011). Factors contributing to these variances include differences in natural intellect, social and economic backgrounds, prior learning experiences, and curriculum congruence (Williams, 1994) According to Crozier, "individual differences may lead to academic success or failure in the area of foreign or second language learning" (as cited in Salahzade & Lashkarian, 2015, p. 88)Gardner (2011) and Armstrong (2002) argue that intelligence is a crucial individual characteristic that significantly influences a language learner's ability to learn a second or foreign language, particularly English, and is considered a key factor in language learning effectiveness Gardner's (2011) theory of multiple intelligences identifies nine distinct types of intelligences, including linguistic intelligence. Gardner posits that each learner possesses distinct intelligences, which vary in expression and degree, and these intelligences significantly impact their academic performance. Muthusami and Jayaraman (2013) argue that none of these intelligences are more successful than the others, but linguistic intelligence is considered the most pertinent for language learning, as it contributes differently to language learning success.Aydoğan and Akbarov (2014) emphasize the importance of mastering four essential language

skills: speaking, listening, reading, and writing, which not only aids in learning English as a second or a foreign language but also fosters effective communication in real-world situations. Linguistic intelligence is evident in a student's ability to listen, react to sound and rhythm, and communicate effectively, as well as by their ability to learn through reading, writing, discussion, and listening. It encompasses comprehension, paraphrasing, interpretation, and memorization of spoken and written language, as well as the capacity to communicate and influence others (Erlina et al, 2019). Thus, understanding linguistic structure (syntax), meaning (semantics), sounds (phonology), and practical activities (pragmatics) are all components of linguistic intelligence.Numerous studies indicate that linguistic intelligence is the most prevalent and closely linked to all language abilities, including listening, speaking, reading, and writing (Rahimi, Sadighi, & Hosseini, 2011; Ahmadian & Hosseini, 2012; Naseri & Ansari, 2013; Wijaya, 2014; Desvitasari, 2015; Ghafarian & Amiri, 2016). There is a favorable correlation between linguistic intelligence and a number of language competencies, including lexical item recall, affixation awareness, and students' lexicon knowledge. (Parsa, Jahandar, & Khodabandelou,2013; Shakouri, Sheikhky, & Teirmourtash, 2016). Linguistic intelligence, influenced by internal and external factors like learning styles, teachers, media use, physical conditions, and school programs, showed no significant gender difference. It is the best predictor of students' language knowledge, regardless of gender. (Irvaniyah & Akbar, 2014; Rahmawaty, 2014; Darmawan, 2015). It follows that individuals with high levels of linguistic intelligence are likely to succeed in learning a language as they are able to utilize the language proficiently in speaking, listening, reading, and writing (Rahmadina, 2020). Consequently, the following questions are investigated in the current study:

1. What is the Iraqi EFL university students' level of verbal intelligence?
2. Are there significant differences in Iraqi EFL university students' linguistic intelligence according to the gender variable (males and females)? Aims
The current study aims at finding out:
1. Iraqi EFL university students' level of linguistic intelligence.
2. the significance of the differences in Iraqi EFL university students' linguistic intelligence according to the gender variable (males and females).LimitsThis study is limited to the Iraqi EFL fourth-year university students at the English department of the University of Baghdad (College of Education/ Ibn Rushd for Human Sciences) during the academic year 2024/2025   Value
This study is hoped to be of value to:
 1. EFL learners to be aware of the potential correlations between their linguistic intelligence and language proficiency and the process of learning the language. This could assist them reach their learning objectives and enhance their performance in listening, speaking, reading, and writing.
2. EFL teachers to emphasize the importance of linguistic intelligence in language learning and integrate it into their teaching methods. Teachers may be drawn to help students enhance their language comprehension and effective usage, as it is crucial in language learning.
3. Curriculum and syllabus designers who may reconsider the course components to incorporate learning opportunities and activities that may enhance students' linguistic intelligence.

Literature Review
 IntelligenceLearning is a dynamic interaction between students, educators, and learning resources in a learning environment. Intelligence, a cognitive ability, is crucial for smooth interaction. Smarter individuals understand and think faster, resolving problems more efficiently (Hasanuddin, 2024). Intelligence, initially considered a single human attribute, has evolved and can now be evaluated using standardized tests (IQ) that incorporate both verbal and logical-mathematical assessments (Gardner, 2011). Armstrong (2009) states that the new paradigm views intelligence as a functional term with diverse applications in individuals' lives, reflecting the complex qualities of the human mind, encompassing various forms and varying degrees of exhibiting them. Gardner (2013) posits that intelligence consists of three elements: problem-solving, problem-generating, and creation. Thus, it can be concluded that Intelligence is a mental ability involving critical thinking, learning, understanding, and problem-solving. It is a general skill that combines human survival skills in specific environments or civilizations. Intelligence is unique and can be created and modified (Muhammad, 2022). Gardner's multiple intelligence theory, developed in the early 1980s, proposes that humans possess nine distinct intelligences including linguistic intelligence, logical/mathematical intelligence, spatial intelligence, musical intelligence, naturalistic intelligence, bodily/kinesthetic intelligence, interpersonal intelligence, intrapersonal intelligence,

and possibly existential intelligence (Rahimi & Sadighi ,2011; Samiyan, 2013; Al-Mekhlafi, 2015; Shakouri et al. 2016). Armstrong (2009) argues that each person possesses all eight intelligences to some extent and displays them uniquely. This theory challenges the notion of intelligence as a single brain property, suggesting a more complex brain structure. A growing body of research on MI has emerged in recent years, with many of these studies concentrating on the connections between intelligences and skill in language, academic success, and language acquisition (Rahimi & Sadighi ,2011).Gardner's multiple intelligences theory significantly contributed to cognitive science by fostering a learner-based philosophy, enhancing understanding and improvement of individual differences in teaching and learning environments (Şener & Çokçalışkan, 2018). Hoerr (2000) asserts that "the theory of multiple intelligences (MI) brings a pragmatic approach to how to define intelligence and allows the teachers to use their students' strengths to help them learn" (p.1). This theory significantly impacts learners' achievement and learning strategies (Campbell & Campbell, 1999; Samiyan, 2013; Alhamudin & Bukhori, 2016) Hoerr (2000, p. 12) emphasizes the significance of multiple intelligences theory in education, which emphasizes the uniqueness of each student, identifies their dominant intelligences, aids learning through these intelligences, offers diverse learning experiences, presents multiple intelligences teaching, offers various assessment methods, and provides various means of expression. The theory of multiple intelligences enables educators to accommodate a wide range of student types, support each type of intelligence, and help each student make the most of their own skills in the classroom (Shirfa, 2023). To put it briefly, multiple intelligences theory posits that human beings possess diverse intelligences, which are crucial for learning and achieving their objectives (Solehah, 2017).Linguistic Intelligence Linguistic intelligence is one of the multiple intelligences proposed by Gardner (1983; 2011). Armstrong (2009) defines LI as "The capacity to use words effectively, whether orally…or in writing…. This intelligence includes the ability to manipulate the syntax or structure of language, the phonology or sounds of language, the semantics or meaning of language, and the pragmatic dimensions or practical uses of language"(p. 6). It is the capacity to acquire new languages, be sensitive to spoken and written language, and use language to achieve goals (Hunt, 2010; Parsa et al., 2013). Additionally, Fleetham (2006) describes linguistic intelligence as the efficient use of language, including the ability to convey and understand its meaning in written and spoken forms. Four linguistic intelligence sensitivities are associated with language. Combining those is crucial for balancing linguistic intelligence. These include sensitivity phonology, which studies the organization and usage of sounds in natural languages; syntax, which studies word rules or the construction of grammars and the combination of other sentence structure elements to form grammatical sentences; semantics, which studies the meaning of linguistic expressions; and pragmatics, which studies the use of context in speech comprehension and production (Armstrong, 2009; Gardner, 2011). In addition to the four sensitivities, linguistic intelligence contains four other significant aspects. The four aspects that make up linguistic intelligence are "rhetoric," which is the ability to use language to persuade others to take a certain action; "mnemonic," which is "the capacity to use language to help one remember information"; "explanation," which is the ability to use language to provide information; and "metalinguistic," which is the ability to learn language itself, i.e., the language's ability to explain its own activities. These aspects are crucial in human society, as they enable individuals to effectively communicate, remember, and explain complex ideas (Erlina et al,2019; Shirfa, 2023). Effective communication, listening comprehension, responding to spoken words, and learning foreign languages through a variety of methods are all traits of high linguistic intelligence. In order to do this, an individual must be able to comprehend, paraphrase, interpret, and retain information; read and speak clearly; spell words with ease; enjoy word games; comprehend puns and jokes; use descriptive language; tell engaging stories; employ complex sentence structures; and appreciate grammar and meaning. Individuals with this intelligence can effectively explain difficult ideas, and they frequently employ it in arguments or compelling speeches (Hoerr, Boggeman, & Wallach, 2010). Linguistically intelligent individuals often have personal interests and should engage in various activities to develop their linguistic intelligence. These activities include brainstorming, choral reading, debates, extemporaneous speaking, journal keeping, lectures, and more. They can also participate in publishing, storytelling, student speeches, talking books, and using word processing software. Writing exercises can include creating plays, poems, essays, articles, books, interviews, research, using dictionaries, and presentations. These activities help learners develop their linguistic skills and enhance their overall communication skills (Armstrong, 2009; Hammoudi, 2010). Method According to the nature of this study, a descriptive quantitative research design is adopted. Descriptive research describes a sample/population to provide insights into its characteristics, without testing hypotheses or establishing cause-and-effect

relationships (Coe et al., 2017). It uses statistical tools like frequency tables, mean, standard deviation, and confidence intervals to answer descriptive questions (Creswell, 2014).Population and Sample Creswell (2012) defines a "population" as a group of individuals with a common characteristic, and the study's population includes students at English language department of the College of Education Ibn Rushd for Human Sciences at Baghdad University   A sample of (100) students, 30 male and 70 female, is randomly chosen from third-year students at English language department of the College of Education at Baghdad University Instruments Through a thorough review of related literature, previous studies, and tests measuring linguistic intelligence and depending on the four sensitivities of linguistic intelligence related to the language, a linguistic intelligence test is constructed by the researcher. To achieve the aims of the study, a four-part test is developed by the researcher. The first part of the test is devoted to test students' knowledge of phonology. It includes two questions. The first one includes 5 multiple-choice items whereas the second consists of 5 completion items to test students' knowledge of phonetic transcription   The second part of the test is devised to test students' knowledge of semantics. It includes two questions. The first one includes 5 multiple-choice items, while the second consists of 5 blanks to be filled The third part of the test is devised to test students' knowledge of syntax. It contains two questions. Both questions include 5 multiple-choice items.Finally, the fourth part of the test is devised to test students' knowledge of pragmatics. It has two questions, each of which consists of 5 multiple-choice items. See Appendix (A Face Validity Oluwatayo (2012)state that face validity refers to the subjective belief of a number of experts concerning an instrument's appearance and relevance , assessing its relevance, logicality, clarity, and unambiguity. Ten experts in Teaching English as a foreign language   review the study test to ensure its face validity, and they all agree that it is appropriate for the study's sample and aims. Pilot Administration   A pilot administration is conducted on 50 randomly selected fourth-stage students at the Department of English/College of Education-Ibn Rushd who are not included in the study sample to assess the clarity of test items and the time participants take to respond. The pilot administration confirms that the test's items are clear and students have a 50-minute completion time.Statistical Analysis of Linguistics Intelligences Test Statistical Analysis of the Items To verify the psychometric properties of the test items, the test is administered to a sample consisting of 100 male and female students.Difficulty Level Tavakol and Dennick (2011) define the item difficulty index, also known as the p-value, as the percentage of all examinees correctly answering a specific item.   The difficulty level of linguistic intelligence test items is calculated by arranging student scores from highest to lowest. The upper and lower 27% of scores represent extreme groups, with 27 students in each group. The number of incorrect answers in each group is extracted. The difficulty coefficients range between (0.315) and (0.593), as per Ebel's (1990) accepted range (0.20-0.80). Thus, the test items are considered acceptable and their difficulty level is suitable, as shown in Table (1).Item Discrimination Power The item discrimination index, as defined by Farenga and Ness (2015), quantifies the degree to which an item distinguishes between high and low test scores. The discrimination index for each objective test item is calculated and found to range from (0.815-0.333), with an item considered acceptable if its index exceeds 0.30, indicating that all test items are acceptable. Table (1) shows that.Table (1).Number of correct and incorrect answers for the upper and lower groups, Difficulty Coefficient, Ease Coefficient, and Discrimination Coefficient for the linguistic intelligence test.

Item	number of answers for the upper group		number of answers for the lower group		number of correct answers	number of wrong answers	Ease coefficient	Difficulty coefficient	Discrimination coefficient
	Correct	Wrong	correct	Wrong					
١	16	11	6	21	22	32	0.407	0.593	0.370
٢	١٩	٨	٧	٢٠	٢٦	٢٨	٠.٤٨١	٠.٥١٩	٠.٤٤٤
٣	٢٠	٧	١٠	١٧	٣٠	٢٤	٠.٥٥٦	٠.٤٤٤	٠.٣٧٠
٤	٢١	٦	٧	٢٠	٢٨	٢٦	٠.٥١٩	٠.٤٨١	٠.٥١٩
٥	٢٤	٣	١٣	١٤	٣٧	١٧	٠.٦٨٥	٠.٣١٥	٠.٤٠٧
٦	٢٥	٢	١٠	١٧	٣٥	١٩	٠.٦٤٨	٠.٣٥٢	٠.٥٥٦
٧	١٧	١٠	٨	١٩	٢٥	٢٩	٠.٤٦٣	٠.٥٣٧	٠.٣٣٣
٨	٢٠	٧	١١	١٦	٣١	٢٣	٠.٥٧٤	٠.٤٢٦	٠.٣٣٣
٩	١٨	٩	٨	١٩	٢٦	٢٨	٠.٤٨١	٠.٥١٩	٠.٣٧٠
١٠	٢١	٦	١٢	١٥	٣٣	٢١	٠.٦١١	٠.٣٨٩	٠.٣٣٣

١١	١٦	١١	٧	٢٠	٢٣	٣١	٠,٤٢٦	٠,٥٧٤	٠,٣٣٣
١٢	١٩	٨	٩	١٨	٢٨	٢٦	٠,٥١٩	٠,٤٨١	٠,٣٧٠
١٣	٢٦	١	١٠	١٧	٣٦	١٨	٠,٦٦٧	٠,٣٣٣	٠,٥٩٣
١٤	٢٥	٢	٨	١٩	٣٣	٢١	٠,٦١١	٠,٣٨٩	٠,٦٣٠
١٥	٢٢	٥	١١	١٦	٣٣	٢١	٠,٦١١	٠,٣٨٩	٠,٤٠٧
١٦	٢٤	٣	١٢	١٥	٣٦	١٨	٠,٦٦٧	٠,٣٣٣	٠,٤٤٤
١٧	١٩	٨	١٠	١٧	٢٩	٢٥	٠,٥٣٧	٠,٤٦٣	٠,٣٣٣
١٨	٢٢	٥	١٢	١٥	٣٤	٢٠	٠,٦٣٠	٠,٣٧٠	٠,٣٧٠
١٩	٢٣	٤	٨	١٩	٣١	٢٣	٠,٥٧٤	٠,٤٢٦	٠,٥٥٦
٢٠	٢٣	٤	٨	١٩	٣١	٢٣	٠,٥٧٤	٠,٤٢٦	٠,٥٥٦
٢١	٢٢	٥	٦	٢١	٢٨	٢٦	٠,٥١٩	٠,٤٨١	٠,٥٩٣
٢٢	٢٤	٣	٢	٢٥	٢٦	٢٩	٠,٤٨١	٠,٥١٩	٠,٨١٥
٢٣	١٩	٨	٩	١٨	٢٨	٣٦	٠,٥١٩	٠,٤٨١	٠,٣٧٠
٢٤	٢١	٦	٨	١٩	٢٩	٣٥	٠,٥٣٧	٠,٤٦٣	٠,٤٨١
٢٥	٢٣	٤	١٠	١٧	٣٣	٣٧	٠,٦١١	٠,٣٨٩	٠,٤٨١
٢٦	٢٣	٤	٧	٢٠	٣٠	٣٤	٠,٥٥٦	٠,٤٤٤	٠,٥٩٣
٢٧	٢٣	٤	٥	٢٢	٢٨	٣٢	٠,٥١٩	٠,٤٨١	٠,٦٦٧
٢٨	٢٢	٥	٨	١٩	٣٠	٣٥	٠,٥٥٦	٠,٤٤٤	٠,٥١٩
٢٩	٢٤	٣	٩	١٨	٣٣	٣٦	٠,٦١١	٠,٣٨٩	٠,٥٥٦
٣٠	٢٧	٠	١٠	١٧	٣٧	٣٧	٠,٦٨٥	٠,٣١٥	٠,٦٣٠
٣١	٢٧	٠	١٠	١٧	٣٧	٣٧	٠,٦٨٥	٠,٣١٥	٠,٦٣٠
٣٢	٢٠	٧	٥	٢٢	٢٥	٣٢	٠,٤٦٣	٠,٥٣٧	٠,٥٥٦
٣٣	٢٠	٧	٦	٢١	٢٦	٣٣	٠,٤٨١	٠,٥١٩	٠,٥١٩
٣٤	٢٤	٣	٩	١٨	٣٣	٣٦	٠,٦١١	٠,٣٨٩	٠,٥٥٦
٣٥	٢٥	٢	٩	١٨	٣٤	٣٦	٠,٦٣	٠,٣٧٠	٠,٥٩٣
٣٦	٢١	٦	٨	١٩	٢٩	٣٥	٠,٥٣٧	٠,٤٦٣	٠,٤٨١
٣٧	٢٣	٤	٦	٢١	٢٩	٣٣	٠,٥٣٧	٠,٤٦٣	٠,٦٣٠
٣٨	٢٥	٢	٧	٢٠	٣٢	٣٤	٠,٦٩٣	٠,٤٠٧	٠,٦٦٧
٣٩	٢١	٦	٥	٢٢	٢٦	٣٢	٠,٤٨١	٠,٥١٩	٠,٥٩٣
٤٠	٢٠	٧	٤	٢٣	٢٤	٣١	٠,٤٤٤	٠,٥٥٦	٠,٥٩٣

Effectiveness of Distracters

Brown (2004) emphasizes that the effectiveness of a distractor in a test is crucial for determining the value of a multiple-choice item, as it determines the number of test takers drawn to the distraction. The effectiveness equation for alternatives is applied to the test's objective items, revealing that each alternative attracted a larger number of lower-class students, making all alternatives suitable. In the linguistic intelligence test, there are 30 multiple-choice test 5 in the phonology part, 5 in the semantics part, 10 in the syntax part, and 10 in pragmatics part. All of the items alternatives are accepted.

Item- Total Correlation

Point Biserial correlation coefficient is used to calculate the correlation coefficient between the score of each item and the total score. The procedures reveals that all test items are statistically significant, with a correlation coefficient of (0.196) at a significance level of (0.05) and degrees of freedom of (98), as shown in Table 2. **Table (2) Correlation Coefficients of the Item with the Total Score of the Linguistic Intelligence Test**

No.	Correlation Coefficient	No.	Correlation Coefficient
1	٠,٣٧٨	21	٠,٤٧٥
2	٠,٤٢٠	22	٠,٤٧٤
3	٠,٢٨٥	23	٠,٤٣٧
4	٠,٣٣٨	24	٠,٤٤١
5	٠,٣٤٧	25	٠,٤٤٤
6	٠,٣٨٨	26	٠,٤٤٩

7	٠,٣٦٦	27	٠,٤٧١
8	٠,٤٢٣	28	٠,٤٥٧
9	٠,٣٧٧	29	٠,٤٥١
10	٠,٣٨١	30	٠,٣٦٢
11	٠,٤٦١	31	٠,٤٣٣
12	٠,٣٨٩	32	٠,٤٦١
13	٠,٤٥٨	33	٠,٤١٠
14	٠,٤٥٨	34	٠,٤٠٦
15	٠,٤١١	35	٠,٤٥٤
16	٠,٤٣١	36	٠,٣٩٨
17	٠,٤٤٧	37	٠,٤١٨
18	٠,٣٥٧	38	٠,٣٧٧
19	٠,٣٩٠	39	٠,٤٢٠
20	٠,٤٤٣	40	٠,٣٨٥

Item-Subscale Correlation

Point-biserial correlation coefficient was utilized to determine the correlation between each item's score and its domain score. The results show that all test items were statistically significant, with a critical value of correlation coefficient of 0.196 at a significance level of 0.05 and degrees of freedom of 98. Table (3) illustrates this.

Table (3)Linguistic Intelligence Item-Subscale Correlation Coefficients (Point-biserial Correlation Coefficient)

No.	Phonology	No.	Semantics	No.	Syntax	No.	Pragmatics
1	٠,٤٨٨	11	٠,٥٨٧	21	٠,٥٧١	31	٠,٤٩٠
2	٠,٥١٢	12	٠,٤٦١	22	٠,٥١٩	32	٠,٥٢٦
3	٠,٣٦٦	13	٠,٥٦٧	23	٠,٥١١	33	٠,٤٧٨
4	٠,٣٩٠	14	٠,٥١٠	24	٠,٥٤٣	34	٠,٤٦٣
5	٠,٣٩٧	15	٠,٤٨٨	25	٠,٥٠٦	35	٠,٥١٤
6	٠,٤٥٠	16	٠,٤٩٦	26	٠,٤٩٨	36	٠,٤٥٥
7	٠,٤١٥	17	٠,٥٠٥	27	٠,٥٣٥	37	٠,٤٦٢
8	٠,٥٣٣	18	٠,٤٧٨	28	٠,٥٤١	38	٠,٣٩٣
9	٠,٤٠٨	19	٠,٤٥٧	29	٠,٤٩٧	39	٠,٤٨٧
10	٠,٤٢٢	20	٠,٥١٩	30	٠,٤٠٢	40	٠,٤١١

Matrix of Internal Correlations

The extent of independence of the main domains in measuring linguistic intelligence is determined by calculating internal correlation coefficients between the scale's overall score and the subscales' total scores, using the Pearson correlation coefficient due to the gradual and connected nature of the scores.To achieve this, 100 sample forms are used. The results indicate that the correlation coefficients of the score of each domain with the total score of the scale, as well as the relationship of the domains to each other, are statistically significant at a significance level of 0.005 and with a degree of freedom of 98, where the critical value equals 0.196. This indicates that the domains are interconnected and measure one thing and are treated as a single total score. Table 4 illustrates this.

Table 4Correlation Matrix for Linguistic Intelligence Subscale

Linguistic Intelligence	Total Score	Phonology	Semantics	Syntax	Pragmatics
Total Score	1	٠,٥٧٦	٠,٤٤٧	٠,٤٩٣	٠,٤١٤
Phonology		1	٠,٣٩٤	٠,٣٤٧	٠,٣٥٤
Semantics			١	٠,٤٤٥	٠,٤٣٩
Syntax				١	٠,٣٩٦
Pragmatics					١

Reliability

The Kuder-Richardson 20 approach is utilized to assess test reliability and internal consistency based on the correlation of test items with each other within the test, resulting in a test reliability coefficient of 0.85 for 100 student scores, indicating its reliability and consistency.

Results

Following the test's application to the study's sample and in accordance with its aims, the results can be summed up as follows:

Results Related to the First Aim:

As far as EFL students' level of linguistic intelligence is concerned, the calculated results indicate that the mean score is 20.310 with a standard deviation of 5.695. For the purpose of identifying the significance of the variance between the mean score and the theoretical mean, which is 20, a t-test for one independent sample is used. It is found that the difference is not statistically significant at the significance level of 0.05, as the calculated t-value (0.544) is smaller than the critical t-value (1.98) with 99 degrees of freedom. This means that the study sample possesses a moderate level of linguistic intelligence because the theoretical mean is smaller than the mean of the sample.   See table (5).**Tablet (5)Mean, Standard Deviation and T-Value for linguistic intelligence test**

Varible	Sample	Mean	Standard Deviation	Theoretical mean	T-Value		Significance (0.05)
					Calculated	Critical	
linguistic intelligence	100	20.310	5.695	20	0.544	1.98	Not significant in favor of the mean

Results Related to the Second Aim

 The t-test for two independent samples is used to find the differences in linguistic intelligence among the sample according to the gender variable and reveals the results shown in table (6).

Tablet (6)Mean, Standard Deviation and T-Value for linguistic intelligence test according to the gender variable

Varible	Gender	Sample	Mean	Standard Deviation	T-Value		Significance (0.05)
					Calculated	Critical	
linguistic intelligence	Male	30	17.397	5.538			
	Female	70	21.507	5.345	3.468	1.96	Significant

The table above shows significant differences in linguistic intelligence between males and females in favor of females showing a higher calculated t-value (3.468) than the critical t-value (1.98) at a significance level (0.05) and degree of freedom (98).

Discussion

   In light of the findings of the present study and in relation to the first aim of the study, which is concerned with "finding out EFL students' linguistic intelligence level ", it is found that students have a moderate level of linguistic intelligence. A moderate level of linguistic intelligence is attributed to students' ability to listen, respond, learn languages, write, understand, spell, enjoy word games, understand puns and jokes, incorporate descriptive language, be a good storyteller, use complex sentence structures, appreciate grammar, and debate issues. (Hoerr, Boggeman, & Wallach, 2010).As far as the second aim of the study is concerned, which is to find out the significance of the differences in Iraqi EFL university students'   linguistic intelligence according to the gender variable (males and females), the results show significant differences in linguistic intelligence between males and females in favor of females. Male and female students have distinct differences in conduct, competence, and ability (Eagly & Wood's 1999).   As evidenced by research, male students are rational and autonomous thinkers, enjoying extracurricular activities. They possess excellent logical-mathematical, intrapersonal, and bodily-kinesthetic intelligence. However, female students outperform male students in linguistic-verbal, visual-spatial, interpersonal, naturalistic, existential, and musical-rhythmic and harmony intelligence (Hasanuddin,2024).

Conclusions

Considering the findings of the current study, the following conclusions have been drawn.

1. Results provide evidence that EFL university students have a moderate level of linguistic intelligence. It suggests that when EFL learners are conscious of their linguistic intelligence, they excel in learning languages through various communication methods, effectively explaining ideas, using language for persuasion, easily remembering information, enjoying word games, and using complex sentence structures. Their activities and careers are based on their linguistic intelligence.

2. There is significant differences in linguistic intelligence between males and females that favor the later. Intelligence studies reveal that logical reasoning, mathematical, and spatial intelligence are masculine domains,

while interpersonal and emotional skills are feminine, and female consistently outperform male in academic performance.

Recommendations

The findings and conclusions have led to the following recommendations:

1. Sudents should focus on their linguistic intelligence, as it strongly predicts their success in language learning, including listening, speaking, reading, and writing skills.

2. It is critical for both students and teachers to comprehend the students' linguistic intelligence as it assists in recognizing their strengths and weaknesses so they can grow from them.

3. Teachers are expected to act as "language coaches" to ensure all students have equal opportunities to utilize their strengths for learning.

4. Teachers can enhance students' linguistic intelligence by implementing easier tasks and practices, thereby increasing their satisfaction with their educational achievements.

5. Teachers should foster a learning environment that promotes positive attitudes towards linguistic intelligence, encouraging, supporting, and reinforcing this positive attitude.

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Appendix (A)
Linguistic Intelligence Test

Part 1 /Phonology

Q1/ Choose the correct answer:

1. The field of phonetics, known as ------------------, focuses on the mechanisms that produce speech sounds.
 A. **articulatory phonetics**   B. auditory phonetics C. acoustic   phonetics   D. none of these

2. Sounds which are formed by the back of the tongue against the soft palate are known as --------
A. lateral   B. **velar**   C. affricate   D. plosive

 3. In English, the letters --------- are represented by the labio-dental fricative.
A. a and o   **B. v and f**   C. p and b   D. c and k

4. ----------- are one of a phoneme's closely related group of sounds.
A. Phonetics   B. Semantics   C. Syntax   D. **Allophone**s

5. Aspiration refers to the --------------
A**. puff of air**   B. inhalation of air   C. exhalation of air   D. blocking of air

 Q1/ Choose the correct answer:
1. Transcribe   the   weak- form of the underlined words
Tom <u>could</u> <u>have</u> driven them to the party.
 2. Transcribe the following words and then mark the stress:
disconnect (v.), -------------------- injury (n.),-----------------
insolent (adj.), --------------------

Part 2 / Semantics

Q1/ Choose the correct answer:

1. What does semantics study in linguistics?
a) The structure of sentences
b) The meaning of words and sentences
c) The sounds of language
d) The origin of language

2. The dog bites <u>the man</u>. The semantic role of the man is --------
a. a goal   b. an agent   c. an instrument   **d. a patient**

3. Which one of the following sentences has an experiencer?
a. Sally was scared. B. She loves music.   C. Sandra made him a cup of coffee.   D. They went to London.

4. Which pair of sentences is the paraphrase of each other?
a. Jane teaches English in a university. / Jane is a teacher.
b. She's interested in reading novels. / She loves reading novels.
c. Matt saw David at the party last Sunday. / It was David that Matt saw at last Sunday's party.
d. It is ten minutes to the nearest pharmacy. / The pharmacy is near.

5. What type of meaning is associated with emotions or attitudes attached to a word?
a) Denotative meaning   **b) Connotative meaning**
c) Literal meaning   d) Grammatical meaning

 Q2. Fill in the blanks with the lexical relationship of the following pairs:
(antonymy,   polysemy, synonymy, homonymy, hyponymy)
  1. Nice, pleasant, kind, ------------------
  2. Move, walk, run , ---------------------
  3. Dreary, interesting, -----------------
  4. Hide, conceal , ----------------------
  5. To lie (not to tell the truth), to lie (to rest), ----------------

Part 3 / Syntax

Q1/ Choose the correct answer:

1. ------------------ is the syntactic structure that is most clearly assigned to a given sentence.
 A. Deep Structure **B. Surface Structure** C. Both A & B
      D. None of these

2. The study of the rules governing the way words are combined to form sentences is said to be ----------------
A. Phonology   B. Linguistics   C. Lexicography   **D. None of these**

3. Joe has been playing tennis all day. They know he is going to <u>wear out</u> soon. What's the meaning of the underlined expression?

A. succeed   B. continue   **C. tire**   D. stop it

4. With respect to subordinate clauses, which of the following statements is false?

a. **they convey a complete meaning**   b. they must always go with a main clause

c. they can never stand alone   d. they consist of noun, adjective, and adverb clause

5. Any sentence that contains ------------ is considered a complex sentence. a. independent + subordinate(s)   **b. main + subordinate(s)**   c. independent + main + subordinate(s)   d. independent + independent

 Q.2   Choose the letter of the underlined word or group of words that is   not correct.

1. If <u>nobody</u> <u>have</u> <u>bought</u> that house from the landlord, then she <u>should</u>
          A   B   C

 <u>return and make</u> another offer.
          D

2. Mark's <u>criticism of the</u> two short stories <u>should not be</u> less than 1000
                    A   B

 words, <u>nor</u> <u>it is</u> more than 20000.
          C   D

3. Almost all students <u>adopt</u>   <u>most common</u> technique of developing a
                              A   B

 controlling idea, which <u>is</u> <u>the use of details</u>.
                              C   D

4. Being absent <u>from the</u> board's session <u>was</u> a strong <u>indications</u> of her
                        A   B   C

decision <u>to depart</u> the company.
              D

5. Philosophy seeks to identify <u>what is</u> fundamentally valuable and
                                        A

<u>significant</u> in life and <u>to discover</u> the nature of <u>true</u> and knowledge.
 B   C   D

Part 4/ Pragmatics

Q1/ Choose the correct answer:

1. It examines "invisible" meaning, or how humans perceive and comprehend meaning without expressing it verbally or in writing. Speakers (or writers) need to be able to rely on a lot of common presumptions and expectations for that to occur.

a. Syntax b. Semantics   C. Pragmatics   D. Morphology

2. An additional information the listener utilizes to establish a link between what is stated and what must be intended is a(n) --------------------

A. Co-text   B. Inference   C. Anaphora   D. Cataphora

3. The term "------------" refers to what a writer or speaker believes a listener or reader knows or believes to be true.

A. presupposition   B. speech act   C. context   D. reference

4. Politeness is defined as being cognizant of and considerate of another person's ——————

A. culture   B. face   C. identity   D. none of these

5. "Constancy under negation" is a test for identifying a(n) --------

A. presupposition   B. direct speech act   C. indirect speech act

D. reference

Q2/ Choose the correct answer:

1. In the utterance " I booked into <u>this</u> hotel yesterday, I think he's arriving <u>tomorrow</u>.", this and tomorrow are both examples of ---------

A. antecedents expressions

B. deictic expressions   C. anaphoric expressions   D. pronominal expressions

2. The utterance " Could you pass me that paper?" can be described as

a -------------

A. face-saving act   B. positive face C. negative face D. face-threatening act

3. Which of the following utterances performs a speech act indirectly?

A. Did Sally buy a present for Joe's birthday?

B. They had completed their project.

C. What time will Tony be home? D. Could you open the widow for me?

4. In the utterance " David dropped the plate. **It** shattered loudly." , the pronoun *it* is a(n) ---

A. anaphora   B. cataphora   C. antecedent   D. postcedent

5. Which one of the following is a presupposition of "Sally doesn't regret buying dresses via the internet again."

A.Sally often buys dresses via the internet again.

B. Sally has never bought dresses via the internet before.

C.Sally is glad that she has bought dresses via the internet.

D. Sally has bought dresses via the internet.