

In the Name of God



ISLAMIC AZAD UNIVERSITY
SCIENCE AND RESEARCH BRANCH
Faculty of Literature, humanities and social sciences
Department of English Literature

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Foreign Language (TEFL)**

Subject:
**Iraqi EFL Learners' Linguistic Intelligence
and Their Writing Accuracy and
Complexity Across Gender**

By
Awng Ahmed Braim

Thesis Advisor:
M. Yarahmadi Ph.D.

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Dedicated To
My Beloved Family

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Abstract

This study addressed the limited understanding of how the relationship between linguistic intelligence writing accuracy, and writing complexity among Iraqi intermediate EFL learners. The research involved 120 intermediate EFL learners, evenly split by gender, from two private schools in Iraq. Using a proficiency test, a linguistic intelligence questionnaire, and a writing task, the study measured learners' linguistic intelligence, writing accuracy, and writing complexity. The findings revealed that female learners exhibited significantly higher levels of linguistic intelligence, writing accuracy, and writing complexity compared to their male counterparts. Additionally, positive correlations were found between linguistic intelligence and both writing accuracy and complexity. These results suggest that tailoring EFL instruction to leverage linguistic intelligence can improve writing outcomes and highlight the need for educational practices that address individual learner characteristics. The study's limitations included its focus on a single proficiency level and academic setting, suggesting that future research should explore the role of variables.

Key words: Linguistic intelligence, writing accuracy, writing complexity, Gender

Chapter One:

Introduction

1-1- Introduction

Intelligence has developed throughout years. Gardner (2011) says that in the past time; intelligence was defined as a single property of human mind. Also, it only could be measured by standardized instrument called IQ (Intelligence Quotient) test which consists of verbal and logical- mathematical tests. However, there are many cons with this traditional view of intelligence. Gardner (2011) argued that “traditional view of intelligence employed in educational and psychological settings needed reform” (as cited in Esmaeli et al. 2014, p. 2663). He suggested that “the concept of a “pure” intelligence measured by a single IQ score is flawed” (pp. 2663-2664). Then, the new paradigm offers that human mind possess more complex properties. Armstrong (2009) says, “the concept of intelligence began to lose its mystique and became a functional concept that could be seen working in people’s lives in a variety of a ways” (p. 9). He says that each person has all intelligences to some degree and displays them uniquely. Therefore, the intelligence is not a single entity, but a variety of talents and everyone has different dominant intelligence. As the combination of different abilities, intelligence is also defined as the ability to solve problems in a given different

situation. According to Gardner (2011) and Hoerr (2000), intelligence has more to do with the ability to solve problems and to fashion products that are culturally valued. Based on the concepts above, we tried to conclude the definition of intelligence as the mental capacity of an individual to find a way to deal with and end the problem and to create the product which can be affected and activated by culture and environment.

Gardner (2011) defined linguistic intelligence in his Multiple Intelligences Theory as sensitivity to spoken and written language and capacity to use language effectively to accomplish goals. As an innate personal aptitude, linguistic intelligence manifests early and persists as the ability to analyze words/sentences, grasp meaning, communicate ideas, convince others and master new languages more readily through heightened phonological, grammatical, semantic and pragmatic awareness (Naseem & Khalid, 2017).

This cognitive framework distinguishes linguistic intelligence as a domain-specific ability from general intelligence. Tests measuring it through subscales assess learners' rhetorical, mnemonic and metalinguistic skills cultivating literacy development irrespective of acquired knowledge (Gardner, 2011). For this study's purposes, Iraqi EFL students' linguistic intelligence levels are quantified based on scores from standardized verbal aptitude measures, chiefly the linguistic subscale of Armstrong's Multiple Intelligences Inventory featuring meta-

linguistic judgment items with empirically verified psychometric validity and reliability.

As students who have well-developed linguistic intelligence, they have their own characteristics. They would learn any language successfully and perform better than those who have low linguistic intelligence. In other words, students who are able to master the languages meaning that they have high linguistics intelligence. There are some characteristics, activities and possible carriers of others with this intelligence. Firstly, there are some characteristics of students with high linguistic intelligence. A student with well-developed linguistic intelligence usually: listen and respond to the sound, rhythm, color, and variety of the spoken word; exhibit ability to learn other languages such as learn through listening, reading, writing, speaking to communicate, discuss, explain and persuade; good at writing; comprehend, paraphrase, interpret, and remember what has been said; read and speak effectively; uses complex sentence structure; appreciates the subtleties of grammar and meaning, often, loves to debate issues or give persuasive speeches, and able to explain things well (Laughin, 1999 as cited in Abdallah, 2008; Hoerr, Boggeman, & Wallach, 2010).

Besides the characteristics, linguistically intelligent students also have their own pursuits. Some experts state the activities for linguistic intelligence learners. Armstrong (2009) and Hammoudi (2010) state the activities for linguistic intelligence learners in the classroom, such as: writing activities such as, write a

story, poem or drama, write an essay, write a newspaper article, write in a learning journal, make a book, interview, do research at the library or on the internet, use a dictionary, and make a presentation. In brief, students with high linguistic intelligence have their own normal behaviors. They learn language more successfully and perform better than others. Also, they will be better than others in performing the language. Therefore, their activities and possible careers are based on their characteristics such as exhibit ability to learn other languages such as learn through listening, reading, writing, speaking to communicate, using language effectively to explain things well and persuade others; good at writing, speaking, reading and listening; easily to remember the information; enjoys word games; uses complex sentence structure grammatically.

The definition of writing proposed by Nunan, Brown (2001:335) also states that writing is the written products of thinking, drafting, and revising that require specialized skills on how to generate ideas, how to organize the coherently, how to use discourse markers and rhetorical conventions coherently into a written text, how to revise text for clearer meaning and how to edit text for appropriate grammar and how to produce a final product. In short, some stages of the text composition proposed by Brown involve the act of physical and mental, for example how to generate ideas, how to organize them coherently and etc.

The definitions of writing are variously stated by some experts. According to Rivers (1981: 294), writing is conveying information or expression of original

ideas in a consecutive way in the new language. Brown, (2001: 336) also claimed that writing is a thinking process. In line with this, Brown (2000: 31) states the definition of a language competence as “one’s underlying knowledge of system of a language its rules of grammar, its vocabulary, and all the pieces of language and how those pieces fit together”. Furthermore, Bachman (1990: 87) divides the language competence into two parts: organization competence and pragmatic competence.

Organization competence is ability to comprehend and form correct sentences, understand meaning of sentences and pour theses sentences into a text. Based on this statement, it can be concluded that writing is one part of the competencies. Writing is one of four English language skills besides listening, reading and speaking. Writing is an ability or activity of arranging words into form of sentences. It uses to communicate information, express the feeling or ideas to someone, public or government. According to Bram (1995:32) defines that writing producing or reproducing written message. It is an active process to organize and formulate the ideas on the paper. Furthermore, Harmer (2004) defines writing is way to produce language and express idea, feeling, and opinion. Furthermore, he states that writing is a process that what people write is often heavily influenced by the constraints of genres, and then the elements have to be presented in learning activities.

Another definition of writing skill is also defined by Urquhart and McIver and also Harmer. Urquhart and Mcvler (2005: 5-6) state that writing is a recursive process, which means students revise throughout the process, frequently moving back and forth among the stages. Then, students should learn strategies for invention and discovery, and teaches should help students generate content and discover a purpose. Also, it is stated that readers, purpose, and occasion define all types of writing and effective writing fulfills the writers' intention and meets the readers' need. It means that writing is a complex process and it seems reasonable to expert, then, that the teaching of writing is complex as well. Moreover, Harmer (2004) states that writing encourages students to focus on accurate language use. It is because students consider the language use when the students engage in their writing process. This activity will provoke language development because the students resolve problems what writing puts in students' minds.

Furthermore, he states that writing can be planned and given with an unlimited number of revisions before its release. In addition, Elbow (1973) in Brown (2001: 336) also says that writing is a two steps process. The first process is figuring out the meaning and the second process is putting the meaning into language. Writing represents what we think. It is because the writing process reflects things, which stay in the mind. Furthermore, based on those definitions above, it can be stated that writing skill is a complex activity in producing a qualified writing. The complex activity consists of stages as the steps in writing. To improve students'

writing skill, the teaching and learning process of writing needs to be done well with developed input and effective activities. As a result, teachers need to consider the teaching of writing skill well based on their student's needs, ability and capacity.

The nature of writing can be widely defined from several perspectives. They are in comparison with speaking, as a physical and mental activity, as a cognitive and means of communication. These four perspectives will be explained more in the following discussions. Hayes (Weigle:2002) states that the process of writing involves three main cognitive activities, involving text interpretation, reflection and text production. The three cognitive processes are not only applied in the drafting process but also in the revising process. First cognitive activity of writing is text interpretation. It is the process of creating internal representations derived from linguistics and graphics input, while reflection is the process of creating new representation ideas from the existing representation in the process of text interpretation. Text production is the last process in which new written linguistics forms are produced.

Bell and Burnaby (1984), Nunan (1989:360) also state that writing is a complex cognitive process which requires the writer to perform control of a number of variables simultaneously both in the sentence level and beyond the sentence level. Content, format, sentence structure, vocabulary, punctuation, spelling, letter formation are variables that must be controlled by the writer in the sentence level.

While beyond the sentence level, the writer must be able to organize and integrate the ideas into cohesive and coherent paragraphs. Being able to maximize the cognitive aspects in writing will lead the writer to deliver the clear message to the readers. In other words, their writing is successful.

The nature of writing can also be defined as both physical and mental activity that is aimed to express and impress (Nunan : 2003). It is categorized as the physical activity because a writer is required to be able to do the act of committing words or ideas. As a mental work, the activities of writing focus more on the act of inventing ideas, thinking about how to express and organize them into clear statements and paragraphs that enable a reader in understanding the ideas of written work. In conclusion, writing is a productive skill that must be learnt and mastered by the English learners that involve the process of thinking, drafting, and revising. Writing is a means of communication that enables the students to synthesize the knowledge they have into an acceptable text that is appropriate with the English writing conventions, such as, using appropriate content, format, sentence structure, vocabulary, punctuation, spelling, letter formation and soon.

Discussing the aspects of writing, there are some important matters that need to be outlined in this discussion. They include 1) micro and macro skill or writing 2) mechanical components of writing, and 3) cohesion and coherence of writing. The first aspect of writing skill is its micro and macro components. Brown (2001:324-343) mentions a list of micro and macro skills for written

communication which focuses on both the form of language and the function of language.

Firstly, the micro and macro skills of writing mentioned by Brown cover several important aspects. Producing writing at an efficient rate of speed to suit the purpose, producing an acceptable core of words and using appropriate word order patterns, using acceptable grammatical system such as tense, subject verb agreement and etc, expressing particular meaning in different grammatical form, using cohesive devices in write discourse and using the rhetorical forms and conventions of written discourse. Meanwhile, the macro skills of writing cover some other aspects. They are accomplishing the communicative functions of written texts according to form and purpose, conveying links and connections between events and communicating such relations as main idea, supporting ideas, new formation, given information, generalization, and finally developing a battery of writing strategies that include such as accurately in using prewriting devices, writing with fluency in the first drafts, using paraphrases and synonyms, soliciting peer and instructor feedback, and using feedback for revising and editing.

Then, mechanical components are the second important matter of writing. Like other skills of English, writing has its own mechanical components, such as handwriting, spelling, punctuation, and construction of well-performed sentences, paragraphs and text (Harmer:2004). He also states that the previous components need to be introduced in the teaching and learning process of writing. The last

aspect will center on the discussion of the cohesion and coherence of writing skill. The two aspects play important role in the process of good paragraph compositions and cannot be separated in the process of writing since they are closely related to one another. Moreover (Harmer:2004) states that both cohesion and coherence are needed to make the writing more accessible. The first thing to know is cohesion. Cohesion can be defined as linking relationship of a number of linguistics elements that can be seen in the structure of the text surface. According to Harmer, there are two types of cohesion. They are lexical (repetition of words) and grammatical cohesion (pronoun, possessive reference, and article reference). On the other hand, coherence is defined in slightly different way that is whether the writing works can easily be read and understood. Oshima and Hogue (1999:40) state that to be able to have the coherence is writing, a writer need to focus on the sentence movements. The movement of one sentence to the next sentence must be logically and smoothly delivered. In other words, the sentences must flow smoothly. He then adds four ways that can be done by the writer to achieve coherence in their works. They involve repeating key nouns, using pronouns, using transactional signals and arranging he sentences in logical order. As summary, the micro and macro skill, the components cohesion and coherence are important aspects of writing. Each of them has contributions towards the good paragraph compositions. Therefore, they must be considered in each stage of the

process of writing, especially when the teachers want to make students' writing works more accessible.

1-2- Statement of the Problem

Iraqi EFL students face significant obstacles in developing writing proficiency due to limitations in the educational environment (Al-Behadili, 2019; Al-Amery, 2018). While individual characteristics like linguistic intelligence impact second language acquisition (Gardner, 1983), existing instructional approaches do not adequately address learner diversity (Alharbi, 2015). Studies in other settings have identified connections between linguistic intelligence and writing abilities (Chan, 2018; Idrus, 2016), but the interplay of these factors within the distinctive challenges of the Iraqi context remains unclear (Alkhafaji, 2020).

Furthermore, the effects of differences in gender, English experience, and overall proficiency level on the relationship between linguistic intelligence and writing have not been thoroughly investigated, particularly in Iraq. Although some research has explored certain variables independently (Kaharuddin et al., 2020; Jin, 2022), a comprehensive examination of their interactive effects is still needed. This limits insight into how personal attributes and contextual constraints jointly shape Iraqi EFL learners' writing development. Without understanding these intricate dynamics, instruction cannot be fully tailored to learners' characteristics and realities (Alnashmi et al., 2022).

Thus, this study addresses the insufficient knowledge about the association between Iraqi intermediate EFL learners' linguistic intelligence and their writing accuracy and complexity, considering both individual and systemic factors. Clarifying this complex relationship can inform the improvement of Iraqi EFL teaching practices to more effectively facilitate learning within educational limitations by focusing on individual strengths and weaknesses. It bridges gaps in applying theory to practice for intermediate writing instruction in the unique Iraqi setting facing distinct challenges.

1-3- Significance of the Study

The significance of this study in the fields of English Language Teaching (ELT) and Multiple Intelligences (MI) is underscored by the inadequate research on EFL learners' linguistic intelligence and its relationship to writing accuracy and complexity. The study's objectives suggest that it may address several gaps in the existing literature. Specifically, the ability to create complex and precise texts is a crucial skill for participating in global communication and knowledge creation in the 21st century.

However, studies show that many EFL learners worldwide struggle to achieve advanced academic writing proficiency despite extensive language study (Gustilo & Magno, 2015). The inferior quality and complexity of EFL students' expository, argumentative, and research writing pose critical literacy challenges that limit their access to academic and professional opportunities conducted in English, the

global lingua franca. Developing context-specific solutions to overcome obstacles in EFL writing acquisition is thus an educational imperative with economic and social justice implications in today's interconnected world (Stapleton, 2020).

The urgent need to enhance EFL writing instruction is particularly evident in developing contexts like Iraq, where proficient English writing ability can shape young people's futures. Iraqi higher education policy actively encourages English literacy development to enable graduates to participate in international conversations within their fields and compete in globalized job markets, rather than remain isolated from transnational knowledge production and economic flows (Al-Husseini, 2021).

However, empirical research reveals significant grammatical, lexical, and rhetorical deficiencies common among Iraqi intermediate students and graduates attempting to write academic or workplace documents in English (Anbari & Taqi, 2022). Addressing this writing proficiency gap remains one of the most pressing and unresolved issues facing Iraqi English language teaching today. Unless writing problems affecting Iraqi EFL learners across educational levels are better understood and tackled through research-informed teaching interventions, a generation of youth risk being left behind on essential literacy measures.

One scientifically-validated theory with immense, yet untapped explanatory potential for modeling Iraqi students' variable EFL writing performance is Gardner's Multiple Intelligences framework, which emphasizes verbal-linguistic

intelligence (Gardner, 2011). This model posits that learners possess independent strengths across different abilities such as mathematical, spatial, bodily-kinesthetic, musical, and interpersonal intelligence. Notably, those with strong linguistic intelligence have an innate sensitivity to the phonology, semantics, and structure of language. These verbal aptitudes presumably facilitate the acquisition of literacy skills, including second language writing. However, the relevance of Iraqi EFL learners' linguistic intelligence for their L2 writing outcomes has never been quantified through empirical methods, an oversight that hinders the advancement of context-specific writing instruction and testing.

1-4- Purpose of the Study

According to O'Malley & Pierce (1996) the purposes of writing are: Expository or informative writing. In this purpose is to give knowledge or to share the knowledge and give information or ideas. Informative writing includes describing events or experience speculating on cause and effect, etc. informative writing helps the writer to integrate new ideas and examine existing the knowledge Expressive or narrative writing is a personal or imaginative expression in which the writer produces the story. It means that the expressive writing is about personal feeling of the writer, how they produce the stories based on people's observation, object and place. Persuasive writing, the writers attempt to influence the other and initiate action or change. It means that the writer produces a story to persuade the reader or people. It is based on background information, fact, etc.

1-5- Research Questions and Hypotheses

The researcher made an attempt to answer the following research questions:

RQ1: Is there any significant difference between male and female Iraqi EFL learners' linguistic intelligence?

RQ2: Is there any significant difference between male and female Iraqi EFL learners' writing accuracy?

RQ3: Is there any significant difference between male and female Iraqi EFL learners' writing complexity?

RQ4: Is there a significant relationship between male Iraqi EFL learners' linguistic Intelligence, writing accuracy?

RQ5: Is there a significant relationship between male Iraqi EFL learners' linguistic Intelligence, writing complexity?

RQ6: Is there a significant relationship between female Iraqi EFL learners' linguistic Intelligence, writing accuracy?

RQ7: Is there a significant relationship between female Iraqi EFL learners' linguistic Intelligence, complexity?

Accordingly, the following null hypotheses were formulated:

H0₁: There is not any significant difference between male and female Iraqi EFL learners' linguistic intelligence.

H0₂: There is not any significant difference between male and female Iraqi EFL learners' writing accuracy.

H0₃: There is not any significant difference between male and female Iraqi EFL learners' writing complexity.

H0₄: There is not a significant relationship between male Iraqi EFL learners' linguistic Intelligence, writing accuracy.

H0₅: There is not a significant relationship between male Iraqi EFL learners' linguistic Intelligence, complexity.

H0₆: There is not a significant relationship between female Iraqi EFL learners' linguistic Intelligence, writing accuracy.

H0₇: There is not a significant relationship between female Iraqi EFL learners' linguistic Intelligence, writing complexity.

1-6- Definition of Key Terms

1-6-1- Linguistic Intelligence

In his Multiple Intelligences Theory, Gardner (2011) characterized linguistic intelligence as a sensitivity to spoken and written language, as well as the ability to use language effectively to achieve objectives. As an innate personal aptitude, linguistic intelligence emerges early and endures as the capacity to analyze words and sentences, comprehend meaning, express ideas, persuade others, and acquire new languages more easily through heightened phonological, grammatical, semantic, and pragmatic awareness (Naseem & Khalid, 2017). In the present

study, linguistic intelligence was examined using the linguistic intelligence subscale of Shearer's (1994) multiple intelligence questionnaire.

1-6-2- Writing Accuracy

The concept of writing accuracy comprehensively refers to the extent to which texts adhere to conventions for spelling, punctuation, capitalization, morphology, lexis, syntax, and semantics in the target language (Lu & Ai, 2015). From cognitive and computational linguistics perspectives, higher accuracy indicates effective activation and application of declarative and procedural knowledge of vocabulary meanings, usage, and grammatical rules (Lu & Ai, 2015). In the present study, writing accuracy referred to the ratio of the error-free T-units to the total number of T-units in the language learners' writing test (Chandler, 2003).

1-6-3- Writing Complexity

According to Lu & Ali (2015), writing complexity encompasses text features that reflect sophisticated control and strategic application of the L2 to achieve communicative goals, primarily operationalized as syntactic and lexical diversity and density indices. Syntactically complex texts exhibit varied, elaborated clauses and sophisticated rhythms, while lexical complexity signals precise, varied, and appropriate vocabulary usage through indices such as type-token ratios and academic word density (Lu & Ai, 2015). In the present study, writing complexity referred to the frequency of language learners' error-free T-units in their writing test.

1-7- Outline of the Study

The current thesis consists of five chapters where chapter one introduced the whole picture of the thesis in one sight. the researcher gave a report of the background to the present study to put the study in context along with the introduction of the major aim and significance of the study, followed by the operational and theoretical definitions for the present study. Finally, the limitations of the present investigation are discussed at the end of chapter one. Chapter 2 reviewed the literature related to the main variables of the study along with empirical studies and explained the results that were obtained. Chapter 3 centered around the research methodology; the methodology employed in this study includes the participants, instruments, and the data collection procedure. Chapter four, revealed the results and analysis of the data, and in the final chapter discussed the findings of the study and provided suggestions for further study.

1-8- Limitations and Delimitations of the Study

The present study was not able to control the effect of all of the variables on the obtained results. As a result, it suffered from a number of limitations. These limitations stemmed from the fact that the study:

a) was not able to control the impact of the participants' age and language background on the results;

b) was not able to select its participants from different schools and focused on the learners from a certain private school;

Furthermore, the researcher delimited the study to deal with the examined variables in an acceptable way. The delimitations of the study stemmed from the fact that it:

a) focused on the intermediate proficiency level and did not deal with the other levels of proficiency;

b) focused on language learners' writing accuracy and complexity and did not deal with the other language skills and aspects;