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An Investigation of EFL Students' Perception of Integration Between Morphology and Pronunciation in The English Language

A B S T R A C T

The study aims to investigate the students' perception the integration between morphology and pronunciation in the English language. The problem of the study is that English language students study the change of pronunciation additions according to the laws of sound at the secondary stage, but at the university stage, despite their study of phonetics and phonology, the degree of their awareness of the overlap between morphology and phoneme is unknown. The study sample consists of (150) samples, including (90) males and (60) females. The results of the study shows that the students got a medium mark of perception the integration between morphology and pronunciation in the English language. According to the findings and results of the study it has been noticed that the ability of male and female students in morphological and phonological levels, are not equal. where the performance of the male students is better than the females in the diagnostic test. In this case the hypothesis which states that there is significant difference between the male and female students' level is accepted.

Also, the results of the questionnaire show that the students' perception of integration is not good, as they do not realize the relationship between the two, and even they seem unaware of the teaching relationship at this stage, which increases the students' ability to interact, and the students are not aware of the vocabulary of the paragraphs mentioned in the questionnaire.

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استقصاء إدراك طلبة اللغة الانكليزية لغة اجنبية التداخل بين علم الصرف والتلفظ في اللغة الإنكليزية

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الخلاصة:

تهدف هذه الدراسة إلى استقصاء إدراك طلبة اللغة الإنجليزية لغة أجنبية التداخل بين علم الصرف والتلفظ في اللغة الإنجليزية. مشكلة الدراسة تتلخص بأن طلبة اللغة الانكليزية يدرسون تغير تلفظ بين الاضافات وفقاً لقوانين الصوت في مرحلة الثانوية، لكن في مرحلة الجامعة بالرغم من دراستهم مادة الصوت وعلم الصوتيات الا ان درجة ادراكهم للتداخل بين الصرف والصوت غير معروفة. وتشمل عينة الدراسة (150) طالبا منهم (90) ذكور و (60) اناث. استخدمت ادوات القياس الاستبانة للطلبة والاختبار التشخيصي، وأظهرت نتائج الدراسة أن الطلاب حصلوا على علامة متوسطة في إدراك طلبة اللغة الإنجليزية لغة أجنبية التداخل بين علم الصرف والتلفظ في اللغة الإنجليزية. وبحسب النتائج فقد لوحظ أن قدرة الطلاب والطالبات في المستويات المورفولوجية والصوتية غير متساوية. اذ كان أداء الذكور أفضل من الإناث في الاختبار التشخيصي. في هذه الحالة، يتم قبول الفرضية التي تنص على وجود فرق كبير بين مستوى الطلاب والطالبات.

الكلمات المفتاحية: علم الصرف، اللفظ، اللغة الإنجليزية، الإدراك، التكامل.

1.0 Introduction

First, a second language (L2) student might not have the term stored in their mental lexicon and would claim, "I don't know this word." This is the least interesting scenario, while being very normal. Second, the term phonological contrast makes it difficult for the student to tell it apart from other words with the same sound, such as "still or steal," "rip or reap," or possibly "lip or jump." This makes the student hesitant to speak the word. Third, L2 learners commonly confuse words that sound similar but distinct even when there aren't any obvious phonological differences. Which one, the whisper or the whisker, belongs to a kitten?" Fourth, L2 students must assess whether a word is mono- or polymorphemic and disassemble morphologically complex words into their constituent morphemes in order to process morphosyntactic information. Two goals will be achieved by this sentence structure-driven morphological analysis: access to the lexical entry and interpretation of the data in the inflection, the past-tense marker (-ed) in "guessed" phrases, and the plural -s marker in "patients" (Gor, 2015).

The current study aims to ascertain learners' perspectives of the usage of linked speech elements to improve their phonological and morphological

performance in light of the literature previously addressed. Although a lot of research has been done to clarify the function of connected speech features, it hasn't been paid any attention to whether or not learners have accurate perceptions. Therefore, the current descriptive study adopts an active stance and suggests novel approaches to assist students in overcoming difficulties encountered in learning English pronunciation by increasing their awareness of the importance of mastering the integration of features and exploring whether EFL teachers in Tikrit's English Department/College of Education incorporate integration into their lesson plans or not.

1.1. Problem of The Study

The English language can be studied in different ways, including how the dialect pattern how its words combine into sentences how its sound connects into larger units. And how the integration of phonetics and morphology affects the pronunciation of the English language.

1.2.Aims of The Study

These are the aims of this study:

1. To find out whether EFL students at Tikrit University college of Education for Humanities English department procure the integration of Eng. Phonologic and morphology.
2. To find out whether there is a significant different between male and female students in the perception of this integration.
3. To find out the most problematic area concerning these integrities.

1.3. Questions of The Study

1. Why do English as a foreign language learners struggle to perceive the integration between phonology and morphology?
2. Is there a significant difference between the means score of male and female students; perception of the morphological and phonological areas?
3. Why do English as a foreign language learners find derivational affixes more challenging compared to other types?

1.4. The Procedures

1. A sample of students will be derived from EFL of the college of Education and Arts, College of Tikrit University.
2. A diagnostic test will be constructed.
3. A questionnaire will be constructed.

4. Data will be analyzed, and conclusion and recommendations will be drawn.

2.0 Theoretical Background

2.1 The Relationship Between spelling and pronunciation

Khansir (2012) notes that the English language has terms whose spellings deviate significantly from their pronunciations. In other words, English spelling and English pronunciation are hostile and strangers to one another; hostile, since neither accepts the use of the other without contention; and strangers, because one seldom recognizes the other. Note that studying English spelling and English pronunciation is just as essential to language learners as learning English grammar and vocabulary. The history of English spelling in the English language is examined. No one would argue today that, despite English's benefits, the contemporary English writing system features a number of irregularities in its phonemic representation. Many of these may in reality be explained historically.

It is essential to note that every language phonological system is always evolving, although writing systems change relatively slowly. Numerous so-called silent letters in contemporary English spelling came from a period when they genuinely represented portions of sound. For instance, the letters "gh" in light, and night are derived from the ancient English sound segment [x], a voiceless fricative produced at the articulation point of either [k] or [c].

Just as English has borrowed words, morphemes, and phonological elements from other languages, it has also borrowed spellings. During the Middle English period, for instance, many literate individuals also spoke French. (Falk, 1978)

2.1.1 Pronunciation

Pronunciation is always the most important factor in the identification of a spoken word. The most essential aspect of studying and teaching a foreign and second language is mastering the accurate pronunciation of English words. This is a significant issue for English language learners since the English language lacks established phonetic norms. Throughout its history, the English language has widely borrowed words and idioms from other languages, which is an essential element to notice in the preceding clause. This is the primary explanation for the pronunciation of those words that sound differently from their spelling.

Jonse (1972) discusses the five kinds in the matter of pronunciation as follows:

- A. A language learner must learn to detect quickly and with confidence the numerous speech sounds that occur in the language, and must also learn to recall the acoustic characteristics of those sounds.
- B. A language learner must learn to produce the foreign sounds using his or her own speech organs.
- C. A language learner must acquire the ability to employ these sounds appropriately in linked speech.
- D. A language learner must learn the proper usage in the matter of the sound-attributes or prosodies as they are often called (especially length, stress and voice-pitch).
- E. A language learner must learn to connect sounds, such as joining one sound in a series to the next and pronouncing the whole sequence quickly and without stuttering.

2.1.2 Spelling

Spelling consists of the principles governing how letters are used to create words of speech; a specific sequence of letters. The history of English spelling starts with the English language's roots in the British Isles, some 1,500 years ago. This lengthy history has resulted in several spelling peculiarities. There are two factors that have contributed to the complexity between sounds and spelling in the English language: the first is that the pronunciation of English has changed over the past 500 years, and the second is that English has adopted thousands of words from other languages, including India, Latin, and Greek (Khansir, 2012a).

The Integration between the English phonology and Morphology

1. Compound Words

Compound words may be impacted by syntagmatic and paradigmatic morphological structure, according to numerous studies (e.g., Cohen 2014a,b; Kuperman et al. 2007; Lee-Kim et al. 2013; Lo et al. 2018; Plag et al. 2017; Schuppler et al. 2012; Smith et al. 2012; Sproat and Fujimura 1993; Zimmermann 2016). Syntagmatic refers to the relationships between items that appear in a

speech or piece of writing in a linear order, whereas paradigmatic refers to the relationships between specific parts in a sentence.

Most of this research have dealt with inflectional and derivational affixes, frequently concentrating on the auditory characteristics of the segments at a morphological border (e.g. Lee-Kim et al. 2013; Smith et al. 2012). Research into morphologically induced phonetic variation in compounds is still in its infancy, but findings from research like Kuperman et al. (2007) or Kunter and Plag (2016) imply that complex words of this sort exhibit similar effects. This study continues this line of inquiry by examining the relationship between morphological structure and consonant length at compound-internal boundaries in English.

For theories of the mental lexicon as well as for theories of speech generation, perception, and understanding, insights into the link between morphological structure and phonetic implementation are crucial. A separation between lexical phonology and post-lexical phonology and phonetics is a key component of strictly feed-forward models of speech production (such as Levelt et al. 1999) and theoretical models of the relationship between morphology and phonology (e.g. Bermdez-Otero 2018; Kiparsky 1982). These models rule out the possibility that knowledge of morphological structure affects how words are phonetically realized since they contend that this knowledge is not available during word articulation.

2. Past Tense

According to Comrie (1985), English assigns verbs a tense and an aspect (or "means of understanding the temporal constituents of a situation") mark. (Comrie, 1976: p. 3). In other words, the tense refers to the location of a situation in relation to a reference point and takes into account the relative sequential ordering of two time points. Thus, it helps readers to recreate the temporal relationships between different circumstances in a text. In English, the present and past tenses are the two most common. According to Comrie (1985), English assigns verbs a tense and an aspect (or "means of understanding the temporal constituents of a situation") mark. (Comrie, 1976: p. 3). In other words, the tense refers to the location of a situation in relation to a reference point and takes into account the relative sequential ordering of two time points. Thus, it helps readers to recreate the temporal relationships between different circumstances in a text. In English, the present and past tenses are the two most common.

3. Lexical Processing

Research on the acquisition and processing of L2 phonology has undergone numerous changes in recent years, including the long-awaited revelation that the majority of studies on L2 perception had been concerned with categorizing phones without regard to their linguistic function. First, phonemes, which are linguistic abstractions, have the role of constituting morphemes and words as they are conceptualized in the mental lexicon. As a result, study has shifted from a theoretically neutral phone to the phoneme, which is only made viable by concentrating on the intersection of phonology and the lexicon rather than meaningless parts and sequences. Second, research on the interplay between bottom-up and top-down processing as well as the phonology-phonetics interface has received fresh attention. Third, recent studies report highly controlled vocabulary learning experiments to gain direct insights into how phonological learning and vocabulary learning interact in a bootstrapping fashion, in addition to looking at phonological processing in L2 learners differing in proficiency, age of acquisition, amount of L2 input received, and other biographical nonlinguistic variables. The fourth area of the phonology-lexicon interface that is being explored by this renewed interest in lexical access and learning is phonological representations of words and lexical competition, as well as the effects of dishonest phonological representations of words on L2 lexical access.

2.2 The pronunciation of Derivational and Inflectional Pronunciation

Foreign language acquisition is mostly dependent on lexical knowledge. Morphology is the study of words, their creation, and their connection to other lexemes in the same language, and it is a crucial aspect of vocabulary acquisition in a foreign language. With the expansion of their vocabularies, learners of a second language acquire their desired levels of linguistic competency and accuracy. Morphology, according to McCarthy (2002), Yule (2010), and Aronoff and Fudeman (2011), examines the structure of words and their constituents, including stems, roots, prefixes, and suffixes. It examines the components of speech, intonation, and stress, as well as the ways in which context may alter the syntax, pronunciation, and meaning of a word.

3.0 Methods and Procedures

3.1 The Methodology of the Study

This study belongs to the descriptive studies, and the current study relies on the survey method, which is one of the most appropriate approaches to humanities studies in general and media studies in particular.

The descriptive survey method is a method for studying types of research that requires selecting an entire study population, or a study sample that represents the majority of the community. and note cards.

3.2 Sources of Data and Information Collection

The data has been collected through a questionnaire containing several questions that the researcher suggested, and then presented it to two arbitrators. Then a diagnostic test is applied.

3.3 The Population of the Study

The study population are second year students at Tikrit University, College of Education, English Language Department, second stage, college of Education.

3.4 Sample of The Study

The sample of the study is (150) male and female undergraduate students at the University of Tikrit, Department of English Language, the second year, whose total number is (150), and the study will be applied to all members of the sample consisting of (150) individuals of both sexes, (99) males, and (51) Females.

3.5 Instruments of the Study

The task of gathering data on research factors is significant and different. It should thus be gathered logically and in a structured manner. Questionnaires and diagnostic tests are used.

3.5. 1 Questionnaire

A questionnaire is a collection of questions about a particular topic that can be answered in-person or by the person being questioned. Information regarding people's knowledge, beliefs, attitudes, and behaviors is routinely gathered in this way. You may capture information about people that is particular to them, such as their opinions or experiences, using questionnaires (Kawther, 2020, p. 11).

A questionnaire is a useful tool for gathering survey data that provides regulated, often numerical values that may be provided without the researcher's presence, according to Eltaif (2019, p. 10).

As a result, the researcher creates a questionnaire that reveals the students' perspectives on their understanding of morphology has been applied.

3.5.2 Diagnostic Test

Since gathering data from students is a significant obligation, systematic methods must be followed. Without this, it is challenging to determine how reasonable educational evaluations and decisions may be (Kawther, 2020, p. 15). Thus, a diagnostic test—the second research tool—is used in the current study.

Aljuboory (2014, p. 7) claims that a test is the finest instrument for gathering information on students' performance and accomplishments within a particular course of study. It is a method or procedure for assessing a person's capacity, knowledge, or effectiveness in a particular field of endeavor. It is the evaluation tool that is most commonly employed. To get an accurate measurement, it includes giving the student a series of questions or assignments.

Test, as defined by Baker (1989, p. 3), is a method for arriving at an exact and right choice.

The test building process involves planning the test, preparing the components and instructions, assembling them, and recreating the test (Brown, 2004, p.47).

A diagnostic test is a useful approach that can benefit both the instructor and the student. Students can take a diagnostic exam at any time to measure their current knowledge and command of the English language. It is essential because it allows the instructor to determine the level of the pupils and the weak points in their learning, as well as to identify which language areas they need to work on (Aljuboory, 2014, p. 8-10).

The creation of the diagnostic exam is largely seen as a person's content competency, which is the result of several intellectual variables. The evidence on achievement comes from experiments and the acquisition of complex areas, such people's approaches to physics problems. The behavioral technique focuses on the

process, whereas representation analysis achieves the diagnostic test (Algarabel and Dasi, 2001, p.43–44).

3.6 Validity of the Research Instrument

3.6.1. Validity of the Questionnaire

The questionnaire was handed to jury members who are professionals in linguistics and English teaching methods in order to establish face and content validity. The jurors review the questionnaire, making notes and changes to some items before reaching an agreement on the questionnaire's validity.

3.6.2. Face Validity of the Diagnostic Test

Face validity is defined by Lewis et al. (1995, p.141) as the degree to which a measure seems to be connected to a given concept in the opinion of individuals associated with education, such as test takers, instructors, and supervisors. In other words, a measuring instrument has face validity if its material appears relevant to the individual taking the test or filling out the questionnaire. It assesses the questionnaire and test's look in terms of practicality, readability, uniformity of style and formatting, and the clarity of the language employed.

It was presented to a jury of instructors and professionals in English language teaching (ELT) morpheme and morphology to ensure test validity. The jurors assessed the instrument and concluded that it is acceptable and legitimate; their suggestions for improvement were taken into account.

3.6.3 Content Validity of Diagnostic Test

The circumstance in which the exam will measure what it is designed to assess is referred to as content validity. It determines whether or whether the exam assesses the desired attributes or abilities (Hughes, 1989, p.26).

Defines content validity as the process of determining the amount to which the test tasks being assessed are legitimate. In other words, content validity is a comprehensive assessment of the test's content to ensure that it covers the information and the behaviors to be tested.

3.7 Pilot Administration

The pilot study is the process of testing the research instrument on a small population sample prior to its final delivery. It is a fundamental phase in every research project. It reveals whether there are any flaws or problems that must be checked and corrected prior to the instrument's ultimate performance. It aids in determining how realistic and rational the measurement is. It also evaluates the time needed to administer a test or a questionnaire (Madsen, 1983, p.109). The following are the pilot study's objectives:

- a. To check the clarity of the test items,
- b. Ensure the test reliability,
- c. Evaluate the time required for answering the test items by the testers.
- d. To analyze the test items to determine their effectiveness in terms of item difficulty level, moreover discrimination power according to testers responses.

To determine if the test items were challenging, a random sample of (90) male and (60) female students from the Second Stage/Colleges of Education/English Department/University of Tikrit participated in the pilot project. This exam was given in the first course of the academic year (2022-2023). The time required to demonstrate the students' morphological knowledge and reading comprehension is around 120 minutes.

3.8 Reliability of the Research Instrument

3.8.1 Reliability of the Questionnaire

The questionnaire must have strong reliability since it is a measuring instrument that seeks to comprehend participants' ideas and opinions about a topic or concept (Dörnyei, 2003, p. 50). This reliability may be confirmed by examining the questionnaire's internal consistency. According to Creswell (2003, p. 365), reliability in questionnaire research studies refers to the equivalence and consistency of the utilized measures used in the study to analyze the same idea. According to Dörnyei (2007, p. 50), dependability describes the degree to which our measuring tools and techniques yield consistent results in a particular population under various conditions. The standard value for the Alpha Cronbach coefficients is 0.74, which denotes an acceptable result.

3.8.2 Reliability of the Diagnostic Test

According to Harrison (1983, p. 11), reliability is the consistency with which a test consistently assesses the same item. The dependability of the test can be attained in a variety of ways.

The internal consistency of the test results is the general level to which one may anticipate the consistent deviation scores of individuals across a testing setting in the same testing instrument, according to Eltaif (2019, p. 10). Therefore, if reliability measurement is conducted outside of literature measurement, it is not recognized. The Test-Retest Method Pearson Correlation Coefficient is used to examine internal consistency the most often.

Because the Alpha Cronbach coefficient is frequently used to assess reliability, internal consistency is frequently equated with it (Devellis, 2003, p. 28).

The most used statistical method for evaluating dependability is the Alpha Cronbach formula (Eltaif, 2019, p. 6). After applying Alpha Cronbach's formula, a result of 0.85 was obtained, which is regarded as acceptable.

3. 9 Scoring Scheme of the Diagnostic Test

Scoring is the process of evaluating replies using a numerical scale. In terms of student accomplishment and instructor attitudes, scoring offers useful feedback (Genesee and Upshur, 1996, p. 208).

4.0 Results

The study found the answers of the hypothesis through of the results of the sample on the following:

1. **There is the mean of the student and significant difference between the phonology and morphology theoretical mean.**

The Sample	N	Mean	SD
	150	1.35	0.331

The results of the study showed that there are differences between the phonology and morphology, because the standard deviation is bigger than ($\alpha < 0.05$).

2. **There is a significant difference between the means score of male and female students; perception of the morphological and phonological areas.**

Gender	N	Mean	SD
Female	60	1.33	0.34
Male	90	1.35	0.35

The study showed that number of the sample are (150) consisted of (60) females and (90) males. The results showed that the standard deviation for males were (0.35), while the standard deviation for females were (0.34), which indicates that males had slightly more accurate answers than females.

3. **The derivational affixes are more problematic area among the other types.**

The Answer	Frequency	Percent %
Correct Answer	107	72
Wrong Answer	38	25
Total	135	90
Missing Answer	15	10

The results of the study showed that there are (25%) of the students gave wrong answers and (10%) left the questions about affixes without answer because of the students suffer from adding affixes correctly on the base words. While (72%) of the students gave correct answers on those questions.

4.1 Discussion of Results

Concerning the hypothesis which mentions that there is significant difference between the phonology and morphology theoretical mean, the results show that there is a significant difference between these two linguistic areas, so the hypothesis is accepted.

According to the findings and results of the study it has been noticed that the ability of male and female students in morphological and phonological levels, are not equal. where the performance of the male students is better than the females in the diagnostic test. In this case the hypothesis which states that there is significant difference between the male and female students' level is accepted, too.

While concerning the third hypothesis 'The derivational affixes are more problematic area among the other types', it became clear that.

4.2 Conclusion

This study has reached to the following conclusions:

1. There is a significant integration of English Phonologic and morphological aspects through the performance of the students.
2. The perception of male students is better than female in the integration of morphological and phonological level of language use.
3. There are many problematic areas that students face and have been seen within the obtained results and these areas are:
 - a- Types of morphemes especially derivational morphemes.
 - b- Lexical Category
 - c- Morphological Concept
4. There is significant difference between the phonology and morphology theoretical mean.
5. There is a significant difference between the means score of male and female students; perception of the morphological and phonological areas.
6. The derivational affixes are more problematic area among the other types where students don't know the function of each morpheme and the class of the word after adding particular morpheme.

7. Students don't have the same point of view concerning pair work and collaborative work are very useful for learning the pronunciation class as well as morphology.
8. Students don't think that pronunciation has an important effect by morphology.

4.3 Recommendation

- 1- Instructors should pay attention to the activities that show integration between morphological and phonological awareness.
- 2- It is important to mention that syllabus designers should increase the quantity and the quality of the tasks that enhance the perception of the learners in the areas of phonology and morphology.
- 3- Learners should be involved in communicative tasks and more practice word class and discuss about the function of specific morphemes and should be able to pronounce these morphemes in proper way.

References

- Aronoff, M. and Fudeman, K. (2011). **What is Morphology? (2nd edition)**. West Sussex: Blackwell Publishing Ltd.
- Comrie, B. (1985). **Tense**. Cambridge: Cambridge University Press
- ELTAIF, Sua'ad. PHONOLOGICAL ASPECTS IN ENGLISH AND ARABIC. **Journal of Tikrit university for humanities** - مجلة جامعة تكريت للعلوم الانسانية - [S.l.], v. 26, n. 3, p. 1-16, June 2019.
- Falk, J.S., (1978). **Linguistics and Language**. John Wiley and Sons, Inc.: Canada.
- Gor, Kira. (2015). **Phonology and Morphology in Lexical Processing**. Cambridge University Press.
- KAWTHER, Parween. English Language Learners' Attitudes toward the Effectiveness of Communicative Strategies to Develop Their Speaking Skill. **Journal of Tikrit university for humanities** - مجلة جامعة تكريت للعلوم الانسانية - [S.l.], v. 27, n. 1, p. 19-1, Jan. 2020.
- Kiparsky, P. (1982). **From Cyclic Phonology to Lexical Phonology**. In H. van der Hulst and N. Smith (Eds.), **The structure of phonological representations** (pp. 131–176). Dordrecht: Foris.
- Kuperman, V.,; Pluymaekers, M.,; Ernestus, M., and Baayen, R. H. (2007). **Morphological Predictability and Acoustic Salience of Interfixes in Dutch Compounds**. **The Journal of the Acoustical Society of America**, 121, pp.2261–2271.
- Lee-Kim, S.-I.,; Davidson, L., and Hwang, S. (2013). **Morphological Effects on The Darkness of English Intervocalic /l/**. **Laboratory Phonology**, 4(2), 475–511.
- Levelt, W. J. M.,; Roelofs, A., and Meyer, A. S. (1999). **A Theory of Lexical Access in Speech Production**. **Behavioral and Brain Sciences**, 22, pp.1–38
- Smith, R.,; Baker, R., and Hawkins, S. (2012). **Phonetic Detail that Distinguishes Prefixed from Pseudo Prefixed Words**. **Journal of Phonetics**, 40(5), pp.689–70
- Yule, G. (2010). **The Study of Language (4th edition)**. Cambridge: Cambridge University Press.