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The Connection Between the Ear, the Process of Hearing and Good Pronunciation Among EFL Learners at the University Level

A B S T R A C T

The relationship between the ear and pronunciation is a main feature of language acquisition . Hearing is an active cognitive function . Before a student can produce a sound , they must first perceive it . If a student cannot hear the difference between the two sounds , they will fail to produce them correctly .When a person speaks , his/her ears act as a monitor .Pronunciation is a hearing-based skill . Students who develop high-level auditory discrimination are better equipped to control their vocal organs, adjust their articulation and achieve near-native pronunciation . The study involved 50 academic students of the second year , the Department of English / College of Education / University of Misan for the academic year 2026. The findings indicated the data which revealed 32% performance gap between the students' auditory discrimination ability and their oral production proficiency . This difference highlighted that while the majority of participants could identify the sounds correct , a significantly smaller proportion was able to produce them accurately . These results serve as the foundation for the comparative analysis .

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أثر الارتباط بين الأذن وعملية السّمع في سلامة اللفظ عند المتعلِّمين للغة الانجليزية كلغة أجنبية على مستوى الجامعة

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المستخلص

تعد العلاقة بين الأذن والنطق صفة رئيسة من صفات اكتساب اللُّغة، إذ إنَّ السمع عملية إدراكية معرفية نشطة؛ فقبل أن يتمكن الطالب من إنتاج صوتٍ ما، يجب عليه أولاً إدراكه. فإذا عجز الطالب عن تمييز الفروق بين صوتين مختلفين، فإنه سيفشل حتماً في إنتاجهما بشكل صحيح. وعندما يتحدث الشخص، تعمل أذناه بمثابة مراقب (لأدائه الصوتي). وعليه،

يُعتبر النطق مهارة قائمة على السمع؛ فالطلاب الذين يطورون قدرة عالية على التمييز السمعي هم الأكثر قدرة على التحكم في أعضاء النطق لديهم، وضبط مخارج الحروف، وتحقيق نطقٍ قريبٍ من لغة أهل اللغة (المتحدثين الأصليين).

شملت هذه الدراسة عينة من طلاب المرحلة الثانية في قسم اللغة الإنجليزية في كلية التربية في جامعة ميسان للعام الدراسي ٢٠٢٦، حيث بلغ عدد المشاركين ٥٠ طالباً. وقد كشفت النتائج وجود تباين في الأداء بنسبة ٣٢٪ بين استطاعة الطلاب على التمييز السمعي وكفاءتهم في الإنتاج الشفوي. يسلط هذا التباين الضوء على أنه على الرغم من قدرة غالبية المشاركين على تحديد الأصوات بشكل صحيح، إلا أن نسبة أقل بكثير هي القادرة على إنتاجها بدقة. وتُشكل هذه النتائج الأساس الذي قامت عليه التحليلات المقارنة في هذه الدراسة. حيث قدرة الطلاب على الاجابة ع الجزء الخاص بالسمع كانت اعلى من الجزء الخاص بالنطق.

الكلمات المفتاحية: الأذن، عملية السمع، النطق الصحيح، متعلمو اللغة الإنجليزية كلغة أجنبية العراقيون.

1.Preliminaries

1.1.Introduction

Pronunciation is one of the core elements to learn English .The link between listening and speaking is a fundamental aspect of language acquisition . According to Jones (2017, p. 54) , accurate pronunciation is not a motor skill involving the vocal tract ; it is an auditory process . Learners fail to produce certain sounds because of their auditory system, which has not yet developed the phonemic categories that are necessary to distinguish the new sounds from those in their native language .

1.2.The Problem of the study

Many students face problems with pronunciation even after years of learning . This is because pronunciation development is related with the ear or with the students' ability to perceive sounds accurately before pronouncing them . Students who cannot recognize the differences in sounds often fail to pronounce the sounds correctly. This leads to misunderstanding and reducing intelligibility in communication. Traditional teaching methods in second language classrooms highlight on articulatory production while neglecting the main role of listening training. This creates an enduring learning difficulties, as learners find it difficult to process unfamiliar phonemic contrasts within their mental linguistic structures. As a result, in the absence of certain instructional strategies that connect perceptional training and speech output, learners continue to experience communication breakdowns.

1.3.The purpose of the study

The central focus of the research paper is to investigates the connection between the ear as well as the hearing process and their impact of auditory perception. Moreover it seeks to examine the relationship between listening ability and pronunciation accuracy in communication .

1.4.The significance of the study

This paper addresses a significant gap regarding the impact of hearing mechanisms on speech production. Hearing process is a good way for enhancing EFL learners' pronunciation .It also gives more attention to perception .

1.5.The hypothesis of the study

The current study relies on the following hypothesis . The second year students /Department of English face greater challenges in the physical production of the sounds more than in auditory perception .

1.6. The limit of the research paper

The research paper was restricted to 50 second-year EFL students / Department of English / college of Education / University of Misan for the academic year 2025 . It focused on the relationship between the ear as a way for perception and pronunciation learning .

2.The Theoretical Part of the study

2.1.Anatomy of Hearing

The human auditory system is a complicated structure . It structured into three primary segments : the outer ear , middle ear , and inner segment . Each component executes a vital function in capturing , amplifying , and translating acoustic waves into neural impulses process by the brain. The pinna (the visible part of the ear) and the external auditory meatus function as a funnel that collects sound waves and funnels them towards tympanic membrane . The distinctive shape of the pinna assists in sound localization , enabling the listener to determine the spatial origin of an acoustic stimulus(Healey, 2025, p. 33) .

External auditory meatus works as a tubular , amplifies certain frequencies , further enhancing our ability to hear . Middle ear operates as an air-filled cavity enclosing three bones , known as the ossicles : the malleus , incus , and stapes .These bones function as a mechanical level system to intensify the vibration of the eardrum and transmitting them to the oval window –the entry aperture of the inner component . The middle part also contains the Eustachian tube , which links the tympanic cavity to the back of the throat in order to balance pressure and protect the tympanic membrane from injury (Ibid).

The inner part houses the cochlea , a spiral –shaped form filled with fluid (liquid) . The cochlea is the site of transduction , where mechanical vibrations are converted into neural signals . It consisted of sensory cells which are arranged along the basilar membrane . These hair cells are sensitive to different frequencies of sounds. If basilar membrane vibrates , these cells stimulate auditory nerve fibes . The importance of these fibes transmit electrical signals to sounds (Ibid).

2.2.The Importance of Hearing

As a vital feature of daily life , hearing plays a key role in ensuring safety , facilitating social interactions , and enhancing overall well-being . Sounds such as, child's crying or a bird's song act as early warning of danger. Crying baby is an example of essential cues for warning . Children being learning to communicate from the moment they are born .They listen to the voices of their mothers and fathers and recognize them . They learn to talk by imitating the sounds they hear (Beth and Lynda, 2009, p. 66). According to Tracy (1984, p. 20) , auditory perception is a considerable function in language learning . According to Quains' anatomy , the important elements of hearing are shaped by head-surface tissue, by which a depression is produced . This indentation progressively deepens while its outer opening narrows forming a flask . This cavity constitutes the primary auditory vesicle on each side. During hearing stage , hearing capacity relies on adequate stimuli and the permeability of the neural pathways mediating sound sensations . At the beginning , there are various internal sounds can generate auditory sensation in the fetus . These sensations include visceral movements of the mother and those of the faetus .

2.3.The role of hearing in language acquisition

Burdach declares several observation :

1.There is no proof that infant hears anything during the first hours of life because the Eustachian tube remains closed . Air also does not enter the middle ear until sometime after regular breathing begins. Lesser's experiment shows that the fatal state of the middle ear may persist in the premature infants for more than twenty hours .

2.Reactions to loud sounds may be caused by vibrations which affect the whole body and act as a nervous shock. Children react strongly to a slammed door while ignoring human voice. They feel the physical impact rather than hearing the sounds .

3.The beginning of hearing varies from the sixth hour to the third week of life . If , a healthy normal child makes no response to a loud sound presented behind him/her by the fourth week, there is no reason to assume hearing impairment .Even adults may fail to notice sounds from lower rooms unless additional cues aid perception .

According to Schultze, "active hearing begun after the first half-year ". At the end of the fourth month, children demonstrate progress in understanding the meaning of sounds. There are certain differences between children. One child noticed gestures at thirteenth days old while another child at sixteen days old, would stop crying when his/her mother spoke to him/her. By two months of age, the child distinguished between dog's loud bark and a coaxing yelp, showing fear in response to the former. Research notes that children of three and a half months can recognize when they are being scolded. Tracy (1984, p. 56) indicates that the average child begins to comprehend the meaning of tones between the second and fourth month.

2.4.The importance of Pronunciation in English communication

Communication is the purpose of learning languages , to some extent , pronunciation decides if communication can be smooth . If one has good pronunciation , she / he can be understood by others in oral communication (Hedge , 2000, p. 32) .Pronunciation affects how a speaker is perceived. Clear and confident pronunciation can create an impression of competence and confidence. Poor pronunciation may cause others to underestimate the knowledge of the speaker . Good pronunciation means intelligible and easy to understand . It also supports listening skills . Learners who practice accurate sounds , stress patterns and intonation become able to recognize the same features in other's speech . This results in good communication . Pronunciation carries tone , intonation, and interpersonal meaning when pronunciation is clear , the message becomes stronger, communication becomes smoother , and the speaker is understood with great accuracy (Murcia and Brinton, 2010, p. 45) .

2.5.Pronunciation skill

Harmer (2001,p. 187) clarifies that " pronunciation is the ability to use the right stress , rhythm , and intonation of a word in a spoken language ". It is the way of giving the right pronunciation of sounds . Any word can be pronounced in different ways according to several features such as the area in which they grew up and the area in which they now live . This affects the way of pronunciation .

According to Lynda and Beth (2009, p. 12) listeners' perceptions and judgments regarding speech intelligibility are shaped by their personal values , capabilities and inherent biases .

2.6.Learning pronunciation

Cakir and Baytar (2014, p. 99-100) mention that mastering pronunciation plays an important role in helping students to feel comfortable when they speak English. Learners build great self-assurance in accurate pronunciation through targeted exercises and consistent practice. Drawing upon Oxford's (1990) framework as cited in Szyszka (2017) , there are several principles guide the acquisition of pronunciation .The initial aspect involves memory strategies, where students benefit from crafting rhymes or songs related to retain material such as echoing native speaker before practicing independently . For instance , students employ personal codes to pronounce the word correctly . The second perspective is cognitive in nature . It focuses on imitating the pronunciation of the teacher by observing articulation and mouth dynamic. This involves repetition exercises and identifying phonetic structures during speech production .

Another principle is compensation . It refers to utilizing a dictionary to verify the phonetic symbols to master the challenges .For instance , students consult dictionaries to check difficult terms during their pronunciation practice. Furthermore , the fourth factor is metacognition , which refers to instructional training phonetic symbols and focuses on auditory design. To illustrate , learners outline a preparation strategy prior to executing pronunciation tasks and conduct self-assessments afterwards .Additionally , the sequent principle is effectiveness . It means empowering oneself to expand knowledge of English and

paying attention to pronunciation dynamics in social setting. A case in point involves students watching films and listening to music to imitate native speaker patterns . Finally , the concluding component is the social dimension , which centers on engaging in pronunciation alongside peers and seeking feedback to correct pronunciation errors. For instance , learners collaborate by practicing speech sounds with others and requesting evaluations on word production. A positive perception of pronunciation learning is significant because it boots oral communication confidence. Perception often struggle with practice sessions , driven by nervousness and fear .(Szyszka, 2017, p. 93) .

2.7.The significance of pronunciation in language learning

Gaining pronunciation is a good way to enriches students' learning experiences .It enhances their speaking abilities and social interaction .Good pronunciation empowers learners to communicate productively , allowing them to engage with foreigners free from communicative misunderstandings .Additionally , proper pronunciation ensures that learners transmit their intended messages effectively .College students can elevate their verbal confidence across contexts such as presentations and interviews . Achieving excellence in oral presentations increases future job prospects (Sahatsathatsana, 2017, P. 67) .

3. Research Design

The instrument has been designed in the form of a test which consists of two parts . The first part is composed of ten pairs of minimal pairs to measure the students' auditory discrimination ability while the second part is designed to measure their pronunciation ability . The minimal pairs used in both parts are taken from a well-known reference "Pronunciation Skills" by Hancock (2017) . The minimal pairs are written on paper . The participants were instructed to listen to a specific audio track , Native English speaker and identify the correct minimal pair from the provided paper .To avoid the memory effect and ensure that the learners did not rely on recalling the items from the first part , a one month interval was maintained between the two parts . In the second part of a test , the students were asked to pronounce the same minimal pairs and then their pronunciations were recorded. The sample of the study was the second year students / Department of English / College of Education / University of Misan of the academic year 2026 .The total number of the students was 50.

3.1. Participants

The participants were ٥٠ students (٢٥ males and ٢٥ females) from the Department of English / College of Education / University of Misan) . Their age was between ١٩-22 years old . All the students were native Arabic speakers .They were divided into groups to ensure a controlled environment . Each session included 10-12 students , which allowed precise monitoring and high quality recording of their pronunciation .

3.2.Instruments

To obtain the necessary data , the following instruments were used :

3.2.1.Minimal Pairs Test

A list of ten minimal pairs was chosen from Hancock (2017) to be the core emphasis of both the auditory and production parts of the experiment .

3.2.2. Audio Recordings

Good quality recordings of a native English speaker were employed to provide a standard auditory model for the students .

3.2.3.Recording Device

A smart phone was adopted to record the students pronunciation during the second part of the experiment .

3.2.4. Standardized Scoring Scheme

In order to evaluate the students' performance, a standardized scoring scheme was utilized. It is used to get high levels of objectivity and reliability in the data analysis. Each answer was assessed to measure the students' auditory discrimination accuracy. A score of (1) was given to a correct solution while incorrect answers attract no score(Alderson, 1995, P. 165).

3.3.Procedures

To explore the interplay between hearing process and pronunciation learning , the procedures were executed as detailed below :

3.3.1.Auditory Discrimination Test

The first part was composed of ten pairs of minimal pairs to measure the students' auditory discrimination ability while the second part was designed to measure their pronunciation ability . The minimal pairs used in both parts were taken from a well-known reference "Pronunciation Skills" by Hancock (2017) . They were written on paper . The participants were required to listen to a Native English speaker twice to get a good results and then identify the correct minimal pair from the provided paper .

3.3.2.The Interval Period

To avoid the memory effect and ensure that the students did not rely on recalling the items from the first part , a one month interval was maintained between the two parts .

3.3.3. Pronunciation Production Test

In the second part of a test , the students are directed to pronounce the same minimal pairs and their pronunciations were recorded .

4. Analysis

Results were compared and analyzed with descriptive statistics .The aim was to determine frequency, and the percentages of the participants' right and wrong answers . Data analysis was conducted in two steps : Descriptive statistics and comparative analysis .

4.1.Descriptive Statistics

This type of analysis was used to summarize the participants' performance in both parts of test . Frequency counts and percentages were calculated to provide a general idea of the success rates among 50 students. To determine the success rates of the participants , the following mathematical formula was applied :

$$\text{Percentage} = \left(\frac{\text{Number of correct responses}}{\text{Number of students}} \right) \times 100$$

The following table shows the distribution of correct and incorrect answers .

Table (1) : Participants' performance in the test

Type of test	Correct Responses N = 50	Percentages
Auditory Discrimination	**35**	**70%**
Oral Production	**19**	**38%**

The data indicated that 70 % from participants answered successfully . This revealed their ability in auditory discrimination . The second part of the test confirmed that 38% of the students produced the right target sounds successfully . The findings were summarized in figure (1) below .

Figure 1: Comparison of Students' Performance in Auditory Discrimination vs. Oral Production

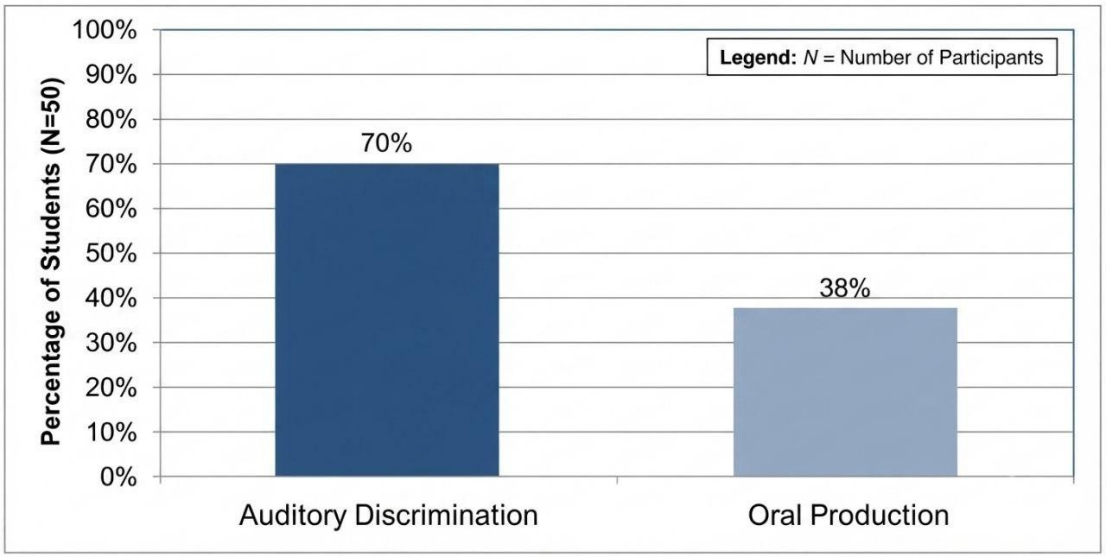


Figure (1) :The students' performance

5. Discussion

The data gathered from the 50 participants .The results were based on the descriptive and comparative analysis of the students' performance in the test . As displayed in table (1) in section 4.1 , the outcomes indicated that 70% of the participants answered successfully in the auditory discrimination task . In contrast , 38% of the students demonstrated successful articulation of the target phonemes in the second part of the test . The data revealed 32% performance gap between the students' auditory discrimination ability and their oral production proficiency . This difference highlighted that while the majority of participants could identify the sounds correct , a significantly smaller proportion was able to produce them accurately . These results serve as the foundation for the comparative analysis .

This discrepancy can be attributed to certain reasons. The first reason is psychological factor . Performance anxiety and social shyness play a central role .While auditory discrimination is passive cognitive process .Oral production requires confidence . Most of students felt hesitant to speak in front of their colleagues and teachers .The second reason affirms lack of sufficient training on accurate articulation of English phonemes in school and university .Without instruction and repetitive oral drills , students struggled to bridge the gap between recognizing a sound and physically producing it . Another determinant focused on L1 interference contributes significantly to preventing students from producing accurate target sounds. These findings suggest that pedagogical interventions should focus on creating supportive classroom environments that encourage oral practice and reduce anxiety .

In light of previous studies, the findings of the current study go closely with the insights of Celce-Murcia, etal (2014). Their study highlighted the major role of auditory discrimination in language learning. Unlike experimental investigations that measure progress across multiple teaching phases as (Gilakjani, 2006), the present study proves that assessment procedures are highly effective in identifying particular pronunciation difficulties encountered by the students.

6.Conclusion

The current research paper sought to investigate the connection between the ear and good pronunciation among 50 second-year EFL undergraduates. Based on the empirical findings , it can be concluded that there is a clear performance gap , where students illustrated higher proficiency in auditory perception (70%) compared with oral production (38%) .The challenges encountered by the learners involved deficiency in practice and self-assurance when pronouncing lexical items because their exposure was restricted to classroom sessions . Because of the difficulties demonstrated by the students , it is crucial to examine learners' perceptions and their pronunciation rehearsal practices .This study provides a valuable comprehension into the connection between the ear, hearing process and phonological development. Furthermore, by creating more supportive and low-anxiety environments , teachers can empower students to overcome these barriers and achieve greater accuracy in English oral production .

Appendix

(Part One)

Listen to the native speaker's audio recording and choose the correct option .

1. sheep ship
2. vine fine
3. three tree
4. chair cheer
5. set sit
6. cat cut
7. path pass
8. light right
9. back bag
10. chin shin

(Part Two)

Read the following minimal pairs carefully .

1. sheep ship
2. vine fine
3. three tree
4. chair cheer
5. set sit
6. cat cut
7. path pass
8. light right
9. back bag
10. chin shin

References

Alderson, J. C. (1995). Language Test Construction and Evaluation. Cambridge

Gilakjani, A. P. (2012). *A study of factors affecting EFL learners' English pronunciation learning and the strategies for instruction*. International Journal of Humanities and Social Science, 2(3), 119–128.

Griffin, K., & Patten, B. R. (1976). *Basic readings in interpersonal communication: Theory and application.* Harper & Row.

Harmer, J. (2001). *The practice of English language teaching*. Longman.

Hancock,M.(2017) .*Pronunciation Skills* . UK.Hancock McDonaldELT Healey, E. C. (2025). *The music of the voice: Phonetic and physiological perspectives.* Academic Press.

Hewings, M. (2004). *Pronunciation practice activities*. Cambridge University Press.

Jenkins, J. (2000). *The phonology of English as an international language*. Oxford University Press.

Jones, D. (2017). *An outline of English phonetics* (10th ed. Reprint) .

Cambridge University Press .

Levis, J. (2005). *Changing contexts and shifting paradigms in pronunciation teaching.* TESOL Quarterly, 39, 367–377.

Susanna, M. (2015). *Teaching English pronunciation in primary school*.

Terrell, T. D. (1984). *The natural approach.*.

Yates, L., & Zielinski, B. (2009). *Give it a go: Teaching pronunciation to adults*. AMEP Research Centre.