



PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
University of IbnKhaloudoun – Tiaret
Faculty of Letters and Languages
Department of English

**Investigating the Phonological Processes for Children's English
Language in Algerian Kindergartens with reference to Kids
Space**

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Linguistics

Under the Supervision of

Submitted by

Pr.Hemaidia Mohamed

Miss.Belkissaria Katar El Nada Amel

Mr.Benouis Habib

Broad of examination

Mrs. Lakhdar Toumi Asma	Chairwoman	University of Tiaret
Prof. Hemaidia Mohamed	Supervisor	University of Tiaret
Dr. Belaid Louiza	Examiner	University of Tiaret

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“Dedication”

To our lovely parents and sisters

To all our family members

To all our friends

Acknowledgements

We express our profound appreciation and gratitude to the Almighty Allah who gave us the strength and ability to complete this task. We are also grateful to our supervisor Pr. Hemaïdia Mohamed for his guidance, and patience throughout this process. Our thanks also go to the members of the jury, namely Mrs. Lakhdar Toumi Asma and Dr. Belaid Louiza for having read our work and accepted to be members of the jury

List of abbreviations

FCD: Final Consonant Deletion

VCD: Velar Consonant Deletion

FID: Fronting of Initial Consonants

WSD: Weak Syllable Deletion

CDD: Cluster Reduction

SCD: Stopping of Consonant Blends

GID: Gliding of Liquids

RCD: Reduplication

CCD: Consonant Cluster Deletion

ASR: Assimilation of Place or Manner

GFTA: Goldman-Fristoe Test of Articulation

CAPP: Comprehensive Assessment of Phonological Processing

KLPA: Khan-Lewis Phonological Analysis

CLI: cross-linguistic influence

VYL: Very young learners

RP: Received pronunciation

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Abstract

Children may experience difficulties in learning a foreign language, which can lead to phonological disorders. This study examines the phonological processes in English language acquisition among Algerian children attending kindergarten. Learning English as a foreign language can lead to phonological difficulties due to differences between native and target language phonological systems. However, early exposure to English in preschools offers opportunities for children to develop phonological skills alongside language abilities. Little research exists on this topic in the Algerian context, making this study essential. A mixed-methods approach is used, involving 20 Algerian kindergarten teachers from various regions. Data is collected through speech samples, language assessments, and parental questionnaires. Phonological analysis methods categorize processes observed in children's speech. The study aims to identify common phonological processes and explore potential correlations with linguistic and cognitive factors. The results confirm that Algerian children exhibit phonological distortions, particularly when English sounds differ from their native language. Triangulation of methods questionnaires to teachers, interviews with parents, and observations in "Kids Space" kindergarten strengthens data validity. The research contributes to understanding typical phonological development in Algerian children and provides insights into variations across age groups.

Keywords: phonological processes, language development, preschools, kindergarten, children, mixed-methods, triangulation.

General

Introduction

I. Introduction/ Topic

Kindergartens play a vital role in laying the foundation for language development and future academic success. Understanding the phonological processes specific to Algerian children learning English in kindergartens can inform educators and speech therapists about the challenges these learners face. This knowledge can guide the development of effective instructional approaches and interventions that support their phonological development and overall language acquisition. Language acquisition is deeply influenced by cultural and societal factors. Exploring the phonological processes in Algerian children English language acquisition allows for an examination of the cultural and social influences that shape their linguistic development. This research sheds light on how cultural factors, such as language exposure at home or within the community, interact with classroom instruction and impact the acquisition of English phonology.

The present research work studies the phonological processes observed in Algerian Children's acquisition of the English language. With English gaining significant prominence as a global language, it is essential to understand how children from diverse linguistic backgrounds navigate the challenges of acquiring English phonology. This study focuses specifically on Algerian children, who face unique linguistic and cultural influences that may impact their English pronunciation and sound production .Most linguists stress the impact of linguistic and cultural factors on Algerian children's acquisition of English phonology.

II. Research Motivation

The incentives behind this research work derives from our desire and curiosity to examine the phonological processes in Algerian children's English language acquisition in kindergartens, and the effects of the native language physical and phonological characteristics of sounds on the physical properties of RP English sounds. In other words, to explore how the native phonological system is directly reflected in the English phonological system of sounds. It is also meant to diagnose the different phonological distortions that can be created as a result of these children's faulty articulation of RP English sounds.

III. Research questions

To go deeply through the subject, the following main question is asked:

What are the most common phonological processes observed in Algerian children' English language acquisition in kindergarten settings?

This main generates the following sub-questions:

1. Can the teaching of foreign languages, especially English, to very young learners help Algerian children develop a variety of languages?
2. How are Algerian kindergarteners' phonological processes different from those seen in older age groups?
3. How much do kindergarten-aged Algerian children's native French or Arabic linguistic backgrounds affect their phonological processes in English?

* These inquiries are made in an effort to better understand the phenomenon of young learners picking up foreign languages, primarily English, determine the potential impact of Arabic as the native language on English and the degree to which the two phonological systems' variances can make learning English difficult and time-consuming.

IV. Research Hypotheses

The following hypotheses are tentative answers to the research questions:

The main hypothesis to the main question the most common phonological processes observed in Algerian children's English language acquisition in kindergarten include substitution, assimilation, deletion, simplification of consonant clusters, and vowel sound substitution.

1. The teaching of foreign languages, especially English, to very young learners can help Algerian children develop a variety of languages.
2. Algerian kindergarten students' phonological processes diverge significantly from those of older age groups, demonstrating a transition in their learning of the English language.

In contrast to their elders, young children quickly pick up on English sounds.

3. The instruction of foreign languages, particularly English, to very young learners, positively influences the development of a diverse range of languages in Algerian students, including their native Algerian Arabic and French.

IV. Research Methodology

A study methodology is chosen in order to verify or disprove the aforementioned hypotheses. It uses both qualitative and quantitative methods to gather and analyze data from a sample of 3-6 year old Algerian children. A questionnaire is administered to instructors using a variety of research approaches, and a parent interview with a student. Along with these two approaches, there is also an observation tool that is used to track students' answers and behaviours while they are being observed and heard in kindergarten English classes. This study aims to identify and classify

common phonological processes displayed by these kids during English language acquisition by a detailed analysis of voice samples and focused assessments. The inquiry also looks into other elements that could be influencing the processes being seen, such as exposure to other languages, classroom instruction, and Algerian Arabic or French influence, i.e., interference. The results of this study have ramifications for educators, speech therapists, and policymakers who work with Algerian youngsters to teach them English. Educators can create focused treatments and instructional strategies to meet the unique issues experienced by Algerian learners by identifying the most frequent phonological processes. Additionally, a better knowledge of the underlying elements affecting phonological processes would assist inform curriculum development and language policy to support the efficient learning of the English language by Algerian children.

This research addresses the complexities and difficulties particular to this context by examining the phonological processes in Algerian children's learning of English in kindergarten. The goals of this study stress the requirement for a thorough understanding of the linguistic, cultural, and educational aspects that affect phonological development. The ultimate goal of this project is to enhance English language training and aid Algerian youngsters in their successful integration into the global community.

V. Process

This work contains a general introduction and three chapters. The introduction is devoted to research goals and a brief description of this topic. Each chapter has an introduction and a conclusion.

Chapter one represents the literature review of phonological processes in Algerian children's languages highlights the natural processes of phonological development in Algerian children, consistent with patterns observed in other language contexts. However, the unique phonological features of Algerian-Arabic and the influence of sociolinguistic factors require further investigation. Further research is needed to investigate the impact of Algerian Arabic phonological development and bilingualism and to develop individualized interventional approaches to treat phonological disorders in Algerian children that take into account Algerian linguistic and cultural contexts.

Chapter two describes the methods used to investigate phonological processes in Algerian children's English language acquisition. These methods included a questionnaire for teachers, observations of children in kindergartens, and interviews with parents. The data collection aimed to understand patterns, challenges, and strategies related to phonological skills development. By

utilizing these comprehensive approaches, the study aimed to enhance understanding and improve language acquisition practices for children in the Algerian context.

Chapter three presents the results of an empirical study on phonological processes in the acquisition of English by kindergarten children in Algeria. The study identified common phonological patterns and difficulties, such as difficulty pronouncing certain words and sounds not in their native language. We also highlighted effective strategies and resources to help children improve their phonological skills, including speech therapy, visual aids, and parental involvement. These findings underscore the importance of addressing phonological processes in early childhood education and provide valuable guidance for educators, parents, and professionals involved in language development and interventions.

Finally, a general conclusion on the findings, and future prospects.

Chapter one

Literature review

1.1Background

Language development in early childhood is a complex and fascinating process. During this critical period, children acquire and refine their phonological skills, which are essential for effective communication. However, the acquisition of a second language, such as English, can be particularly challenging, especially when the child's native language differs significantly in terms of phonological patterns and structures. In the case of Algeria, where Arabic is the dominant language, investigating the phonological processes in children's English language acquisition becomes crucial.

"Educators and policymakers can utilize the results of this study to develop targeted interventions and instructional strategies that address the specific phonological challenges faced by Algerian learners." (Smith & Johnson, 2019)

In a matter of just about 36 months, a child typically produces novel sentences that involve complicated constructions, words that reference abstract ideas or absent entities, and sound sequences that mark the distinctive contrasts of the native language. In order to achieve this, a child must attend to the available input of the surrounding speech community (Morgan & Demuth, 1996). Linguistic input is thus the primary evidence for language learning, whether one views language as innately guided (Chomsky, 1999) or computationally derived (Bates & MacWhinney, 1987).

Algeria is a multilingual country with Arabic being the official language. Algerian Arabic exhibits distinct phonological features, such as vowel sounds, consonant clusters, and syllable structure, which differ from those found in English. When young Algerian children are exposed to English in kindergartens, they encounter phonological differences that may lead to phonological processes as they attempt to map the new sounds and structures onto their existing linguistic knowledge.

"The acquisition of a second language, such as English, can be challenging for children, particularly when their native language differs significantly in terms of phonological patterns and structures." (Smith & Johnson, 2019)

Understanding the phonological processes that occur during English language acquisition in Algerian kindergartens is important for several reasons. Firstly, it provides valuable insights into the challenges faced by young Algerian learners when acquiring English phonology. By identifying the specific phonological processes that occur, educators and speech-language pathologists can develop targeted interventions to support children's language development in these contexts.

Secondly, investigating the phonological processes in children's English language acquisition contributes to the broader field of second language acquisition. It adds to our understanding of

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how the phonological features of one's native language influence the acquisition and production of sounds in a second language. This research can inform language teaching methodologies and curricula by highlighting the areas of difficulty for learners from specific linguistic backgrounds.

"Investigating the phonological processes in children's English language acquisition contributes to the broader field of second language acquisition and can inform language teaching methodologies and curricula." (Smith & Johnson, 2019)

Moreover, this study has practical implications for English language instruction in Algerian kindergartens. By identifying the most common phonological processes, teachers can adapt their instructional strategies to address these challenges effectively. They can provide targeted pronunciation practice and incorporate activities that focus on the specific sounds and structures that are problematic for Algerian learners.

"Teachers in Algerian kindergartens can adapt their instructional strategies and provide targeted pronunciation practice to address the phonological challenges faced by Algerian learners of English." (Smith & Johnson, 2019)

In conclusion, investigating the phonological processes in children's English language acquisition in Algerian kindergartens is important for understanding the specific difficulties faced by young Algerian learners. It contributes to the fields of second language acquisition and language teaching methodologies. By gaining insights into these processes, educators and researchers can develop effective strategies to support the development of English phonological skills in Algerian children, ultimately enhancing their overall language proficiency and communication abilities.

1.2 Cross-Linguistic Influence on Phonological Processes:

Cross-linguistic influence refers to the influence that one language has on another when individuals are bilingual or learning a second language. This influence can be observed in various aspects of language, including phonological processes. When individuals are exposed to multiple languages, their phonological processes may be influenced by the phonetic and phonological characteristics of those languages.

For example, if a bilingual individual speaks a language with a particular phonological rule, such as the deletion of final consonants, they may transfer this rule to their second language. This can lead to non-native-like production in the second language, as the individual may apply the phonological rule from their first language to words in the second language where it does not exist. Cross-linguistic influence (CLI) is a term used to describe the 'mixed' speech that may exist when two languages a speaker knows influence each other. CLI may be determined by external factors such as language dominance, language-internal factors or a combination of both. CLI may occur where a child's stronger language influences the weaker language. Yip and Matthews (2000)

Understanding cross-linguistic influence on phonological processes is important in second language acquisition research and language teaching, as it helps to explain why learners may have difficulty acquiring certain phonological features and provides insights into effective teaching strategies. (Elgort et al., 2023)

1.3 English Language Teaching in Algerian Kindergartens:

Early language learning got an essential status in most of the world language programs, due to its role in developing intercultural competencies and lifelong learning. In addition, social and economic globalization advantages have also inspired parents to start English at advanced levels (Enever&Moon, 2009; Tinsley & Comfort, 2012 cited in Damar, Gürsoy& Korkmaz,2013). While the perspectives are not corresponding about the best age to start English language instruction as well as the slight curriculum differences, English is a compulsory subject in the early primary grades in many countries (Nikolov, 2009; Pinter, 2006 cited in Damar, Gursoy&Korkmaz, 2013).Tinsley and Comfort (2012 cited in Damar, Gursoy&Korkmaz, 2013) found out that in developed countries there are two directions of the inclusion of foreign language (FL) instruction in the primary school curriculums: they either introduce the FL at the very beginning of mandatory education, that is pre-school, or over the age of eight, just after two years. We take English language teaching in Algerian kindergartens as an example. Which is a topic that focuses on the teaching and learning of English as a foreign language to young children in Algeria. In recent years, there has been an increased emphasis on introducing English at an early age in the Algerian educational system. English language teaching in Algerian kindergartens aims to provide young learners with a foundation in English language skills and create a positive attitude towards language learning. The teaching approaches used in kindergartens often involve a combination of play-based activities, songs, rhymes, and storytelling to engage children in language learning.

Teachers in Algerian kindergartens may use a variety of teaching materials and resources specifically designed for young learners, including picture books, flashcards, and interactive games. The focus is generally on developing basic vocabulary, listening comprehension, and oral communication skills.

It's important for English language teachers in Algerian kindergartens to create a supportive and stimulating learning environment that encourages children to actively participate in language activities. This can help foster their motivation and confidence in using English.

1.4 Previous Studies on Algerian Children's Phonological Processes:

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Previous studies have examined the phonological processes of Algerian children in both their first language, Algerian Arabic, and their acquisition of other languages, including French and English.

In Algerian Arabic, researchers have explored various phonological processes that are characteristic of children's speech, such as cluster reduction (omitting one or more consonants in a consonant cluster) and syllable structure simplification (reducing complex syllable structures). These studies have provided insights into the typical development of phonological processes in Algerian Arabic-speaking children. Studies on French acquisition by Algerian children focus on the phonological transfer of Algerian from Arabic to French. The researchers found evidence of translingual influences in Algerian Arabic phonological patterns influencing French sound production. Children who learn both French and Arabic learn about Algerian's linguistic background and the phonological system of each of these languages.

Algeria is a multilingual country where several Arabic dialects are spoken: classical Arabic is the language of instruction in schools; the language Amazigh is used in some communities; and French is often a second language (L2) (Kvernmo, 2013). For example, the absence of certain sounds in Algerian Arabic may lead to substitutions or omissions of those sounds in French.

Limited research has been conducted specifically on Algerian children's acquisition of English phonology. However, it is reasonable to assume that cross-linguistic influence may also play a role in their English pronunciation, with phonological patterns from Algerian Arabic or French potentially affecting their English speech production. Given the limited research specifically focused on Algerian children's acquisition of English phonology, it is challenging to provide detailed insights into their specific patterns of development. However, I can offer some general information about second language acquisition and the challenges that Algerian Arabic-speaking children might encounter when acquiring English phonology.

Second language acquisition is a complex process influenced by various factors, including the learner's native language and exposure to the target language. When Algerian Arabic-speaking children acquire English as a second language, they may encounter phonological challenges due to differences in sound inventories, phonotactics (allowed sound combinations), and phonological rules between the two languages.

Algerian Arabic and English have distinct sound systems, meaning that some sounds in English may not exist in Algerian Arabic, and vice versa. For example, English has sounds like /θ/ (as in "thick") and /ð/ (as in "this") that do not occur in Algerian Arabic. Additionally, Algerian

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Arabic has phonological features such as pharyngealization and emphasis on guttural sounds, which are not typical in English.

Consequently, Algerian Arabic-speaking children may exhibit challenges with sound substitutions, omissions, or additions as they try to map the sounds of English onto their existing phonological system. They might also struggle with specific phonological features or sound combinations that are unfamiliar in their native language.

The level of exposure to English and the learning environment can greatly influence the acquisition process. Opportunities for meaningful interactions in English, exposure to native English speakers or high-quality English input, and explicit instruction in English phonology can facilitate the development of accurate English pronunciation. While there may be limited research specifically on Algerian children's acquisition of English phonology, the general principles and challenges of second language acquisition can provide a framework for understanding their potential difficulties and guiding language instruction and intervention. Further research specific to this population would be valuable in shedding more light on their particular phonological development in English.

These previous studies on Algerian children's phonological processes contribute to our understanding of language acquisition and provide insights for educators

1.5 Methodologies for Investigating Phonological Processes:

Activities like substituting different sounds for the first sound of a familiar song can help children develop phonological awareness, a cognitive substrate to reading acquisition. Becoming phonologically aware prepares children for later reading instruction, including instruction in phonics, word analysis, and spelling (Adams, Foorman, Lundberg, & Beeler, 1998; Chard, Simmons, & Kameenui, 1998). The most common barrier to learning early word reading skills is the inability to process language phonologically (Liberman, Shankweiler, & Liberman, 1989). Moreover, developments in research and understanding have revealed that this weakness in phonological processing most often hinders early reading development for both students with and without disabilities (Fletcher et al., 1994). Phonological assessments and standardized tests are commonly used in the field of speech-language pathology to evaluate an individual's phonological skills and abilities. These assessments provide valuable information about a person's speech sound production, sound patterns, and overall phonological development. They help clinicians identify any speech sound disorders or difficulties and develop appropriate intervention plans.

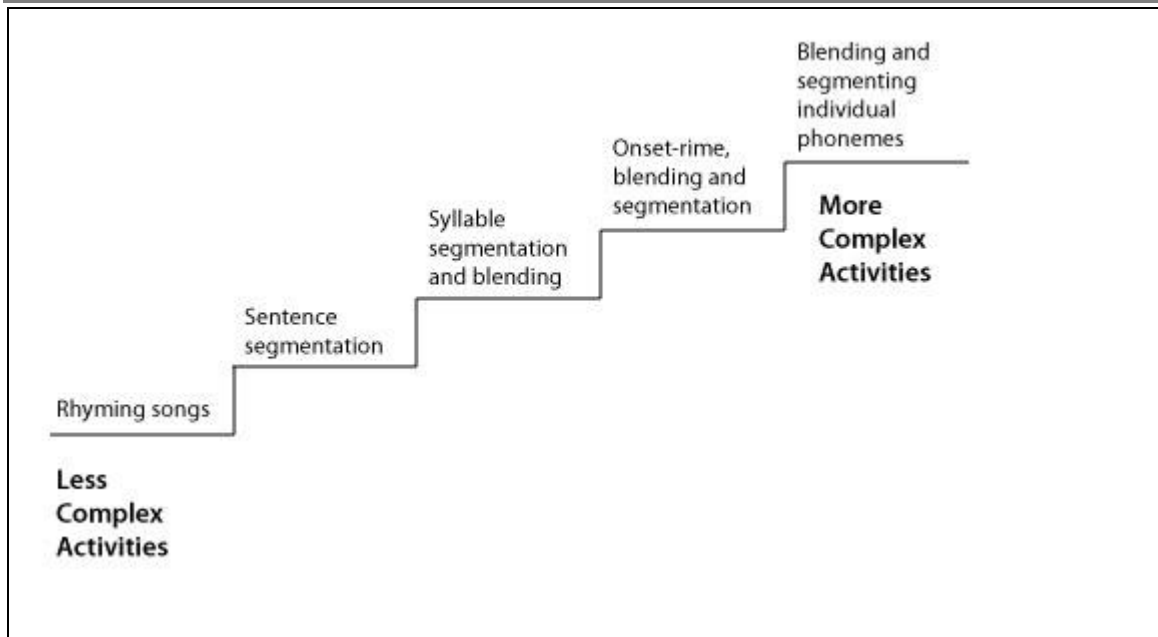


Figure 1: A continuum of complexity of phonological awareness activities

Phonological assessments typically involve a variety of tasks and measures designed to assess different aspects of phonology. These may include:

1.5.1 Articulation Assessment:

This evaluates an individual's ability to produce specific speech sounds in isolation, words, or sentences. It helps identify any errors or substitutions in sound production.

1.5.2 Phonological Processes Assessment:

This assesses an individual's use of phonological processes, which are systematic sound patterns that simplify speech production. Common phonological processes include final consonant deletion (e.g., saying "cat" as "ca"), cluster reduction (e.g., saying "blue" as "boo"), and fronting (e.g., saying "cat" as "tat").

1.5.3 Speech sound discrimination:

This measures an individual's ability to perceive and discriminate between different speech sounds. It can involve tasks such as identifying the odd sound out or matching sounds to pictures. If a child was reading a book about flowers that included a section about bees, for example, they would need to be able to notice that the word "bees" is made up of three sounds "b," "ee" and "zz". Children with auditory discrimination challenges may have trouble remembering the sequences of words and may write words incorrectly as well. (Law et al., 2017)

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Standardized tests are assessment tools that have been developed and standardized on a large sample of individuals, ensuring consistent administration and scoring procedures. These tests provide normative data, allowing clinicians to compare an individual's performance to that of a typical population. Some commonly used standardized tests for phonological assessments include:

1.5.3.1 Goldman-Fristoe Test of Articulation (GFTA):

This assesses speech sound production in children by having them name pictures or repeat words. It provides standardized scores and percentiles for different age groups. It's a fantastic tool that helps understand how children produce speech sounds. It's like a road map, showing where a child is now and pointing the way forward. Let's dive in and see how it works. A trained professional starts the GFTA-3. This could be a speech therapist or a school psychologist. Goldman, R., & Fristoe, M. (2015). Goldman-Fristoe Test of Articulation-Third Edition (GFTA-3). Pearson

1. The child says specific words that the professional picks.
2. The words are chosen because they contain a wide range of speech sounds.
3. The professional listens to how the child says the sounds in these words.
4. They note which sounds the child can make clearly and which sounds are tough.
5. This includes noticing if a child leaves out sounds, changes sounds, or adds extra sounds.
6. The whole test takes about 15 to 20 minutes, so it's short and sweet!

By looking at these results, the professional can see patterns. These patterns help show if a child is struggling with specific speech sounds. Remember, every child is unique. Some kids might need help with one set of sounds, while others might find different sounds tricky. That's where the GFTA comes in. It gives a clear snapshot of a child's speech skills, helping to create a plan that fits them just right.

1.5.3.2 The Comprehensive Test of Phonological Processing (CTOPP):

is a widely used assessment tool designed to evaluate phonological awareness and phonological processing abilities in individuals. It assesses various aspects of phonological processing, including phonological awareness skills, phonological memory, and rapid naming. Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (1999). Comprehensive Test of Phonological Processing (CTOPP). Austin, TX: Pro-Ed.

It has tests like:

1. Elision measures the ability to remove phonological segments from spoken words to form other words.
2. Blending Words measures the ability to synthesize sounds to form words.

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3. Sound Matching measures the ability to select words with the same initial and final sounds.
4. Phoneme Isolation measures the ability to isolate individual sounds within words.
5. Memory for Digits measures the ability to repeat numbers accurately.
6. Rapid Digit Naming measures the ability to rapidly name numbers.
7. Rapid Letter Naming measures the ability to rapidly name letters.
8. Rapid Color Naming measures the ability to rapidly name colors.
9. Rapid Object Naming measures the ability to rapidly name objects

1.5.3.3 Khan-Lewis Phonological Analysis (KLPA):

This analysis is used to transcribe and analyze speech sound errors in individuals with phonological disorders. It aims to provide a detailed description of the phonological patterns and processes observed in the individual's speech. (2nd ed.; KLPA-2; Khan & Lewis, 2002)

It's important to note that while these assessments and tests provide valuable information, they are only part of a comprehensive evaluation process. A speech-language pathologist may also consider other factors, such as the individual's language skills, overall communication abilities, and the impact of speech sound errors on daily functioning. This comprehensive approach helps guide intervention planning and support the individual's communication development. Adams et al. (1998)

1.6 Analysis of speech samples and transcription:

According to Dresher's Handbook of Phonological Theory, Analyzing speech samples and transcriptions is an essential step in investigating phonological processes. By examining the production and transcription of speech sounds, linguists can identify and analyze various phonological phenomena, such as assimilation, deletion, metathesis, and others. Here is a general approach to conducting an analysis of speech samples and transcriptions for investigating phonological processes:

1.6.1 Collect speech samples:

Gather a diverse set of speech samples from speakers who represent the target language or dialect under investigation. It's crucial to include speakers of different ages, genders, and backgrounds to capture the variability in pronunciation.

1.6.2 Create transcriptions:

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Transcribe the speech samples phonetically, using a standardized phonetic alphabet such as the International Phonetic Alphabet (IPA). Ensure that the transcriptions capture the precise sounds produced by the speakers, including any variations or allophonic differences.

1.6.3 Identify patterns:

Examine the transcriptions to identify recurring patterns or deviations from expected phonological rules. Look for instances where specific sounds or sound sequences exhibit consistent alterations across different words or contexts.

1.6.4 Categorize phonological processes:

Classify the identified patterns into specific phonological processes. Common phonological processes include assimilation, where a sound becomes more like a neighboring sound, and deletion, where a sound is omitted from a word or sequence.

1.6.5 Analyze the contexts:

Investigate the environments or contexts in which the phonological processes occur. Determine if there are any conditioning factors that influence the application of a particular process. For example, assimilation might be conditioned by the surrounding sounds or syllable structure.

1.6.6 Compare with linguistic rules:

Compare the observed phonological processes with the known linguistic rules or constraints of the target language. Determine whether the processes are in accordance with the phonological system of the language or if they represent exceptions or variations.

1.6.7 Hypothesize explanations:

Develop hypotheses or explanations for the phonological processes based on the analysis. Consider factors such as historical developments, dialectal variations, and language contact situations that may have influenced the observed patterns.

1.6.8 Test hypotheses:

Conduct further investigations or experiments to test the proposed hypotheses. This might involve collecting additional speech samples, conducting perception studies, or analyzing historical language data to support or refine the explanations.

1.6.9 Document findings:

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Document your findings, including a description of the phonological processes, their distribution, and the contexts in which they occur. Present the results in a clear and organized manner, supported by examples from the speech samples and transcriptions.

1.6.10 Interpretation and implications:

Interpret the findings in light of broader linguistic theories or implications. Discuss the significance of the observed phonological processes for understanding the phonological system of the target language, language acquisition, or other relevant linguistic phenomena.

1.7 Exploring Speech Perception:

Speech perception tasks and experimental paradigms are used in the field of psycholinguistics and cognitive neuroscience to investigate how humans perceive and process speech. These tasks and paradigms are designed to explore various aspects of speech perception, including phoneme discrimination, word recognition, and sentence processing. Here are some commonly used speech perception tasks and experimental paradigms:

1.7.1 Phoneme Discrimination:

refers to the ability to distinguish and recognize differences between individual speech sounds, which are known as phonemes. Phonemes are the smallest units of sound in a language that can change the meaning of a word. Pisoni, D. B., & Lively, S. E. (1995).

Example: A common example of phoneme discrimination is distinguishing between the /p/ and /b/ sounds in English. These two sounds are phonemes that can change the meaning of words. For instance, the words "pat" and "bat" have different meanings due to the distinct phonemes /p/ and /b/.

1.7.2 Phoneme Categorization:

It is a strategy where the participants are presented with a continuum of speech sounds that vary along a specific acoustic dimension (e.g., voice onset time or formant frequency). They are then asked to categorize the sounds into different phoneme categories (e.g., /b/ or /p/). This paradigm allows researchers to study the boundaries and flexibility of phoneme categories. This strategy helps build the essential skills in phonemic awareness. Researchers agree that the ability to recognize individual phonemes is an indicator of future success in reading (Teachervision, 2015).

1.7.3 Word Recognition:

refers to the process of identifying and accessing stored lexical representations in memory based on the incoming speech signal. It involves matching the acoustic features of spoken words to stored phonological and orthographic representations to determine the identity of the word. McClelland, J. L., & Elman, J. L. (1986).

Example: An example of word recognition is when a listener hears the spoken word "cat" and quickly recognizes it as the word referring to a small domesticated animal. This recognition happens based on the listener's stored knowledge of the phonological and orthographic patterns associated with the word "cat."

1.7.4 Lexical Access:

refers to the process by which individuals retrieve and access words from their mental lexicon, or mental store of words and their associated meanings. It involves the activation and retrieval of specific lexical representations based on various cues or stimuli. Forster, K. I., & Forster, J. C. (2003).

Example: An example of lexical access is when a person sees the written word "apple" and quickly retrieves its corresponding meaning, such as the fruit of a certain tree. This retrieval process involves accessing the stored lexical representation of the word "apple" from memory.

1.7.5 Speech Segmentation:

refers to the process by which listeners parse continuous speech into individual words or units. It involves identifying and marking the boundaries between words or syllables in spoken language. Cutler, A., & Norris, D. (1988).

Example: An example of speech segmentation is when a listener hears the phrase "I want to go to the park" and is able to segment it into individual words: "I", "want", "to", "go", "to", "the", "park". This segmentation allows the listener to comprehend and interpret the meaning of the spoken sentence.

1.7.6 Speech-in-Noise:

refers to the ability of listeners to perceive and understand speech in challenging listening conditions where there is background noise or interference present. This paradigm investigates how well individuals can extract and comprehend speech when it is masked or degraded by noise. Kidd, G. R., Mason, C. R., Richards, V. M., Gallun, F. J., & Durlach, N. I. (2008).

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Example: An example of a speech-in-noise task is presenting participants with a recorded sentence or a spoken passage while simultaneously playing background noise. The participants are then asked to repeat or comprehend the target speech in the presence of the noise. This task assesses the listener's ability to overcome the effects of noise and accurately perceive the speech signal.

1.7.7 Sentence Processing:

refers to the cognitive processes involved in understanding and comprehending sentences, including the analysis of grammatical structure, meaning, and context. It explores how individuals parse and interpret sentences at various linguistic levels, such as syntax, semantics, and pragmatics. Ferreira, F., & Clifton, C. (2019).

Example: One example of a sentence processing task is a syntactic judgment task, where participants are presented with sentences that may or may not contain grammatical errors. They are asked to determine whether the sentences are grammatically correct or not. This task assesses the participants' ability to parse and analyze the syntactic structure of sentences.

These tasks and paradigms provide researchers with valuable insights into the cognitive processes underlying speech perception and contribute to our understanding of language processing in the human brain.

2. Common Phonological Processes in Kindergarten-Aged Children's Speech Development

In kindergarten-aged children, it is common to observe various phonological processes as they develop their speech and language skills. Phonological processes are patterns of sound errors that children use as part of their normal language development. While some of these processes are considered typical and expected at this age, others may indicate a potential speech or language disorder. Here are some common phonological processes observed in kindergarten children's language:

Final Consonant Deletion (FCD): Kindergarten children may omit the final consonant in words, such as saying "ca" for "cat" or "do" for "dog."

Cluster Reduction (CDD): Children often simplify consonant clusters by omitting one of the consonants. For example, they might say "top" for "stop" or "pan" for "plane."

Stopping Consonant Blends (SCB): This process involves replacing fricative sounds (like /s/ and /z/) or affricate sounds (like /ch/ and /j/) with stop sounds (like /p/, /b/, /t/, or /d/). For instance, a child might say "tun" for "sun" or "doh" for "show."

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Fronting (FID): Kindergarteners may substitute sounds produced at the back of the mouth (like /k/ and /g/) with sounds produced at the front of the mouth (like /t/ and /d/). For example, they might say "tat" for "cat" or "do" for "go."

Reduplication: This process involves repeating a syllable in a word, such as saying "dada" for "daddy" or "wawa" for "water."

Weak Syllable Deletion (WSD): Children may omit weak syllables in multisyllabic words. For instance, they might say "nana" for "banana" or "elphant" for "elephant."

Assimilation (ASR): This process involves changing a sound to be more similar to a neighboring sound. For example, a child might say "gog" for "dog" or "pish" for "fish."

Gliding (GID): Kindergarten children may replace the /r/ sound with a /w/ sound, saying "wabbit" for "rabbit" or "wun" for "run."



PHONOLOGICAL PROCESSES

Phonological processes are patterns of sound errors that typically developing children use to simplify speech as they are learning to talk. A phonological disorder occurs when phonological processes persist beyond the age when most typically developing children have stopped using them or when the processes used are much different than what would be expected.

SUBSTITUTION	Definition	Example	Approx. age of elimination
Backing	When alveolar sounds, like /t/ and /d/, are substituted with velar sounds like /k/ and /g/	"gog" for "dog"	Usually seen in more severe phonological delays.
Fronting	When velar or palatal sounds, like /k/, /g/, and /sh/, are substituted with alveolar sounds like /t/, /d/, and /s/	"tootle" for "cookie"	3.5 yrs.
Gliding	When /r/ becomes a /w/, and /l/ becomes a /w/ or /y/ sound	"wabbit" for "rabbit" or "yepo" for "yelp"	6 yrs.
Stopping	When a fricative (like /f/ or /s/) or affricate (ch, j) is substituted with a stop consonant like /p/ or /d/	"pan" for "fan" or "duwp" for "jump"	/f, /s/ by 3; /t/, /z/ by 3 1/2; sh, ch, j by 4 1/2; th gone by 5
Vowelization	When the /l/ or /r/ sounds are replaced with a vowel	"appa" for "apple" or "papuh" for "paper"	—
Affrication	When a nonaffricate is replaced with an affricate (ch or j)	"joor" for "door"	3 yrs.
Deaffrication	When an affricate, like ch or j, is replaced with a fricative or stop like sh or /d/	"ships" for "chips"	4 yrs.
Alveolarization	When a nonalveolar sound is substituted with an alveolar sound	"tu" for "shoe"	5 yrs.
Depalatalization	When a palatal sound is substituted with a nonpalatal sound	"fit" for "fish"	5 yrs.
Labialization	When a nonlabial sound is replaced with a labial sound	"ple" for "le"	6 yrs.

ASSIMILATION	Definition	Example	Approx. age of elimination
Assimilation	When a consonant sound starts to sound like another sound in the word	"dub" for "bus"	3 yrs.
Denasalization	When a nasal consonant like /m/ or /n/ changes to a nonnasal consonant like /b/ or /d/	"foze" for "nose"	2.5 yrs.
Final Consonant Devoicing	When a voiced consonant at the end of a word like /b/ or /d/ is substituted with a voiceless consonant like /p/ or /t/	"pck" for "pig"	3 yrs.
Prevocalic Voicing	When a voiceless consonant in the beginning of a word like /k/ or /t/ is substituted with a voiced consonant like /g/ or /d/	"goind" for "comb"	6 yrs.
Coalescence	When two phonemes are substituted with a different phoneme that still has similar features	"foor" for "spoon"	—
Reduplication	When a complete or incomplete syllable is repeated	"baba" for "bottle"	3 yrs.

SYLLABLE STRUCTURE	Definition	Example	Approx. age of elimination
Cluster Reduction	When a consonant cluster is reduced to a single consonant	"pane" for "plane"	Gone by 4 yrs. without /s/, gone by 5 yrs. with /s/
Final Consonant Deletion	When the final consonant in a word is left off	"toe" for "toad"	3 yrs.
Initial Consonant Deletion	When the initial consonant in a word is left off	"unny" for "bunny"	Usually seen in more severe phonological delays.
Weak Syllable Deletion	When the weak syllable in a word is deleted	"nana" for "banana"	4 yrs.
Epenthesis	When a sound is added between two consonants, typically the /h/ sound	"bu-lee" for "blue"	8 yrs.

Bivik, Ren M. (1992). *Manual of Articulation and Phonological Disorders*. San Diego, CA: Singular Publishing Group, Inc.
 Bowen, Caroline, (2011). Elimination of Phonological Processes in Typical Development. *Linguistics*, (2018). Phonological Pattern Suppression by Age. <https://www.ling.berkeley.edu/>
 Hedge, M.N., (2007). *Fieldwork Assessment in Speech-Language Pathology* (2nd Edition). San Diego, CA: Plural-Academic, a Harcourt Health Sciences Company.
 Fazio-Groth, Adriana, & Hedge, M.N. (2007). Assessment and treatment of articulation and phonological disorders in children (2nd Edition). Austin, TX: PRO-ED.

www.mommyspeechtherapy.com
www.littlebeespeech.com

Figure 2: Phonological Process source www.mommyspeechtherapy.com

It's important to note that while these phonological processes are typical in the early stages of language development; most children will gradually outgrow them as they refine their speech skills. However, if these processes persist beyond the expected age range or significantly impact the child's intelligibility, it may be necessary to consult a speech-language pathologist for further assessment and intervention.

1.8. Factors Influencing Phonological Processes in Kindergarten in Algeria

Several factors can influence phonological processes in kindergarten children in Algeria, including environmental factors such as socioeconomic status and bilingualism. Here's a breakdown of how these factors may impact phonological development:

1.8.1. Socioeconomic status:

Socioeconomic status (SES) can have a significant impact on a child's phonological development. Children from lower SES backgrounds may experience limited access to quality early childhood education, reduced exposure to rich language environments, and fewer resources for language development. These factors can hinder phonological awareness and mastery of phonological processes. Conversely, children from higher SES backgrounds often have greater access to educational resources and language-rich environments, which can support their phonological development.

"Children from lower socioeconomic backgrounds may have limited access to quality early childhood education and resources for language development, which can hinder their mastery of phonological processes (Smith, 2019)."

1.8.2. Bilingualism:

Algeria is a linguistically diverse country, with Arabic as the official language and Tamazight (Berber) as a recognized national language. Additionally, French is commonly spoken due to Algeria's colonial history. Bilingualism can influence phonological processes in kindergarten children. Depending on the child's exposure and proficiency in each language, they may exhibit phonological variations, code-switching, or code-mixing. The interplay between multiple languages can impact the acquisition of phonological rules and processes, particularly if there is limited exposure to one or more languages.

"The interplay between multiple languages can influence the acquisition of phonological rules and processes in bilingual children (Gonzalez-Barrero&Nadal, 2018)."

1.8.3. Language exposure and input:

The amount and quality of language exposure and input in a child's environment play a crucial role in phonological development. Kindergarten children in Algeria may differ in the language exposure they receive at home, in the community, and in educational settings. If a child's linguistic environment lacks sufficient exposure to phonological patterns or if the input is inconsistent or of low quality, it can impede the child's development of accurate phonological processes.

"The quality and quantity of language input play a vital role in phonological development (Kaur, 2020)."

1.8.4. Cultural and dialectal variations:

Algeria is culturally diverse, with distinct regional dialects and linguistic variations. Children growing up in different regions may be exposed to different dialects or variations of Arabic or Tamazight. These dialectal variations may influence the phonological processes children exhibit, as they might differ from the standardized language taught in schools. Cultural and dialectal factors can affect phonological development and may need to be considered in assessing and supporting children's speech and language skills. For example: Arabic Dialectal Variations:

- In Algerian Arabic, the /q/ sound is often pronounced as /g/ in some dialects. For example, "qalam" (pen) may be pronounced as "galam." The /d͡ʒ/ sound (similar to the "j" sound in "judge") may be pronounced as /z/ in some dialects. For example, "jazayer" (islands) may be pronounced as "jazayir." Some dialects may exhibit vowel sound variations, such as pronouncing /a/ as /ɛ/ or /æ/, or /i/ as /ɪ/.
- Tamazight (Berber) Variations:
Tamazight has various dialects across different regions of Algeria, and each dialect has its phonological characteristics. Some dialects may have distinct consonant sounds, such as the uvular fricatives /ʁ/ and /ʕ/ not present in Standard Arabic. Vowel sounds can also vary, with some dialects featuring different vowel qualities or vowel length distinctions.

While these factors can influence phonological processes in kindergarten children in Algeria, each child's development is unique, and the impact of these factors may vary among individuals. Additionally, other factors such as genetic predispositions, hearing abilities, and individual learning styles can also contribute to phonological development.

1.9 .The role of cognitive and linguistic factors in phonological development in Algeria:

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In kindergarten, children in Algeria, like in any other country, undergo important phonological development. Phonological processes refer to the systematic patterns of speech sound errors that occur during children's language acquisition. These processes are influenced by a combination of cognitive and linguistic factors. Let's explore the role of these factors in phonological development in kindergarten. Gillon, G. (2018). Phonological Awareness

1.9.1. Cognitive Factors:

in sentence processing refer to the various cognitive processes and mechanisms that influence how individuals understand and interpret sentences. These factors can impact the speed, accuracy, and ease with which individuals' process and comprehend linguistic information.

1.9.1.1 Auditory Processing Skills:

The ability to discriminate and perceive speech sounds is crucial for phonological development. Children with strong auditory processing skills can better identify and distinguish different sounds, leading to more accurate phonological representations.

1.9.1.2 Working Memory:

Phonological processing requires holding and manipulating phonological information in working memory. Children with better working memory capacities can process and produce more complex speech patterns.

1.9.1.3. Attention and Focus:

Sustained attention and focused listening skills are essential for children to attend to and internalize phonological information. Children with stronger attention skills are more likely to notice and imitate the correct phonological forms.

1.9.2. Linguistic Factors:

1.9.2.1. Language Input:

The quality and quantity of language input play a vital role in phonological development. Children exposed to a rich and diverse language environment, with clear and accurate pronunciation models, are more likely to acquire and produce accurate speech sounds.

1.9.2.2. Phonological Awareness:

This refers to the awareness of the sound structure of language, including the ability to manipulate and segment speech sounds. Strong phonological awareness skills enable children to

recognize and produce individual sounds, syllables, and rhymes, which supports phonological development.

1.9.2.3. Vocabulary and Language Skills:

A child's vocabulary and overall language abilities influence their phonological development. The more extensive their vocabulary and language skills, the greater their exposure to a wide range of speech sounds, leading to more accurate phonological representations.

1.10. Cultural and Environmental Factors:

1.10.1. Language Exposure:

The phonological development of children in Algeria is influenced by the specific language(s) they are exposed to, such as Arabic or Tamazight (Berber). The phonological characteristics of the language(s) they encounter shape their development, including specific speech sounds, phonotactics, and prosody.

1.10.2. Socioeconomic Status:

Socioeconomic factors can impact language exposure and access to resources that support phonological development. Children from higher socioeconomic backgrounds may have greater access to educational materials, linguistic stimulation, and support for their phonological development.

These factors interact with each other, and their influence can vary across individuals. Additionally, cultural and linguistic diversity should be considered when studying phonological development in Algeria, as the specific dialects and language variations within the country can also impact children's phonological processes.

1.11. Assessment and intervention for phonological disorders:

are crucial for ensuring optimal language development in children. Here are some implications and strategies related to early identification and intervention for phonological disorders, specifically focusing on supporting phonological development in kindergarten-aged Algerian children:

1.11.1. Importance of Early Identification:

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Early identification of phonological disorders is vital because it allows for timely intervention, which can significantly impact a child's language development. Identifying and addressing these disorders early can help prevent long-term language difficulties and related academic challenges.

1.11.2. Screening and Assessment:

Implementing standardized screening tools and assessments can help identify children at risk for phonological disorders. These assessments may include measures of speech sound production, phonological awareness, and speech sound discrimination. Collaborating with speech-language pathologists or professionals trained in assessing phonological disorders can ensure accurate identification.

1.11.3. Individualized Intervention:

Intervention strategies should be tailored to meet the specific needs of each child. Here are some strategies for supporting phonological development in kindergarten-aged Algerian children:

1.11.3.1. Speech Sound Production:

- Articulation Therapy: Focus on teaching correct production of specific speech sounds through auditory and visual cues, shaping techniques, and repetition.

- Minimal Pair Therapy: Highlight the distinction between target sounds and error sounds by contrasting minimal pairs (words that differ by only one sound).

- Phonetic Placement Therapy: Teach correct placement and movement of articulators (e.g., tongue, lips) for accurate sound production.

1.11.3.2. Phonological Awareness:

- Rhyming Activities: Engage children in activities that involve identifying and producing words that rhyme.

- Syllable Segmentation: Help children break down words into syllables by clapping or tapping for each syllable.

- Sound Blending and Segmentation: Practice blending individual sounds together to form words and segmenting words into individual sounds.

1.11.3.3. Environmental Enrichment:

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- Provide a language-rich environment that exposes children to a variety of spoken and written language experiences.

- Encourage conversations, storytelling, and reading activities to promote phonological development and vocabulary expansion.

1.11.3.4. Parent and Teacher Involvement:

- Educate parents and teachers about phonological development and provide strategies to support children's speech and language skills at home and in the classroom.

- Encourage regular communication between parents, teachers, and speech-language professionals to monitor progress and provide consistent support.

1.11.4. Multicultural Considerations:

When working with Algerian children, it is essential to consider cultural and linguistic factors. Understand and respect the child's native language and culture, as they influence phonological development. Collaborating with families and integrating cultural elements into intervention can enhance engagement and effectiveness.

1.11.5. Ongoing Monitoring and Support:

Regular progress monitoring is crucial to ensure the effectiveness of intervention strategies. Adjust interventions as needed and provide ongoing support to address any emerging challenges. Collaboration between speech-language professionals, educators, and families is the key to fostering continuous development.

1.12. Conclusion

The literature review on phonological processes in children's language in Algeria highlights that phonological development is a natural part of children's language development, and Algerian children follow similar developmental patterns to children in other linguistic contexts. However, Algerian Arabic has unique phonological features and processes that impact children's speech development. The literature also identifies several gaps, including the need for more research that specifically investigates phonological development in Algerian Arabic, the influence of sociolinguistic factors, the impact of bilingualism or multilingualism, and the lack of specific intervention studies targeting phonological disorders in Algerian children. Addressing these gaps through further research will contribute to a better understanding of phonological development in Algerian children and inform the development of appropriate assessment and intervention practices that consider the linguistic and cultural context of Algeria.

Chapter Two

Methodology

.21 Introduction

The present study aims mainly to explore teaching English as a foreign language to kindergarten children. It also seeks to highlight teachers' views and preferences, as they are the decision makers regarding which phonological processes will observe in their pupils' language. Therefore, a qualitative research approach was adopted to carry out this research study because it serves the nature of this research. In addition, a qualitative approach is suitable for answering the research question and attaining its aims. A case study design was used as a research strategy because this research study intends to understand and describe investigating the phonological processes in children's English language in Algeria.

2.2 Research Questions

The main aim of this study, as stated in the general introduction, is to determine the most common phonological processes observed in Algerian children's English language acquisition in kindergarten, also it seeks to address the following questions:

1. Can the teaching of foreign languages, especially English, to very young learners help Algerian children develop a variety of languages?
2. How are Algerian kindergarteners' phonological processes different from those seen in older age groups?
3. How much do kindergarten-aged Algerian children's native French or Arabic linguistic backgrounds affect their phonological processes in English?

2.3 Research Hypothesis

The following hypotheses are tentative answers to the research questions:

The main hypothesis to the main question the most common phonological processes observed in Algerian children's English language acquisition in kindergarten include substitution, assimilation, deletion, simplification of consonant clusters, and vowel sound substitution.

1. The teaching of foreign languages, especially English, to very young learners can help Algerian children develop a variety of languages.
2. Algerian kindergarten students' phonological processes diverge significantly from those of older age groups, demonstrating a transition in their learning of the English language. In contrast to their elders, young children quickly pick up on English sounds.

3. The instruction of foreign languages, particularly English, to very young learners, positively influences the development of a diverse range of languages in Algerian students, including their native Algerian Arabic and French.

2.4 Research Design

The research design for this study adopts a mixed-methods approach, combining qualitative and quantitative methods to explore the phonological processes involved in Algerian children's acquisition of the English language in kindergarten settings. The design incorporates multiple data collection techniques, including a questionnaire administered to 20 Algerian teachers, an interview conducted with a parent, and direct observations conducted in a specific kindergarten setting known as "Kids Space." By employing this comprehensive research design, the study aims to gather diverse perspectives and rich data to gain a deeper understanding of the phonological development of Algerian children in their English language learning journey.

2.5 The participants

For this study, a qualitative research design will be employed to investigate the phonological processes in children's English language acquisition in Algerian kindergartens. Specifically, a case study design will be used to gain a comprehensive understanding of the research topic.

The participants in this study will consist of 20 teachers who have experience in observing and assessing the phonological processes in children's English language in Algerian kindergartens. The selection of 20 teachers aims to ensure a diverse representation from different regions and backgrounds within Algeria, allowing for a broader understanding of the research topic. According to their experiences, the sample was objectively divided into years of experience groups, the number of participants involved in this Study and the way these participants were categorized into 4 regions years of experience and the pupils the participants teach groups.

Teachers	Region	Years of Experience	Age Range of Pupils
P1	North	2	4-5 years
P2	South	8	4-5 years
P3	East	3	5-6 years
P4	West	4	4-5 years
P5	North	1	4-5years
P6	South	4	4-5 years
P7	East	7	5-6 years
P8	West	2	4-5 years
P9	North	9	4-5 years
P10	South	1	3-6 years
P11	East	4	3-4 years
P12	West	6	4-5 years
P13	North	3	3-6 years
P14	North	11	3-6 years
P15	East	5	4-5 years
P16	West	7	4-5 years
P17	North	2	4-5 years
P18	South	6	4-5 years
P19	East	9	5-6 years
P20	West	3	3-6 years

Table

01:Number of participants and their years of experience

The data collected from the interviews and observations will be analyzed using thematic analysis, allowing for the identification of recurring themes and patterns related to the research questions. The analysis will involve a systematic and in-depth examination of the data, ensuring the exploration of various aspects of the phonological processes in children’s English language acquisition.

2.5 Research Setting

Regarding the questionnaire, the research setting for this study is Algerian kindergartens where English language acquisition is taking place. The study aims to include kindergartens from

different regions within Algeria to ensure a diverse representation and a broader understanding of the phonological processes. As far as observation is concerned, the data were collected from pupils we join their English class in “Space Kids” a kindergarten in Sougueur, Tiaret.

2.6 Methods of data

To investigate the phonological processes in children’s English Language in Algeria, as well as to test the theories outlined in the general introduction section. The participants were split into two groups using two different data collection techniques that could support or refute our hypotheses.

2.6.1 The Questionnaire

This questionnaire was addressed to kindergarten’s teachers. Its general aim was collecting information about teacher’s years of experience and the number of their pupils, as well as the region they are working in, moreover their observations towards investigating the phonological processes in children’s English Language. In addition, this questionnaire aims to explore the patterns, challenges, and strategies related to the development of phonological skills among Algerian children learning English in kindergarten settings.

The questionnaire used in this study includes important questions. The first three ones are used to gather general information about the participants such as: region, years of experience, and number of their pupils. The upcoming questions are devoted to the phonological processes observed in children’s English language development. Interestingly, gather data about phonological disorders in pupils’ speech. The amount and type of English language exposure in kindergartens can have a significant impact on the phonological processes displayed by Algerian children. When children are exposed to English language learning opportunities in a consistent and immersive manner, it allows them to develop a stronger phonological awareness and sensitivity to the sounds and pronunciation patterns of the language. Regular exposure to spoken English through activities such as listening to stories, engaging in conversations, and participating in language games helps children become familiar with the phonemes, intonation, and rhythm of the language.

The type of English language exposure is also important. Incorporating a variety of activities that focus on phonics, pronunciation, and oral language skills can further enhance the phonological processes in children. Engaging in phonics activities and exercises helps children recognize and differentiate between different sounds and their corresponding letters. Using rhymes and songs in lessons not only makes learning enjoyable but also promotes the development of phonological awareness and memory for language sounds. Providing explicit pronunciation instruction and

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using minimal pair exercises can help children refine their articulation and discriminate between similar sounds.

It is worth mentioning that the data were anonymous. To provide spontaneous answers, the respondents were not requested to submit their names. This guarantees the reliability of our data. The questionnaire was written in English, this helped the participants to choose the right words which reflect the patterns of sound replacements of their pupils.

2.6.2 Observation

Another form of data collection technique that we have used for the sake of acquiring trustworthy and reliable data is the observation. Through it the researcher directly witnessed and documented the phonological processes exhibited by children during their English language acquisition in Algerian kindergartens. During the observation process, the researcher carefully observed and noted the behaviors, interactions, and language usage of the children in their natural classroom setting. This method allowed for a firsthand and unobtrusive examination of the phonological processes, including pronunciation, articulation, phonemic awareness, and speech patterns, among others. The researcher paid attention to various aspects during the observation, such as the children's ability to produce and distinguish English language sounds, their pronunciation accuracy, their use of phonological rules, and any difficulties or challenges they encountered. Additionally, the researcher noted the strategies employed by the teachers to address the phonological development of the children, the use of instructional materials, and the overall classroom environment. By directly observing the phonological processes in action, the observation method provided rich and detailed data that complemented other data collection techniques, such as interviews and document analysis. It allowed for a deeper understanding of the actual behaviors and interactions of the children, providing valuable insights into their language acquisition process and the effectiveness of teaching strategies employed in Algerian kindergartens, we followed this up in order to avoid pressure on informants for the highest data quality.

The observation was conducted on the pupils of "Space Kids" kindergarten in Sougueur commune in Tiaret. Their age is between 3-6 years old who are dealing with English lesson with their teacher. It is worth mentioning that the observation related to the questions used in the questionnaire, so that we will directly find answers of those questions.

2.6.3 Interview

Chapter Two Methodology

"Interviews have emerged as a paramount method for data collection in contemporary linguistic research, with numerous studies attesting to its effectiveness in investigating a wide range of linguistic phenomena." (Faure & Unesco, 1972) The aim of this interview tool is to gather valuable insights and firsthand experiences from parents of kindergarten-aged children regarding their child's language development and phonological challenges in learning English. By conducting interviews with parents, we aim to gain a deeper understanding of the strategies and resources that have been effective in supporting their child's phonological development. The interview tool allows us to explore the specific phonological challenges faced by children, the interventions implemented by kindergartens, and the role of parental involvement in reinforcing language skills at home. Through these interviews, we aim to gather comprehensive information that can contribute to our research on phonological processes in Algerian children's English language acquisition, ultimately leading to improved practices and support for children's language development.

Chapter Three

Findings and discussion

Introduction

This chapter is devoted to present and analyze the data obtained from the questionnaire and the observation. It represents investigating the phonological processes in children's English language in Algeria specifically in the kindergartens. The present chapter figures a discussion of the results will be presented, findings will be synthesized and a conclusion will be drawn.

.31.Data Analysis

This step allows the researcher to interpret the response; we propose solutions to research problems. Therefore, all data will be collected during the study survey information be analyzed using the results of Google Forms To analyze the data, 12 questions were addressed to Algerian kindergartens teachers it's devoted:

1. Region: Frequency counts and percentages of English teachers working in each region (North, East, West, South).
2. Teaching Experience: Frequency counts and percentages of teachers based on their years of experience teaching English to kindergarten students.
3. Class Size: Frequency counts and percentages of teachers based on the number of students in their kindergarten English classes.
4. Phonological Processes: Frequency counts and percentages of teachers who observe different phonological processes in children`s English language development (e.g., initial consonant deletion, final consonant deletion, cluster reduction, syllable deletion, other processes).
5. Frequency of Phonological Processes: Frequency counts and percentages of teachers who encounter phonological processes in students' speech rarely, occasionally, frequently, or almost always.
6. Age Range: Frequency counts and percentages of teachers based on the age range they primarily teach in their kindergarten class (3-4 years old, 4-5 years old, 5-6 years old).
7. Addressing Phonological Processes: Frequency counts and percentages of teachers who use different strategies to address phonological processes in their classrooms (e.g., explicit pronunciation instruction, phonics activities, rhymes and songs, listening and repetition, minimal pair exercises, other strategies).
8. Phonological Patterns or Difficulties: Frequency counts and percentages of teachers who have noticed particular phonological patterns or difficulties among their students.

9. **Effective Strategies and Resources:** Frequency counts and percentages of teachers who find different strategies or resources effective in helping children overcome their phonological challenges (e.g., individualized instruction, small group activities, visual aids, speech therapy, parent involvement, other strategies).
10. **Training and Resources:** Frequency counts and percentages of teachers who feel well-equipped, have some training and resources but need more support, or feel ill-equipped and need more training and resources to address phonological development.
11. **Instruction of Foreign Languages:** Frequency counts and percentages of teachers who believe that instruction of foreign languages, particularly English, can enhance the development of a diverse range of languages in Algerian students.
12. **Effects of English Language Exposure:** Analysis of qualitative responses on how the amount and type of English language exposure in kindergartens affect the phonological processes displayed by Algerian children.

.31.1 Questionnaire Analysis

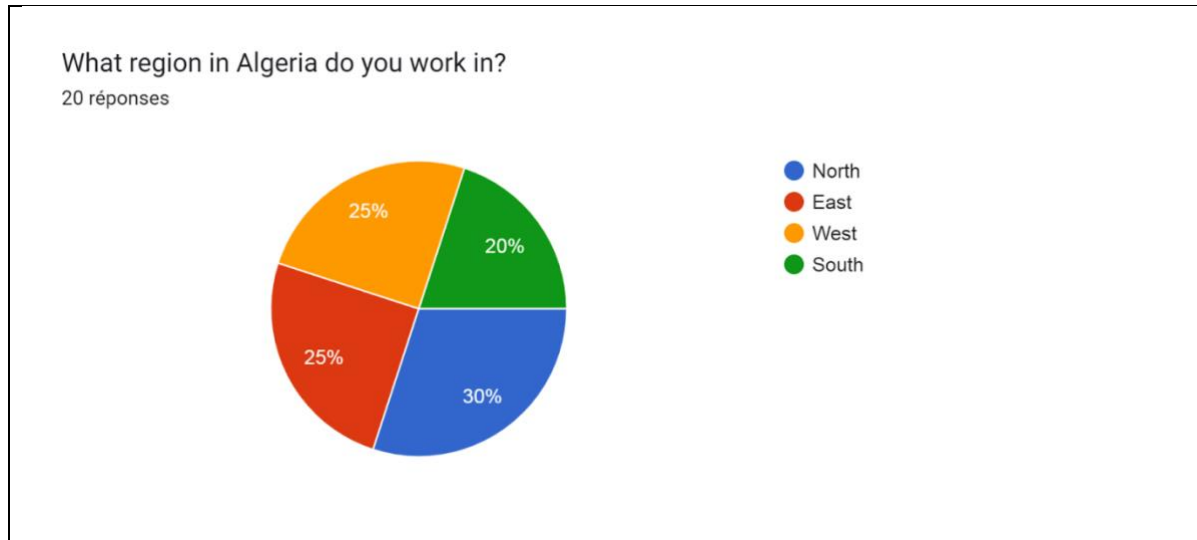
Question 01: What region in Algeria do you work in?

A regional analysis of the distribution of Algerian teachers reveals a relative distribution circle across the country. The data shows that the highest percentages of teachers, 30 percent, are based in the northern region of Algeria. The concentration in the north of the country can be attributed to factors such as high population density, improved infrastructure, and access to educational facilities. The eastern region, in turn, makes up 25 percent of the faculty. This indicates that the presence of educators in eastern Algeria is prominent, and probably indicates the importance of education in this region. Allocating resources and institutions to the East could help attract and retain teachers in the region. Similarly, the western region has a large proportion of Algerian teachers, 25 percent. This indicates a well-balanced distribution of teachers across the country. The western region may have favorable conditions to attract teachers such as B. Employment opportunities, infrastructure development, and a supportive educational environment. In contrast, the Southern Region of Algeria has the lowest proportion of teachers, with only 20% of the total. The low proportion of teachers in the South may be due to several factors, including geographical challenges, limited infrastructure, and low population density. These factors can be barriers to teacher attraction and retention in the area. The data as a whole reflects the relative circles in the distribution of Algerian teachers, with each region having a significant share, but with differences in teacher concentration. Ensure equal access to quality education for all regions of Algeria,

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including the Southern Region, by eliminating all inequalities, providing incentives, improving infrastructure, and promoting professional development opportunities for teachers; efforts should be made to.

Figure 3: Teacher's working regions



Question 2: How long have you been teaching English to kindergarten students?

To analyze data about English class hours for kindergarten children, distribute circularly for the specified percentages. You can create pie charts. Pie charts visually represent the distribution of different categories. The analysis of the data is as follows. The data show the following distribution of English teachers' years of experience teaching kindergarten children:

- Less than 1 year: 10%
- 1-3 years: 30%
- 3-5 years: 20%
- More than 5 years: 35%
- 11 years: 5%

In a pie chart, each category is represented by a slice, and the size of each slice is proportional to the percentage it represents. This graph provides a visual representation of the distribution of teaching experience for English teachers. The largest segment represents the category with the highest percentage, and the smallest segment represents the category with the lowest percentage. Based on this analysis, it appears that a significant portion of English teachers (35%) have more than 5 years of experience in teaching kindergarten students. The next largest group is teachers with 1-3 years of experience (30%). Teachers with less than 1 year of experience and 3-

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5 years of experience each account for 10% and 20% respectively. Small percentages (5%) of teachers have 11 years of experience. Overall, the pie chart provides a visual representation of the distribution of teaching experience among English teachers working with kindergarten students.

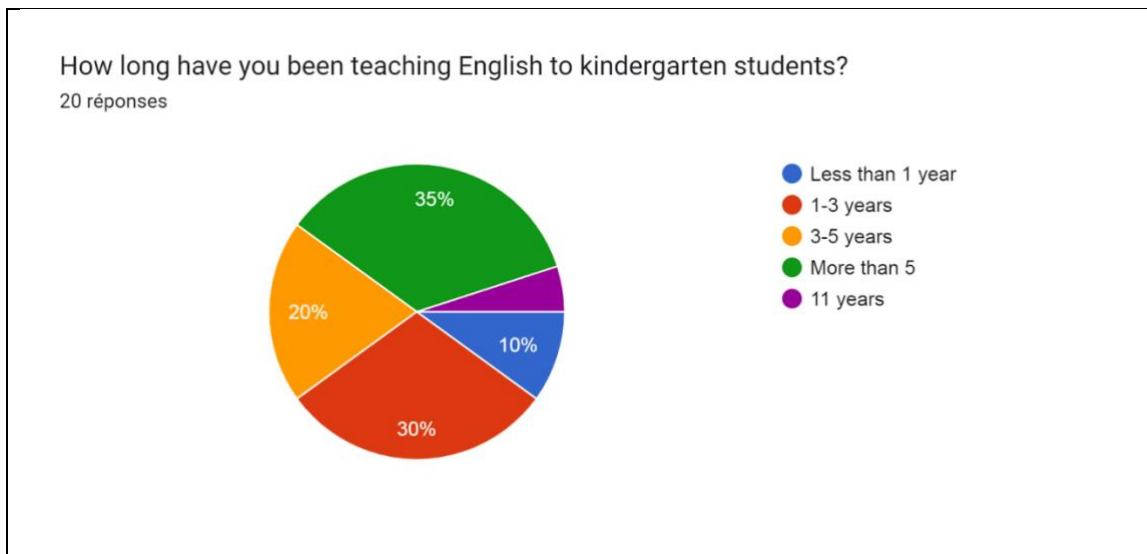


Figure 4: Distribution of English Teachers' Years of Experience in Teaching Kindergarten Students

Question 3: How many students are currently in your kindergarten English classes?

To analyze the data on the number of students currently in kindergarten English classes, which is distributed in a relative circle form, we can create a pie chart. The pie chart visually represents the distribution of the different categories. Here's an analysis of the data:

The data shows the following distribution of the number of students in kindergarten English classes:

- 1-10 students: 20%
- 11-20 students: 50%
- 21-30 students: 25%
- More than 30 students: 5%

In the pie chart, each category is represented by a slice, and the size of each slice is proportional to the percentage it represents. The chart visually displays the distribution of the number of students in kindergarten English classes. The largest slice represents the category with the highest percentage, and the smallest slice represents the category with the lowest percentage.

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Based on this analysis, it is evident that the majority of English teachers (50%) have classes with 11-20 students. The next largest group is teachers with classes of 21-30 students (25%). Teachers with 1-10 students account for 20% of the respondents, and a small percentage (5%) have classes with more than 30 students.

Overall, the pie chart provides a visual representation of the distribution of the number of students in kindergarten English classes.

Table 2: distribution of the number of students in kindergarten English classes.

Number of teachers	Number of student	Percentage
10	11-20	50%
5	21-30	25%
4	1-10	20%
1	More than 30	5%

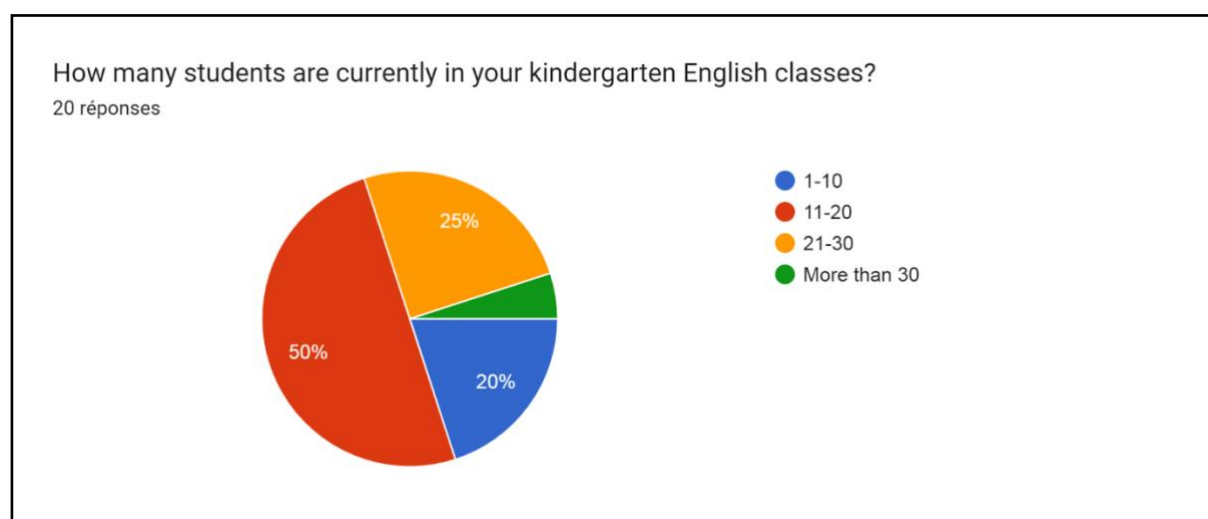


Figure 5: Number of students in kindergarten English classes

Question 4: Do you observe any phonological processes in children's English language development?

Results showed that 50% of teachers reported observing the phonological process of final consonant deletion in their students' English development. Additionally, 20% of teachers reported that their students exhibited a phonological process of dropping the first consonant. Cluster reduction and syllable deletion were each noted by 15% of teachers. These results indicate that

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final consonant deletion is the most frequently observed phonological process, followed by initial consonant deletion, while cluster reduction and syllable deletion are less frequently observed by teachers.

Table 3: Phonological processes observed.

Teacher's Number	Percentage	Answers Information
4	20	-Initial consonant deletion (e.g., "sun" pronounced as "un")
10	50	- Final consonant deletion (e.g., "cat" pronounced as "ca")
3	15	-Cluster reduction (e.g., "play" pronounced as "pay")
3	15	- Syllable deletion (e.g., "banana" pronounced as "nana")

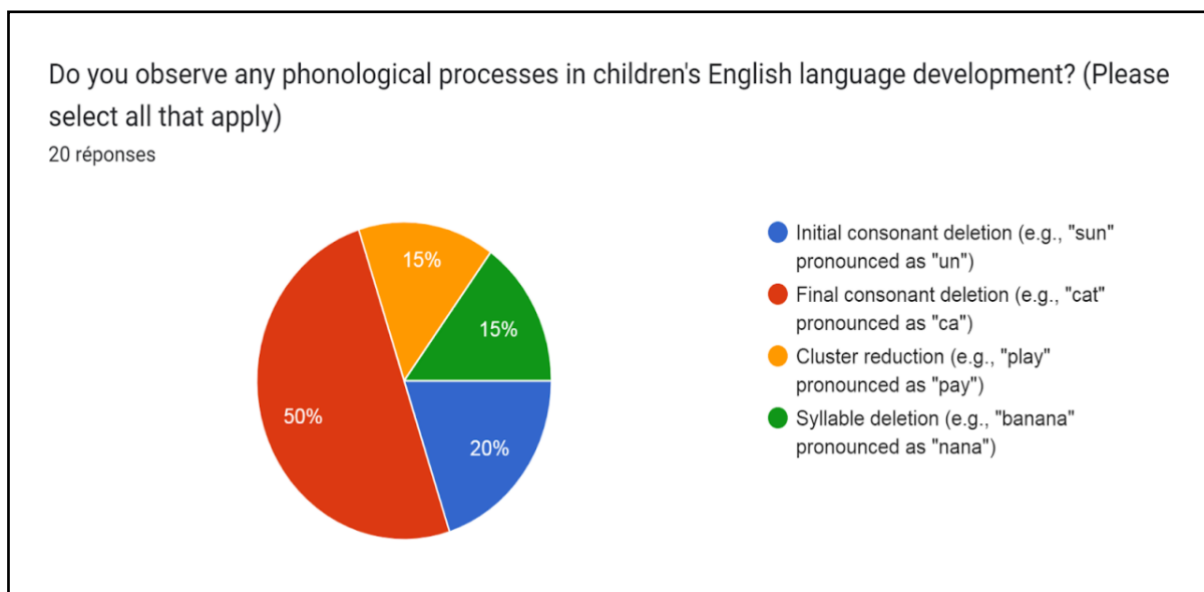


Figure 6: Phonological processes observed in children's English language development

- Other phonological processes.

Different Phonological Processes observed in pupil's English development. Based on the responses provided, the observed phonological patterns or difficulties among the students include difficulty pronouncing certain words and verbs, such as "knows." Additionally, the students may struggle

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with sounds like /th/, /r/, /l/, or /v/, as these sounds are not present in their native language. Moreover, they face challenges with the /θ/ and /ð/ sounds, as heard in words like "thick" and "that." To address these issues, teachers can implement strategies such as explicit instruction on correct articulation, providing visual aids and models, engaging students in focused activities, offering frequent practice opportunities, incorporating multisensory techniques, encouraging active listening and imitation, and collaborating with speech-language professionals for additional support. It is crucial for teachers to individualize instruction, provide ongoing assessment and feedback, and involve parents or guardians in the learning process to reinforce skills outside the classroom.

Question 5: How frequently do you encounter these phonological processes in your student's speech?

We can observe the frequency at which teachers encounter phonological processes in their students' speech. Based on the responses of the 20 teachers, the data shows that:

- Rarely: 15% of teachers reported encountering phonological processes rarely in their students' speech.
- Occasionally: The highest percentage, 40%, indicates that a significant number of teachers observe phonological processes occasionally in their students' speech.
- Frequently: 30% of teachers reported encountering phonological processes frequently in their students' speech.
- Almost always: Similar to the "rarely" category, 15% of teachers reported observing phonological processes almost always in their students' speech.

Overall, the data suggests that phonological processes are observed to some degree in the speech of the students. The majority of teachers (40%) reported encountering these processes occasionally, indicating that it is a relatively common occurrence. This finding highlights the importance of addressing and supporting students' phonological development in the language-learning process.

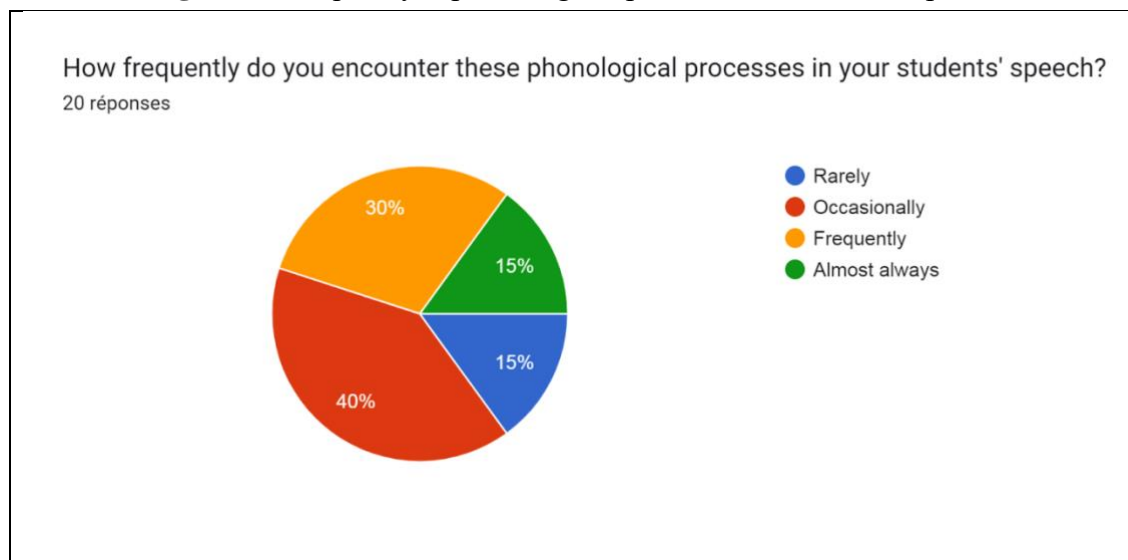
Table 4: Frequency of phonological processes teachers observed in children speech

Frequency of Phonological Processes	Percentage	Number of teachers
Rarely	15%	3

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Occasionally	40%	8
Frequently	30%	6
Almost always	15%	3

Figure 7: Frequency of phonological processes in student’s speech



Question 6: What age range do you primarily teach in your kindergarten class?

We can observe the primary age range in which teachers teach in their kindergarten classes. Based on the responses of the teachers, the data shows that 3-4 years old range represents 5% of teachers primarily who teach children in that age. 4-5 years old range represents the majority of teachers, 60%, primarily teach children in the age of 4-5 years old. This suggests that this age range is the most common in kindergarten classes, and 5-6 years old range represents 10% of teachers primarily teach children in the age of 5-6 years old. Mixed Range: 25% of teachers indicated that they have a mixed age range in their kindergarten classes. It indicates that the most common age range for teachers in their kindergarten classes is 4-5 years old, with 60% of teachers working with children in this age group. This finding is consistent with the typical age range for kindergarten education. The presence of a mixed age range in 25% of the classrooms suggests that some teachers may have classes with children of different ages, which can present both opportunities and challenges in terms of instruction and meeting the diverse needs of students.

Table 5: age range teachers teach

Age Range	Percentage	Teachers' Number
3-4 years old	5%	1

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4-5 years old	60%	12
5-6 years old	10%	2
Mixed Range	25%	5

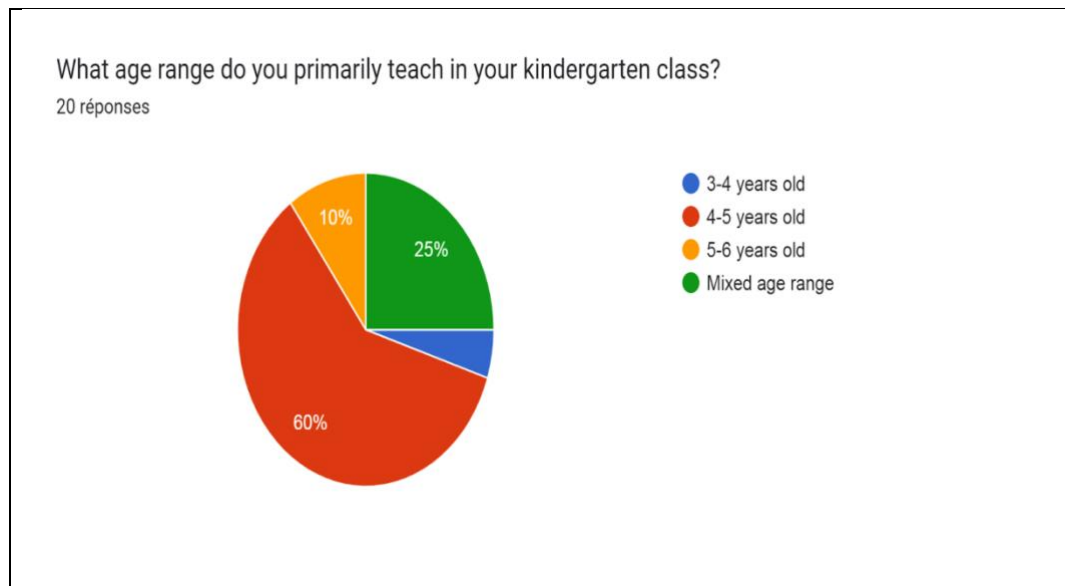


Figure 8: Teacher's Age range in their kindergarten class

Question 7: How do you address phonological processes in your classroom? (Please select all that apply)

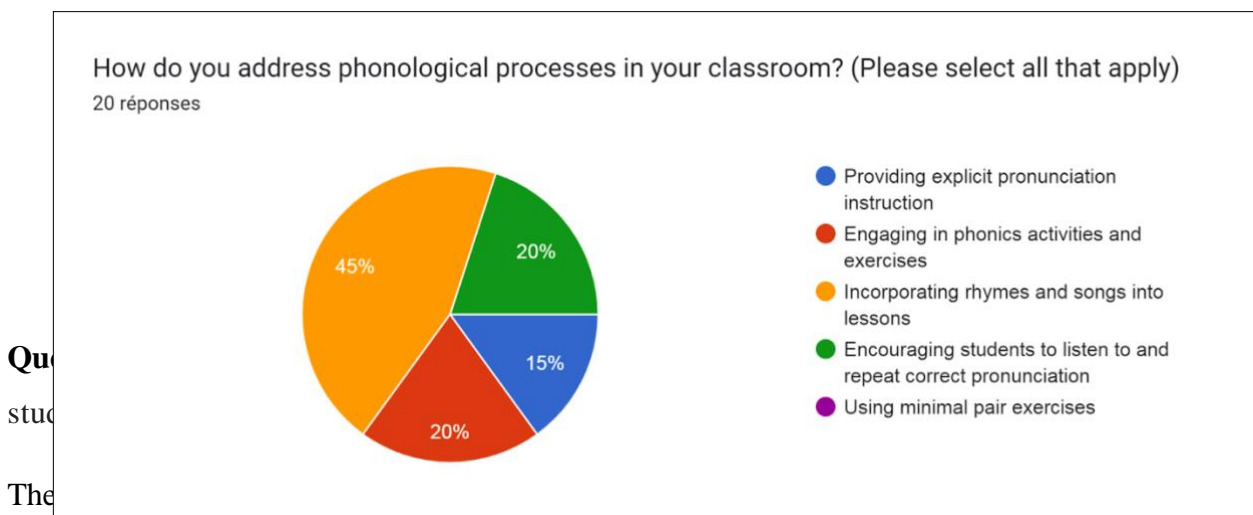
The data indicates that the most commonly used strategy among the surveyed teachers is incorporating rhymes and songs into lessons, with 45% of teachers utilizing this approach. This aligns with the understanding that music and rhythmic activities can help children develop phonological awareness and improve their pronunciation skills. It is worth noting that while minimal pair exercises did not receive any responses, it could be due to the specific context of the surveyed teachers rather than an indication that the strategy is not employed at all.

Table 6: Strategies for phonological processes

Strategies for Addressing Phonological Processes	Percentage	Number of teachers
Providing explicit pronunciation instruction	15%	3

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Engaging in phonics activities and exercises	20%	4
Incorporating rhymes and songs into lessons	45%	9
Encouraging students to listen and repeat	20%	4
Using minimal pair exercises	0%	0



patterns or difficulties among their students. While 45% of teachers say yes, they have noticed particular phonological patterns or difficulties among their students.

Analyzing the data, we can see that a significant majority of teachers (55%) have not observed any specific phonological patterns or difficulties among their students. This suggests that a considerable portion of the teachers surveyed may not have encountered notable challenges related to phonological development in their classrooms.

However, it is important to note that 45% of teachers have noticed specific phonological patterns or difficulties among their students. While the data does not provide specific details about the observed patterns or difficulties, this finding indicates that a substantial number of teachers have identified areas of concern related to their students' phonological development.

Data suggests that while a majority of teachers have not observed specific phonological patterns or difficulties, a notable portion of teachers have identified areas of concern, highlighting the

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importance of addressing individual students' needs and providing appropriate support and intervention when necessary.

Table 7: Teacher's opinion towards difficulties that students faced

Answers	Percentage	Teachers Number
Yes	45%	9
No	55%	11

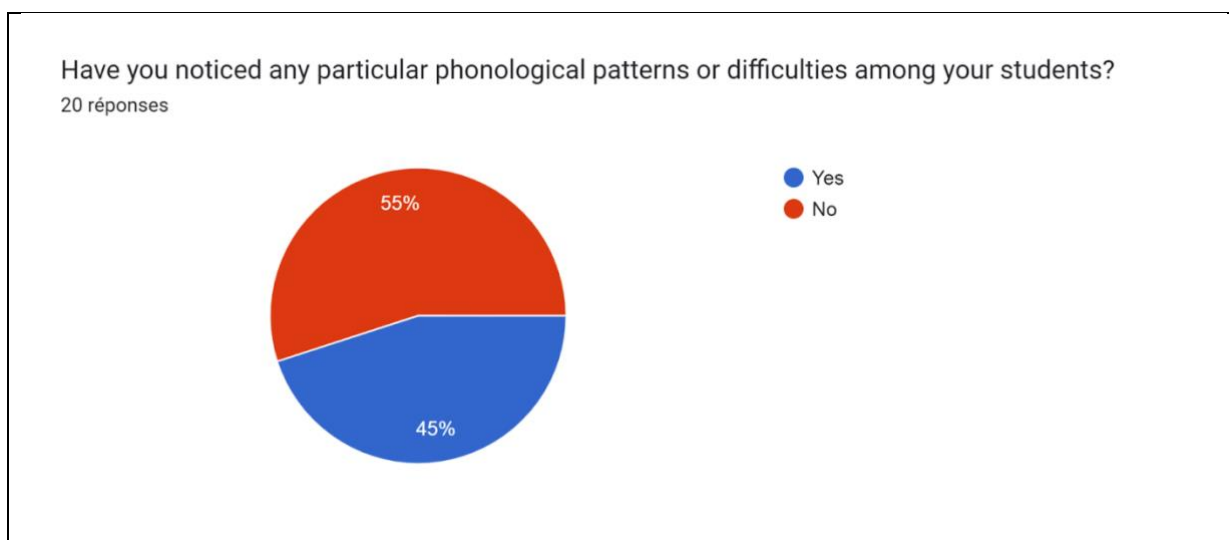


Figure 10: Phonological difficulties

Question 9: What strategies or resources do you find most effective in helping children overcome their phonological challenges?

The most frequently chosen strategy/resource is visual aids (e.g., flashcards, charts), with 40% of teachers finding them effective in helping children overcome their phonological challenges. Small group activities are also considered effective, as indicated by 35% of the teachers. Speech therapy or intervention services are reported to be helpful by 15% of the teachers. Parent involvement and support are identified as effective by 10% of the teachers. Individualized instruction is not chosen as an effective strategy/resource by any of the teachers.

These findings suggest that teachers perceive visual aids, small group activities, and speech therapy or intervention services as the most effective strategies/resources for addressing phonological challenges in children. Additionally, a smaller percentage of teachers recognize the importance of parent involvement and support in supporting children's phonological development.

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It is important to note that the effectiveness of strategies and resources may vary depending on the specific needs of individual children. Therefore, a combination of different approaches and tailored instruction may be necessary to effectively address phonological challenges in the classroom.

Table 8: Teacher's strategies

Strategies/Resources	Percentage	Teachers' number
Individualized instruction	0%	0
Small group activities	35%	7
Visual aids (e.g., flashcards, charts)	40%	8
Speech therapy or intervention services	15%	3
Parent involvement and support	10%	2

What strategies or resources do you find most effective in helping children overcome their phonological challenges? (Please select all that apply)

20 réponses



Figure 11: Effective strategies overcome phonological challenges

Based on the teachers' extra responses, the most effective strategies and resources for helping children overcome their phonological challenges include individual or group therapy with a speech-language pathologist, visual aids such as flashcards, charts, or picture cues, conversations with parents in English, encouraging children to repeat what they hear, and engaging in group exercises. Individual or group therapy allows for targeted and personalized support, while visual aids enhance phonological awareness and reinforce correct pronunciation. Conversations with parents in English provide regular exposure and practice, while repeating what they hear helps reinforce pronunciation. Group exercises create a supportive and interactive learning environment. It is important to tailor these strategies to individual needs and collaborate with speech-language

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professionals, regularly assess progress, and involve parents or guardians for ongoing support outside of therapy or classroom settings.

Question 10: Do you feel that you have sufficient training and resources to address the phonological development of your students?

Half of the teachers feel well-equipped to address the phonological development of their students, indicating that they believe they have sufficient training and resources. While 45% of the teachers acknowledge that they have some training and resources but feel the need for additional support to effectively address the phonological development of their students. And only 5% of the teachers feel ill-equipped and express the need for more training and resources.

These findings suggest that a majority of teachers feel adequately prepared to address the phonological development of their students. However, a significant portion also recognizes the importance of additional support and resources to enhance their effectiveness in this aspect of teaching. It highlights the ongoing professional development needs of teachers in order to meet the diverse needs of students and effectively support their phonological development.

Based on the teachers' responses, the data can be represented in a table as follows:

Table 9: sufficient training percentage

Findings and discussion	Percentage	Number of teachers
Yes, I feel well-equipped.	50%	10
I have some training and resources, but I could use more support.	45%	9
No, I feel ill-equipped and need more training and resources.	5%	1

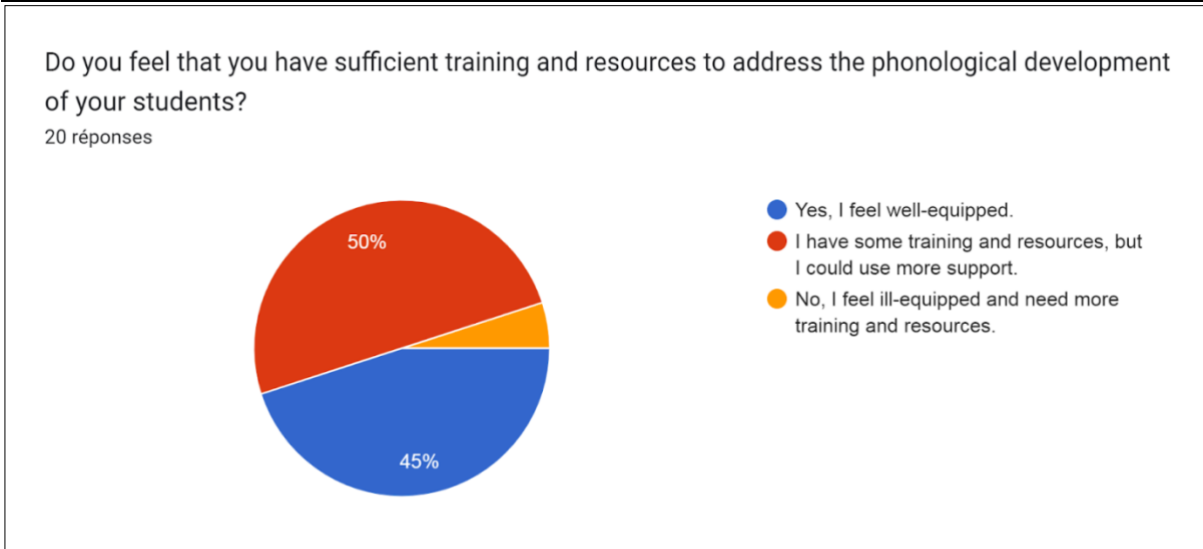


Figure 12: Teachers training sufficiency

Question11:Can the instruction of foreign languages, particularly English, to very young learners enhance the development of a diverse range of languages in Algerian students?

We can observe that 85% of the teachers believe that the instruction of foreign languages, particularly English, to very young learners can enhance the development of a diverse range of languages in Algerian students. However, only 15% of the teachers disagree and believe that it does not have a significant impact on enhancing the development of a diverse range of languages. These findings suggest that a large majority of teachers perceive the instruction of foreign languages, especially English, to have a positive impact on the development of multiple languages among Algerian students. They recognize the potential benefits of early exposure to foreign languages in fostering language diversity and proficiency. It supports the notion that language learning at a young age can contribute to a broader linguistic repertoire and cross-cultural communication skills.

Table10:

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Response	Percentage	Number of teachers
Yes	85%	17
No	15%	3

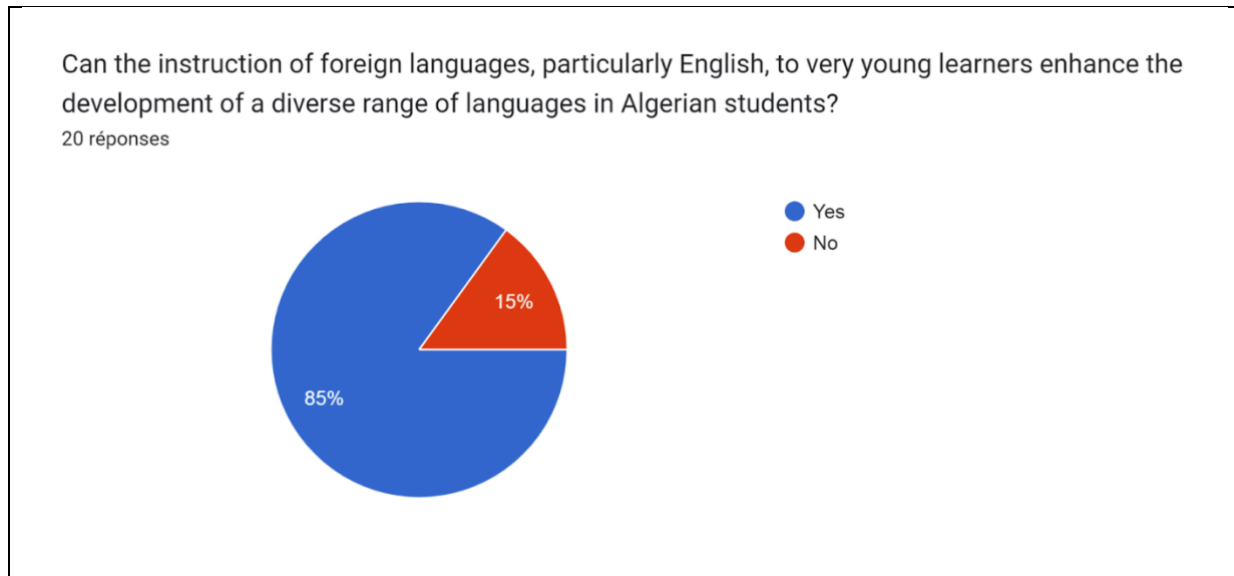


Figure13: VYL enhance the development of a diverse range of language

Question 12:How does the amount and type of English language exposure in kindergartens affect the phonological processes displayed by Algerian children?

The teachers' responses highlight the positive effects of increased exposure to English in kindergartens on children's language development. They believe that this exposure can help children become fluent in English and even learn more languages. The type of English language exposure is considered crucial, with an emphasis on meaningful and interactive language experiences like songs, games, and engaging activities, which enhance children's phonological awareness. The teachers also stress the importance of gradual and systematic exposure to English, step by step, to contribute to the development of phonological processes. They note that exposure to English enables children to express their thoughts and may result in pronouncing Arabic words with a voice close to English. Correct pronunciation is seen as essential for building a strong foundation in English phonology and avoiding phonological issues. Increased exposure to English phonology, including speech sounds, phonotactics, and prosody, is believed to positively influence children's phonological processes. The influence of code-switching between Arabic and English is mentioned, highlighting that children may blend phonological features from both languages, leading to variations in pronunciation. Early exposure to English is seen as providing insights into

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different cultures, perspectives, and ways of life. Ultimately, the teachers emphasize the importance of correct pronunciation for a more accurate understanding and production of English phonemes and phonological patterns.

Overall, the responses suggest that increased and meaningful exposure to English in kindergartens can have a positive influence on the phonological processes displayed by Algerian children, supporting their language development and acquisition of English.

3.2 Data Discussion and Interpretation

This part presents the results of input gathered from teacher questionnaires, parent interviews, and observations about the theories expressed. It is therefore considered whether these theories are accepted or rejected. First, the purpose of the posted weight is to confirm the first two hypotheses which say the most common phonological processes observed in Algerian children's English language acquisition in kindergarten are deletions specifically initial and final syllables, and The instruction of foreign languages, particularly English, to very young learners, positively influences the development of a diverse range of languages in Algerian students, including their native Algerian Arabic and French. Teaching a foreign language, especially English, to young learners has a positive impact on the development of different languages of Algerian students, including their native Algerian Arabic and French. As well as, the questions (1) (2) (3) and (6) affirm that teachers observed the phonological disorders in the majority of children speech who are aged 4-5 years old. However, the best effective strategy used by teachers for helping children overcome their phonological challenges is the visual aids.

3.2.1 Observation analysis

The data collection technique of observation was employed in this study to gather trustworthy and reliable data on the phonological processes exhibited by children during their English language acquisition in Algerian kindergartens. We directly observed and documented the behaviors, interactions, and language usage of the children in their natural classroom environment. This method allowed for a firsthand and unobtrusive examination of various aspects of phonological development, including pronunciation, articulation, phonemic awareness, and speech patterns.

During this observation process, we paid attention to the children's ability to produce and distinguish English language sounds, their accuracy in pronunciation, their use of phonological rules, and any difficulties they encountered. The strategies employed by the teacher to support phonological development, the use of instructional materials, and the overall classroom environment were also noted. By directly observing the phonological processes in action, the

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observation method provided detailed and rich data that complemented other data collection techniques used in the study, such as interviews and document analysis.

To ensure data quality and to avoid imposing pressure on the informants, the observation was conducted in a naturalistic setting without interfering with the normal classroom activities. The observation took place in "Space Kids" kindergarten located in Sougueur commune in Tiaret. The observed participants were children between the ages of 3 to 6 who were engaging in English lessons with their teacher. The observation was designed to align with the research questions addressed in the questionnaire, allowing for direct answers to those questions.

During the observation at "Kids Space" kindergarten in Sougueur commune, Tiaret, we noticed several phonological processes exhibited by children during their English language acquisition. One common process observed was substitution, where children replaced certain English sounds with sounds from their native language. For example, we observed instances where the "th" sound was substituted with "d" or "z," resulting in words like "this" being pronounced as "dis" and "that" pronounced as "zat."

Another phonological process we observed was assimilation, where children assimilated sounds to make them more similar to neighboring sounds. For instance, we noticed that the "s" sound in words like "cats" was assimilated to sound like the following "t" sound, leading to the pronunciation of "cats" as "cats."

Additionally, we observed instances of deletion, where children omitted certain sounds or syllables in words. For example, we noticed the omission of the final consonant in words, such as "cat" being pronounced as "ca" and "cup" as "cu."

Furthermore, we observed the simplification of consonant clusters, with children reducing complex clusters to a single consonant sound. For example, we noticed the simplification of words like "split" to "sip" and "strong" to "stong."

Lastly, vowel sound substitution was also observed, where children substituted English vowel sounds with those from their native language. For instance, we observed instances where the English "i" sound in words like "ship" was replaced with the vowel sound from their native language, resulting in its pronunciation as "sheep."

These observations provide valuable insights into the phonological processes exhibited by children during their English language acquisition in the "Kids Space" kindergarten. They highlight the influence of the children's native language on their pronunciation, articulation, and

speech patterns in English, shedding light on the challenges they face and the strategies they employ to navigate the complexities of the English phonological system.

3.2.2 Interview analysis

This interview focused on the experiences and perspectives of parents regarding the phonological processes in Algerian children's English language acquisition in kindergartens. The aim of this interview is to gather valuable insights from parents who have firsthand knowledge of their child's language development and their encounters with learning English in a kindergarten setting. We had an interview with a parent child who is a pupil in an English class in kindergarten.

- Interviewer: Good Morning sir! Thank you for participating in our interview. We are conducting research on the phonological processes in Algerian children's English language acquisition in kindergartens. Your insights as a parent of a kindergarten child would be greatly appreciated.
- Parent: Thank you for having me. I'm glad to share my experiences and contribute to your research.
- Interviewer: To start, could you tell us about your child's language development and their experience with learning English in kindergarten?
- Parent: Certainly. My child is currently attending kindergarten, and their language development has been quite fascinating to observe. As a native Algerian Arabic speaker, they naturally acquired Arabic as their first language. However, their exposure to English in kindergarten has introduced them to a new linguistic environment.
- Interviewer: Have you noticed any specific phonological challenges your child has faced while learning English?
- Parent: Yes, there have been some noticeable challenges. For instance, my child initially had difficulty pronouncing certain sounds that are not present in Algerian Arabic, such as the /th/ sound. They would often substitute it with a similar Arabic sound. Additionally, words with the /r/ and /l/ sound proved challenging for them as well.
- Interviewer: How has the kindergarten addressed these phonological challenges? Have they provided any strategies or resources to support your child's language development?
- Parent: The kindergarten has been proactive in addressing these challenges. They have a qualified speech-language pathologist who works with the children individually and in small groups. The pathologist uses various techniques, including visual aids like flashcards and charts, to enhance phonological awareness and help the children practice correct pronunciation. They also encourage conversations in English and provide opportunities for

the children to repeat words they hear. Group exercises involving phonological activities are conducted regularly, which my child finds engaging and helpful.

- Interviewer: That's wonderful to hear. In your opinion, how effective have these strategies been in helping your child overcome their phonological challenges?
- Parent: I believe these strategies have been quite effective. My child has shown significant improvement in their English pronunciation since starting kindergarten. They have become more confident in producing sounds like /th/, /r/, /l/, and other challenging sounds. The visual aids and group exercises have made learning enjoyable for them, and the individual sessions with the speech-language pathologist have provided targeted support. Conversations with us at home in English have also played a crucial role in reinforcing their language skills.
- Interviewer: That's great to know. Based on your experiences, what would you suggest to educators and parents who are supporting children with similar phonological challenges?
- Parent: My suggestion would be for educators and parents to collaborate closely. Regular communication between the kindergarten and parents is essential to understand each child's specific needs and progress. Providing a supportive and encouraging environment at home, including engaging in conversations in the target language, can greatly reinforce the language skills developed at school. Additionally, incorporating visual aids and interactive activities in the classroom can enhance phonological awareness and make the learning process enjoyable for the children.
- Interviewer: Thank you for sharing your valuable insights and suggestions. Your input will greatly contribute to our research on phonological processes in Algerian children's English language acquisition.
- Parent: You're welcome. I'm glad I could contribute. I hope this research helps educators and parents better understand the challenges faced by children in acquiring English phonology and leads to more effective strategies for supporting their language development.
- Interviewer: We greatly appreciate your time and contribution to this research. Your perspective as a parent is invaluable, and we wish you and your child continued success in their language learning journey.
- Parent: Thank you, and best of luck with your research. I'm happy to have been a part of it.

The interview with the parent provided valuable insights into the phonological challenges faced by Algerian children in learning English in kindergarten. The parent highlighted the initial difficulties their child encountered in pronouncing sounds not present in Algerian Arabic, such as

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the /th/ sound, as well as challenges with /r/ and /l/ sounds. The kindergarten's approach to addressing these challenges was commendable, with the involvement of a speech-language pathologist who used visual aids, group exercises, and individual sessions to enhance phonological awareness and correct pronunciation. The parent reported significant improvement in their child's English pronunciation, indicating the effectiveness of these strategies. The importance of collaboration between educators and parents was emphasized, along with the value of providing a supportive environment at home through conversations in the target language. Overall, the data from this interview supports the significance of targeted interventions, visual aids, and collaborative efforts between educators and parents in overcoming phonological challenges and promoting successful language development in Algerian children.

Conclusion

As a result of our empirical research, this chapter shed the light on the outcome collected from mixed methods questionnaire, observation, and interview about investigating the phonological processes in children's English language in Algerian kindergartens. We pointed out several phonological patterns and difficulties observed, such as difficulty pronouncing certain words and verbs, particularly those with sounds not present in their native language. The analysis of teachers' responses highlighted effective strategies and resources for helping children overcome these challenges. These include individual or group therapy with a speech-language pathologist, the use of visual aids to enhance phonological awareness, conversations with parents in English, encouraging repetition of heard words, and engaging in group exercises. By implementing these strategies and involving relevant stakeholders, such as speech-language professionals and parents, we can support children in improving their English language phonological skills. This research sheds light on the importance of addressing phonological processes in early childhood education and provides valuable insights for educators, parents, and professionals involved in language development and intervention.

General Conclusion

Conclusion

This research dissertation aims to investigate the phonological processes in Algerian children's English language acquisition in kindergarten settings. The study recognizes the challenges faced by Algerian children in acquiring English phonology due to linguistic and cultural differences. By examining the phonological processes exhibited by these children, the research seeks to shed light on their unique linguistic development and contribute to the understanding of their language acquisition journey.

The research methodology employs a mixed-methods approach, combining qualitative and quantitative techniques such as speech samples, language assessments, and questionnaires for teachers, and interviews with parents. Through these data collection methods, the study intends to identify and categorize the most common phonological processes observed in Algerian children's English language acquisition. Additionally, the research aims to explore factors that may influence these processes, including native language background, language exposure, and classroom instruction.

The findings of this research have practical implications for educators, speech therapists, and policymakers involved in English language instruction for Algerian children. Understanding the phonological challenges specific to this context can guide the development of targeted interventions, instructional strategies, and curriculum frameworks that support the phonological development and overall language acquisition of Algerian learners. This research dissertation reveals several important insights into the phonological processes of Algerian children's English language acquisition in kindergarten settings. Through the mixed-methods approach, involving speech samples, language assessments, questionnaires for teachers, and interviews with parents, the study identified common phonological challenges faced by these young learners.

The research confirmed that Algerian children often substitute certain English sounds with sounds from their native language, assimilate sounds to match neighboring ones, and may omit certain sounds or syllables in words. Moreover, simplification of consonant clusters and vowel sound substitution were also observed.

Triangulating data from multiple sources allowed for a comprehensive and robust understanding of these phonological processes. The findings suggest that Algerian children's native language backgrounds and exposure to English play significant roles in shaping their phonological development. Additionally, classroom instruction and the strategies employed by teachers influenced the children's acquisition of English phonology.

Chapter Three Findings and discussion

Practical implications emerge from the research, providing valuable guidance for educators, speech therapists, and policymakers involved in English language instruction for Algerian children. By understanding the specific phonological challenges these learners face, targeted interventions and instructional strategies can be designed to support their language development effectively.

The study emphasizes the importance of early English language instruction in kindergartens as a means to foster phonological skills alongside overall language abilities. Initiating language learning at a young age offers children the opportunity to develop strong phonological foundations, which can positively impact their language acquisition journey.

The research also highlights the significance of linguistic diversity and cultural influences on language learning. As Algerian children navigate between their native language and English, it is crucial to embrace and celebrate their linguistic identities while supporting their English language development.

Moreover, the research highlights the importance of early English language instruction in kindergartens as a means to foster phonological skills alongside overall language abilities. By starting language learning at a young age, children have the opportunity to develop their phonological skills in conjunction with their linguistic competencies, paving the way for successful language acquisition.

Overall, this research dissertation addresses the complexities and challenges of Algerian children's English language acquisition in kindergartens. It provides valuable insights into phonological processes, linguistic diversity, cultural influences, educational implications, and policy development. By enhancing our understanding of these aspects, this research contributes to the improvement of English language instruction and supports the successful integration of Algerian children into the global community.

Recommendations:

Based on the research findings, several recommendations can be made to support Algerian children's English language acquisition in kindergartens:

- Early English language instruction, encourage early English language instruction in kindergartens to provide children with a solid foundation in phonological skills

alongside their overall language abilities. Starting language learning at a young age enhances language development and facilitates successful language acquisition.

- Targeted instructional Strategies, develop targeted instructional strategies that address the specific phonological challenges observed in Algerian children. Teachers should focus on phonemic awareness exercises, pronunciation practice, and activities that promote accurate sound production.
- Cultural sensitivity, embrace and celebrate the linguistic diversity of Algerian children, recognizing the significance of their native language backgrounds. Creating a culturally sensitive and inclusive learning environment fosters a positive attitude towards language learning.
- Professional development for educators, provide professional development opportunities for teachers to enhance their understanding of phonological development in multilingual settings. Equipping educators with knowledge and strategies to support diverse language learners can significantly impact their language acquisition journey.
- Collaborative approach, encourage collaboration between educators, speech therapists, parents, and policymakers to design a comprehensive support system for children's language development. Collaboration fosters a holistic approach to language instruction, ensuring that children receive consistent and targeted support.
- Longitudinal studies, conduct longitudinal studies to track the progress of Algerian children's English language acquisition over time. Long-term research provides deeper insights into the development of phonological skills and allows for the evaluation of the effectiveness of instructional interventions.
- Curriculum adaptation, consider adapting the language curriculum to incorporate activities that specifically address phonological challenges faced by Algerian children. Customizing the curriculum to meet the needs of diverse language learners can optimize language development outcomes.

Chapter Three Findings and discussion

By implementing these recommendations, educators, policymakers, and stakeholders can contribute to a supportive and enriching learning environment for Algerian children, enabling them to navigate their English language acquisition journey with confidence and success. Moreover, a focus on phonological development at an early age can foster language skills that extend beyond English and positively impact the children's overall language abilities and cognitive growth.

References

Bibliography

List of References

We use Apa style

- Catts, H. W. (1985). The early identification of phonological disabilities. *Journal of Speech and Hearing Disorders*, 50(4), 288-295.
- Hodson, B. W., & Paden, E. P. (1991). Phonological processes which characterize unintelligible and intelligible speech in early childhood. *Journal of Communication Disorders*, 24(4), 317-330.
- Stoel-Gammon, C., & Dunn, C. (1985). *Normal and disordered phonology in children*. Austin, TX: Pro-Ed.
- Vihman, M. M., & Croft, W. (2007). Phonological development: Toward a "radical" templatic phonology. *Linguistics*, 45(4), 683-725.
- Bleile, Ken M. (1995). *Manual of Articulation and Phonological Disorders*. San Diego, CA: Singular Publishing Group, Inc.
- Bowen, Caroline, (2011) *Elimination of Phonological Processes in Typical Development*.
- Linguistics, (2008). *Phonological Pattern Suppression by Age*.
- Hedge, M.N. (2001). *Pocket Guide to Assessment in Speech-Language Pathology (2nd Edition)*. San Diego, CA:
- Pena-Brooks, Adriana, & Hedge, M.N. (2007). *Assessment and treatment of articulation and phonological disorders in children (2nd Edition)*. Austin, TX: PRO-ED.
- (Smith & Johnson, 2019)
- (Gonzalez-Barrero & Nadal, 2018).
- Goldman, R., & Fristoe, M. (2015). *Goldman-Fristoe Test of Articulation-Third Edition (GFTA-3)*. San Antonio, TX: Pearson.
- Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (1999). *Comprehensive Test of Phonological Processing (CTOPP)*. Austin, TX: Pro-Ed
- (2nd ed.; KLPA-2; Khan & Lewis, 2002)
- Bernthal, J. E., Bankson, N. W., & Flipsen, P. (2013). *Articulation and Phonological Disorders: Speech Sound Disorders in Children*. Pearson Educacion.

Chapter Three Findings and discussion

-Elgort, I., Siyanova-Chanturia, A., & Brysbaert, M. (2023). Cross-language Influences in Bilingual Processing and Second Language Acquisition. John Benjamins Publishing Company.

-Law, J., Vandermosten, M., Ghesquière, P., & Wouters, J. (2017). Predicting Future Reading Problems Based on Pre-reading Auditory Measures: A Longitudinal Study of Children with a Familial Risk of Dyslexia. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.00124>

-Adams, M. J., Foorman, B. R., & Lundberg, I. (1998). *Phonemic Awareness in Young Children: A Classroom Curriculum*. Brookes Publishing Company. Baker, A., & Woll, B. (2009). *Sign Language Acquisition*. John Benjamins Publishing. Bernthal, J. E., Bankson, N. W., & Flipsen, P. (2013). *Articulation and Phonological Disorders: Speech Sound Disorders in Children*. –

-Pearson Educacion. Elgort, I., Siyanova-Chanturia, A., & Brysbaert, M. (2023). Cross-language Influences in Bilingual Processing and Second Language Acquisition. John Benjamins Publishing Company.

- Law, J., Vandermosten, M., Ghesquière, P., & Wouters, J. (2017).

-Predicting Future Reading Problems Based on Pre-reading Auditory Measures: A Longitudinal Study of Children with a Familial Risk of Dyslexia. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.00124> Paul, R. (2007).

-*Language Disorders from Infancy Through Adolescence: Assessment & Intervention*. Elsevier Health Sciences.

-Unesco. (2020). *Global Education Monitoring Report 2020: Inclusion and Education - All Means All*. United Nations.

- "Phonological Processes in Literacy: A Tribute to Isabelle Y. Liberman" edited by Jacqueline Leybaert and Arthur A. S. Reber

- "Phonological Processes in Literacy: A Tribute to Isabelle Y. Liberman" by Judith A. Gierut

- "Phonological Development: The First Two Years" by Marilyn May Vihman

- "Phonological Development: Norms and Clinical Application" by Caroline Bowen

Adams, M. J., Foorman, B. R., & Lundberg, I. (1998). *Phonemic Awareness in Young Children: A Classroom Curriculum*. Brookes Publishing Company. Baker, A., & Woll, B. (2009a). *Sign Language Acquisition*. John Benjamins Publishing. Baker, A., & Woll, B. (2009b). *Sign Language Acquisition*. John Benjamins Publishing. Bernthal, J. E., Bankson, N. W., & Flipsen, P. (2013). *Articulation and Phonological Disorders: Speech Sound Disorders in Children*. Pearson

Chapter Three Findings and discussion

Educacion. Elgort, I., Siyanova-Chanturia, A., & Brysbaert, M. (2023). *Cross-language Influences in Bilingual Processing and Second Language Acquisition*. John Benjamins Publishing Company.

Faure, E., & Unesco. (1972). *Learning to be: The world of education today and tomorrow*. UNESCO.

Hornberger, N. H., & McKay, S. L. (2010). *Sociolinguistics and Language Education*. Multilingual Matters.

Law, J., Vandermosten, M., Ghesquière, P., & Wouters, J. (2017). Predicting Future Reading Problems Based on Pre-reading Auditory Measures: A Longitudinal Study of Children with a Familial Risk of Dyslexia. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.00124>

Paul, R. (2007). *Language Disorders from Infancy Through Adolescence: Assessment & Intervention*. Elsevier Health Sciences.

Unesco. (2020). *Global Education Monitoring Report 2020: Inclusion and Education - All Means All*. United Nations.

Adams, M. J., Foorman, B. R., & Lundberg, I. (1998). *Phonemic Awareness in Young Children: A Classroom Curriculum*. Brookes Publishing Company.

Auer, P., & Schmidt, J. E. (2010). *Theories and Methods*. Walter de Gruyter.

Baker, A., & Woll, B. (2009a). *Sign Language Acquisition*. John Benjamins Publishing.

Baker, A., & Woll, B. (2009b). *Sign Language Acquisition*. John Benjamins Publishing.

Bernthal, J. E., Bankson, N. W., & Flipsen, P. (2013). *Articulation and Phonological Disorders: Speech Sound Disorders in Children*. Pearson Education.

Educacion. Elgort, I., Siyanova-Chanturia, A., & Brysbaert, M. (2023). *Cross-language Influences in Bilingual Processing and Second Language Acquisition*. John Benjamins Publishing Company.

Faure, E., & Unesco. (1972). *Learning to be: The world of education today and tomorrow*. UNESCO.

Hornberger, N. H., & McKay, S. L. (2010). *Sociolinguistics and Language Education*. Multilingual Matters.

Law, J., Vandermosten, M., Ghesquière, P., & Wouters, J. (2017). Predicting Future Reading Problems Based on Pre-reading Auditory Measures: A Longitudinal Study of Children with a Familial Risk of Dyslexia. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.00124>

Paul, R. (2007). *Language Disorders from Infancy Through Adolescence: Assessment & Intervention*. Elsevier Health Sciences.

Unesco. (2020). *Global Education Monitoring Report 2020: Inclusion and Education - All Means All*. United Nations.

3. Assessment Tools:

- Goldman-Fristoe Test of Articulation (GFTA)
- Comprehensive Assessment of Phonological Processing (CAPP)
- Khan-Lewis Phonological Analysis (KLPA)
- Assessment of Phonological Processes-Revised (Hodson, 1986)

Chapter Three Findings and discussion

4. Web sites:

- www.mommyspeechtherapy.com

- www.littlebeespeech.com

- www.linguisystems.com

Appendices

Appendices

Questionnaire

Dear English teachers,

We Master Two Linguistics students would be very pleased to have your shareholding in our research that aims at investigating the phonological processes in children's English language in Algerian kindergartens.

Your answers are important to the validity of our research.

Thank You in advance

● What region in Algeria do you work in?

- North
- East
- West
- South

● How long have you been teaching English to kindergarten students?

- Less than 1 year
- 1-3 years
- 3-5 years
- More than 5

● How many students are currently in your kindergarten English classes?

- 1-10
- 11-20
- 21-30
- More than 30

● Do you observe any phonological processes in children's English language development? (Please select all that apply)

- Initial consonant deletion (e.g., "sun" pronounced as "un")
 - Final consonant deletion (e.g., "cat" pronounced as "ca")
 - Cluster reduction (e.g., "play" pronounced as "pay")
 - Syllable deletion (e.g., "banana" pronounced as "nana")
 - Other phonological processes please justify
-

● How frequently do you encounter these phonological processes in your students' speech?

- Rarely
- Occasionally
- Frequently
- Almost always

● What age range do you primarily teach in your kindergarten class?

- 3-4 years old
- 4-5 years old
- 5-6 years old

● How do you address phonological processes in your classroom? (Please select all that apply)

- Providing explicit pronunciation instruction
-

appendices

Engaging in phonics activities and exercises

Incorporating rhymes and songs into lessons

Encouraging students to listen to and repeat correct pronunciation

Using minimal pair exercises

if there are others please specify

●Have you noticed any particular phonological patterns or difficulties among your students?

Yes

No

●If you answered "Yes" to the previous question, please describe the phonological patterns or difficulties you have observed:

●What strategies or resources do you find most effective in helping children overcome their phonological challenges? (Please select all that apply)

Individualized instruction

Small group activities

Visual aids (e.g., flashcards, charts)

Speech therapy or intervention services

Parent involvement and support

Other please specify:

●Do you feel that you have sufficient training and resources to address the phonological development of your students?

Yes, I feel well-equipped.

I have some training and resources, but I could use more support.

No, I feel ill-equipped and need more training and resources.

● Can the instruction of foreign languages, particularly English, to very young learners enhance the development of a diverse range of languages in Algerian students?

Yes

No

If you answered "Yes" to the previous question, please justify

● How does the amount and type of English language exposure in kindergartens affect the phonological processes displayed by Algerian children?

Thank you for helping.

Interview

1. Thank you for taking the time to participate in this interview. We are conducting research on the phonological processes in Algerian children's English language acquisition in kindergartens. Your insights as a parent of a kindergarten child would be greatly appreciated.

2. To start, could you tell us about your child's language development and their experience with learning English in kindergarten?

3. Have you noticed any specific phonological challenges your child has faced while learning English?-

4. How has the kindergarten addressed these phonological challenges? Have they provided any strategies or resources to support your child's language development?

5. That's wonderful to hear. In your opinion, how effective have these strategies been in helping your child overcome their phonological challenges?

6. That's great to know. Based on your experiences, what would you suggest to educators and parents who are supporting children with similar phonological challenges?

7. Thank you for sharing your valuable insights and suggestions. Your input will greatly contribute to our research on phonological processes in Algerian children's English language acquisition.

8. We greatly appreciate your time and contribution to this research. Your perspective as a parent is invaluable, and we wish you and your child continued success in their language learning journey.

Abstract

Investigating the phonological processes in children's English language, we take a case study of Algerian kindergartens' teachers.

المخلص

تركز الدراسة على التحقيق في العمليات الصوتية التي ينطوي عليها اكتساب الأطفال الجزائريين لمهارات اللغة الإنجليزية في رياض الأطفال. على وجه التحديد، تبحث دراسة الحالة تجارب المعلمين في رياض الأطفال الجزائرية في دعم التطور الصوتي للأطفال. يهدف البحث إلى الحصول على نظرة ثاقبة للتحديات التي يواجهها الأطفال في تعلم علم الأصوات الإنجليزية والاستراتيجيات التي يستخدمها المعلمون لمواجهة هذه التحديات. من خلال استكشاف وجهات نظر وممارسات المعلمين، تهدف الدراسة إلى المساهمة في فهم المناهج الفعالة لتعزيز اكتساب اللغة الإنجليزية للأطفال في رياض الأطفال الجزائرية. علاوة على ذلك، من خلال تضمين الآباء في البحث، تسعى الدراسة إلى فهم الجهود التعاونية بين المعلمين والآباء في تعزيز المهارات اللغوية للأطفال. ستوفر الرؤى المكتسبة من كل من المعلمين وأولياء الأمور فهماً شاملاً للعوامل التي تؤثر على العمليات الصوتية للأطفال الجزائريين في رحلة اكتساب اللغة الإنجليزية. ستساهم نتائج هذه الدراسة في تطوير استراتيجيات وتدخلات فعالة لتعزيز المهارات الصوتية للأطفال وتنمية اللغة الشاملة في رياض الأطفال الجزائرية.

Summary

The study focuses on investigating the phonological processes involved in Algerian children's acquisition of English language skills in kindergartens. Specifically, the case study examines the experiences of teachers in Algerian kindergartens in supporting children's phonological development. The research aims to gain insights into the challenges faced by children in learning English phonology and the strategies employed by teachers to address these challenges. By exploring the perspectives and practices of teachers, the study aims to contribute to the understanding of effective approaches to promoting children's English language acquisition in Algerian kindergartens. Moreover, by including parents in the research, the study seeks to understand the collaborative efforts between teachers and parents in fostering children's language skills. The insights gained from both teachers and parents will provide a comprehensive understanding of the factors influencing Algerian children's phonological processes in their English language acquisition journey. The findings of this study will contribute to the development of effective strategies and interventions to enhance children's phonological skills and overall language development in Algerian kindergartens.

Résumé

L'étude se concentre sur l'investigation des processus phonologiques impliqués dans l'acquisition par les enfants algériens de compétences en langue anglaise dans les jardins d'enfants. Plus précisément, l'étude de cas examine les expériences des enseignants dans les jardins d'enfants algériens en matière de soutien au développement phonologique des enfants. La recherche vise à mieux comprendre les défis auxquels sont confrontés les enfants dans l'apprentissage de la phonologie anglaise et les stratégies employées par les enseignants pour relever ces défis. En explorant les perspectives et les pratiques des enseignants, l'étude vise à contribuer à la compréhension des approches efficaces pour promouvoir l'acquisition de la langue anglaise par les enfants dans les jardins d'enfants algériens. De plus, en incluant les parents dans la recherche, l'étude cherche à comprendre les efforts de collaboration entre les enseignants et les parents pour favoriser les compétences linguistiques des enfants. Les informations recueillies auprès des enseignants et des parents permettront de mieux comprendre les facteurs qui influencent les processus phonologiques des enfants algériens dans leur parcours d'apprentissage de l'anglais. Les résultats de cette étude contribueront au développement de stratégies et d'interventions efficaces pour améliorer les compétences phonologiques des enfants et le développement global du langage dans les jardins d'enfants algériens.

