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Investigating the Phonological Influence of French (FL1) on the Intelligibility of English (FL2) Pronunciation by Middle School EFL Learners. Case Study: Ould Ibrahim Said - Tiaret

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Declaration of Authenticity

The conductor of this research hereby declares that the study this paper reports was carried out under the supervision of Dr. Louiza BELAID in the Department of Letters and Foreign Languages, section of English, University of Ibn Khaldoun Tiaret. We further declare that to the best of our knowledge, no part of this paper has been dealt-with or submitted here or elsewhere. All sources used have been duly acknowledged and referenced.

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Abstract

When regarding foreign languages' phonological influence, English and French have aesthetic similarities in the written form. Nevertheless, the oral production in both languages is noticeably different. In this prospect, the aim of this investigation is to measure the cross-linguistic effect of French as a second language on English, and the extent to which it disrupts intelligibility of lexical items. All of which focuses on EFL learners in Algerian middle schools, where the sample chosen is three classes of third and fourth levels in Ould Ibrahim Said Middle School in Tiaret. The collected data were quantified and analyzed through audio recordings of regular learning sessions, recordings of individual text readings, and using 50 advanced EFL speakers to test intelligibility. The results indicate that in the Algerian EFL context, French is significantly influential on mispronunciation, besides this, the cross-phonological influence of French on English occurs to larger extent with female pupils regarding gender differences. Additionally, learners rely on French to pronounce words unfamiliar to them in English. Therefore, intelligibility of the English code is phonologically affected.

Key Words: cross-linguistic effect; EFL; gender differences; intelligibility; phonological influence; pronunciation; unfamiliar words.

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List of Abbreviations and Acronyms

ADA	Algerian Dialectal Arabic
APA	American Psychiatric Association
CLI	Cross Linguistic Influence
EFL	English as a Foreign Language
EIL	English as an International Language
ELT	English Language Teaching
ESL	English as a Second Language
FL	Foreign Language
FL1	Foreign Language One
FL2	Foreign Language Two
L1	First Language
L2	Second Language
L3	Third Language
MSA	Modern Standard Arabic
NBESs	Non-Bilingual English Speakers
NNES	Non-Native English Speakers
NNS	Non-Native Speakers
NS	Native Speakers
RP	Received Pronunciation
SL	Second Language
TA	Tunisian Arabic

General Introduction

General Introduction

The overall area when it comes to the field of this study is in roots of linguistics, phonetics, and phonology. In the daily oral realization of the English language by EFL learners or speakers in academic environments, people could notice many mistakes in pronunciation that are made by such speakers. When not noticed it becomes habitual, and for the most part, the speakers do not inherently know the source of the mistake, its repercussion on recognizability and intelligibility. The present study addresses mispronunciation issues that are specifically caused by the French code as a second language in terms of whether or not they warp the recognizability of the intended word and its placement in the sentence, leading to unintelligibility; meaning utterances that cannot be clearly identified as their original form. The knowledge and addressing of such problem may lead to avoiding miscommunication to a lager extent.

The problem affects EFL learners whose previously learned language in schools is French, with the most affected theoretically being intermediate learners since they are relatively new to the English language unlike the French one.

The study will have the potential utility of further understanding the relationship between the two variables which are the phonological aspects, at the segmental level, of the French language and the intelligibility of the English language when influenced by French. Furthermore, the study empirically tests the relationship between the two codes at the level of phones and the actual effect of one on the other.

The existence of previous research on the importance of pronunciation highlights that such a topic is essential to explore in order to provide a sense of awareness, and to avoid any problematic complexities that may emerge from elements that relate to the topic.

EFL teachers seldom teach the phonetic and phonological components of English as it is advised by scholars when compared to other aspects and levels such as vocabulary and grammar; that is to say, they focus more on teaching those other aspects rather than dedicate an extensive effort to teach proper phonetics. Therefore, EFL learners` natural inclination when not acquiring the full phonological aspect to the language whether consciously or unconsciously, they rely on other available set of knowledge that influences their production of the language.

For the purpose of efficiently producing an outcome of intelligibility and avoiding the aforementioned issue, learners should be instructed on various phonological and phonetic characteristics of the English language. Furthermore, EFL learners need to be aware of the actual differences between the two languages at question, and should be aware of the influence of one on the other in terms of effect and whether that is interfering on intelligibility. Thus, knowledge of the phonological influence of French on English in terms of whether that influence is negative on the ultimate recognizability could be quite essential. It may be useful to guarantee a cohesively intelligible product that avoids miscommunication with people of a higher level of proficiency in English.

We have recognized on our temporary positions of observation in the University of Tiaret, in some secondary schools, and especially middle schools, that learners tend to seemingly rely on French sounds to an excessive extent to pronounce items and sentences in the English language resulting in mispronunciation. Also, we have noticed that sometimes miscommunication can happen when certain vowel or consonant sounds are substituted up to the point of changing the whole meaning within the English language. Accordingly, the focus is limited to the extent of influence of French phonological elements on the English ones, some areas of such influence, and its consequences on intelligibility. As a matter of fact, the majority of EFL speakers in the Algerian context has learned French in elementary schools,

and are quite used to it, when they get introduced to the English language in middle school they lean on the familiar code to learn the new variety

As a result, the learners' ability to properly produce English in oral rubrics becomes impaired and distorted; and when including the habitual factor, it entails a large issue in many facades of EFL learning and oral production of the language. Thus, this study is largely concerned with the skewing of the intended words caused by the phonological system of another language in terms of oral proficiency. The problem that is tackled in this work paves the way to raise the following question:

- What is the effect of the cross-linguistic influence of French on English on the intelligibility of middle school EFL learners in the Algerian context?

In this vein, the current work on EFL learners in Algeria proposes four sub-questions that are as follows:

1. Does the cross-linguistic influence of FL1 on FL2 exist significantly in terms of mispronounced items?
2. To what extent does French phonologically influence English among middle school learners?
3. Could gender act as an intervening variable in this cross-linguistic issue?
4. Do learners rely on FL1 in pronouncing words that are difficult and unfamiliar to them in FL2?

The first variable (Independent) of the problem is the phonological characteristics of the French language as FL1 which are defined in terms of vowel and consonant sounds in their most simplistically apparent function; meaning the segmental aspect. Furthermore, the variable will be defined and looked-at superficially since the study mostly focuses on the French vowel sounds and some consonants that replace their counterparts in English items.

The second variable (Dependent) is the intelligibility of pronunciation of items and sentences in the English language by middle school learners, in which the study observes the extent of the influence by the first variable, and whether it is largely interfering on the intended naming of words.

Consequently, the main hypothesis is as follows:

- The cross-linguistic influence of French on English may significantly affect intelligibility of middle school EFL learners in the Algerian context.

Furthermore, four sub-hypotheses are proposed, in the Algerian EFL context:

1. The cross-linguistic influence of the second language on the third language may be influential to a large extent in terms of mispronounced items.

2. The cross-linguistic influence of FL1 on FL2 may exist to a significant extent among learners.

3. The cross-linguistic influence of FL1 on FL2 may include gender as an intervening variable.

4. Learners may heavily rely on the FL1 in pronouncing words that are difficult and unfamiliar to them in the FL2.

The focus of the study will be on French's impact on English mispronunciation and whether that largely affects intelligibility of middle school learners. Additionally, there will be notes of any discrepancies caused by gender, and any reliance on French when items are not identified by the subjects taken as additional variables. To reach this end, the current work is divided into three chapters, the first of which is devoted to the literature review, the second is the methodology and fieldwork; meanwhile, the third one is devoted for the analysis of data and discussion of results.

Chapter One

Literature Review

1.1. Introduction

The inevitable nature of language contact brings about some cross-linguistic results among which are the phonetic and phonological effects on pronunciation. The pronunciation aspect is largely investigated in ESL and EFL contexts and is found to be an integral part of the language learning process. There is an assortment of reported cases of learners facing many difficulties when it comes to pronunciation and the committing of many mistakes in FLT, or in this current study's case, EFL. Thus, linguists and researchers have a duty to investigate the sources and results of the problem concerning pronunciation.

Investigative research has brought linguists to search for the significance of pronunciation and its correlation with intelligibility. All of which led to many linguistic conclusions that interrelate the phonetic and phonological properties of language with the aspect of intelligibility. Furthermore, several researches and theories emphasize the significance of pronunciation and teaching it to speakers of other languages which entails the restriction of excessive deviation from a given model or an agreed upon systemic guideline for oral production of English. Therefore, such ideas are insightful in terms of their linguistically universal applicability.

The linguistic situation of North African countries dictates the reality that French is the second language learned in primary schools after MSA. Such a situation raises an assortment of variables that linguistically manifest themselves in the learning and producing of another language introduced after French. That could be best exemplified when it comes to EFL learning in these countries and the variables they bring up, among which is the phonetically or phonologically cross-linguistic aspect, where one language affects another for the better or for the worse. Furthermore, there are reported cases of using the previously learned second language as a mediator to introduce learners to a new code, especially when they have hugely aesthetic similarities. However, such reliance brings about certain effects

such as interference or cross-linguistic transfer which may or may not have a significant effect on intelligibility.

When it comes to the gender based variable, there is a prevailing stereotypical view in the Algerian context that females are more reliant on the French language. In the field of gender studies, there has been an array of stereotypes, linguistic or otherwise, that plague books and papers without empirical evidence until that was rectified down the line. However, there have been studies that illustrate some of the differences between males and females in terms of pronunciation, and such may or may not be applicable in the North African context.

The concept of intelligibility is a widely discussed one with its numerous nuances. Within the concept one can find many definitions that may thematically conflict, or even include within it several sub-conceptual elements that further amplify the theoretically diverse outlook on the term.

The current chapter details the aforementioned concepts by providing the most representatively punctual definitions by specialists, as well as it highlights similar studies that have been done on the subject in contexts not too distinct from the Algerian one. Due to the fact that this research is focused on the influence of French as a previously learned language on English's pronunciation in an EFL context, and since the target is the intelligibility ramifications of such influence; the main focus is the effect of French on Pronouncing English by EFL learners' and whether or not that hinders intelligibility.

1.2. The Concept of Pronunciation

In order to explore the concept of pronunciation there is a need to introduce defining parameters for it with its significance and contextualization in accordance with the study.

1.2.1. Defining Pronunciation

Pronunciation is a commonly used term that demands a need to be properly defined and distinguished from phonetics. The Oxford Learner's Dictionary defines pronunciation as *"the way in which a language or a particular word or sound is pronounced,"* and the verb pronounce as *"to make the sound of a word or letter in a particular way."* Moreover, Cook (1996) identifies pronunciation as being the habit-based sound production. One can notice that in both definitions the commonly identifying element is the production of sound which accordingly serves as a mainly distinctive axiom to identify the concept.

In another added aspect some look at pronunciation as being *"the production of a sound system which doesn't interfere with communication either from the speakers' or the listeners' viewpoint"* (Paulston & Burder, 1976, as cited in Gilakjani, 2016, p.2). Furthermore, Dalton & Seidlhofer (1994) have defined pronunciation as the sound-production, provided that the latter is meaningfully and distinctively significant. This means that the successful communication of significant sound is looked at as being the main purpose of pronunciation according to these definitions.

The conclusion to be drawn from observing many definitions is that there is not much controversy when it comes to the concept at hand. However, it is essential to compile a relatively restrictive meaning to it which relates to the current study at hand. Therefore, according to what is formerly mentioned, we define the concept of pronunciation as being the oral articulation of significant sound in aim of reaching intelligibility.

1.2.2. The Significance of Pronunciation

Pronunciation's significance is stressed by many different linguists and scholars for its inclusion of assorted aspects. Dalton & Seidlhofer (1994) have argued for the inclusion of identity as a marker for significance of sound 'as human beings we are individuals, but at the same time we are also members of groups; meaning that since sound is an elemental component of a particular language or language variety, it is significant. Furthermore, they argue for the significance of sound in another area that encompasses intelligibility in saying:

> Second, sound is significant because it is used to achieve meaning in contexts of use. Here the code combines with other factors to make communication possible. In this sense we can talk about pronunciation with reference to acts of speaking. (Dalton & Seidlhofer, 1994, p. 3)

The importance of correct pronunciation is a subject of scientific curiosity as well. In a study conducted on the importance of correct pronunciation in spoken English, it is concluded that through the perspective-based measurement of second language learners, they have an apparent understanding for the essentialness of correct pronunciation (Abu Bakar & Abdullah, 2015). In fact, in the same study, it is argued that *"pronunciation has a key role in successful communication both productively and receptively"* (Abu Bakar & Abdullah, 2015, p. 143).

The acknowledgement of the role of pronunciation and its teaching by academics is in itself a testament to its importance. Pardede (2010) has stated that correct pronunciation is in demand due to the incessantly rising didactic dependency on the communicative approach. Thus, teaching correct pronunciation is essential, especially due to many didactic approaches to teaching in which the focal point is pronunciation such as the audio-lingual method (Castillo, 1990).

1.2.3. The Teaching of Pronunciation

Since the significance and importance of pronunciation are verifiability acknowledged, then its teaching scheme must be examined. It is argued that teachers of a language should possess knowledge about that language due to the insufficiency of practical competence, and that entails the component of pronunciation within that language in order for learners to make clear of phonological distinctions (Dalton & Seidlhofer, 1994). To further explain, pronunciation is an integral part of language and therefore language teaching, and the teacher must have proficiency in the distinctively phonological aspect of the code in order to teach.

The aforementioned argument is evidence that teachers must be aware of the rules that govern pronunciation, those being phonetics and phonology. However, Shahzada (2012), in a study conducted on views of the teachers regarding the students' poor pronunciation in the English language in an EFL context, has concluded that teachers have no knowledge of phonetics and phonology, and whether that is applicable to North African countries is not exactly clear; but if the mentioned study is of any indication, teachers' potential lack of knowledge may be a variable that aids in learners' poor pronunciation. That being enforced by other factors such as the influence of another language's phonetic and phonological system on the pronunciation of English which this current study aims to investigate.

There are other arguments about pronunciation teaching which center on the overall goal. Burgess & Spencer (2000) have argued that SL and FL learners' absorbtion of the manner in which to pronounce sounds rather than extensively learning about those sounds may be beneficial for language users; which means that the practical application of the sounds learned in the target language is far more valuable than the theoretically oriented aspect of those sounds.

The aim from teaching pronunciation is the most essential aspect to bring up. The reason pronunciation should be taught is identified as being far from getting learners to a native's level of oral proficiency, but it is oriented towards communicative competence. That is highlighted in Cecle-Murcia et al., (1996), as follows:

> The goal of teaching pronunciation to such learners is not to make them sound like native speakers of English. With the exception of a few highly gifted and motivated individuals, such a goal is unrealistic. A more modest and realistic goal is to enable learners is to surpass the threshold level so that their pronunciation will not detract from their ability to communicate. (p. 8)

According to the arguments above, the conclusion to be drawn is that pronunciation is an essential part of language, and it should be practically taught by teachers who are competently familiar with the phonetic and phonological aspects of the language, because their awareness may play a pivotal role in hindering intrusive influencers on the oral production such as French's influence on English which relates to the current study. All of the above is in order for the EFL learners to have a proper communicative competence.

1.2.4. The Gender Differences in Pronunciation

Pronunciation accuracy in terms of the gender variable is certainly a subject of scientific curiosity. A study conducted on gender-based pronunciation accuracy in an EFL context reports that males are outperformed by females regarding consonant production, but not significantly; it also reports that vowel production between male and female subjects is not significantly different and is almost the same (Jahandar et al., 2012).

There is a stereotypical view in the Algerian context that females tend to use French more often for reasons assumed to be related to prestige. There is in similar respects evidence that points to females in an ESL context to be more attracted to the NS pronunciation of the

variety while males have a better tolerance for local pronunciation (Chan, 2018). This may indicate that what is regarded as purest form of L2, meaning the native variety, is more preferred by females, and that may also be applied in the Algerian context in a sense that females tend to prefer NS L2 pronunciation more, and thus females are more susceptible to French's phonetic and phonological influence on their English pronunciation. However, there is no empirical study to support such a viewpoint.

In fact, with regard to the Algerian EFL learning, there are studies that point to something relatively different from what is mentioned above. According to Babou & Abdelhay (2019) in their study on the gender-based analysis of learning English pronunciation in Algeria, the significant majority of female learners outperform in the articulation of particular sounds and so, manifesting certain styles.

1.3. The Concept of Intelligibility

Intelligibility as a concept should be properly defined and contextualized in accordance with the study as the following demonstrates.

1.3.1. Defining Intelligibility

Intelligibility as a term is subject to a plethora of debatable usage instructions. The Oxford Learner's Dictionary defines the term as *"the fact of being able to be easily understood,"* and while that is conceptually simple to grasp, especially with the keyword here being 'understood,' and the academic field of linguistics there is a large intellectual quarrel over it. However, once delving deep into the usage and applications of such a term, one will undoubtedly find that *"no general consensus in the use of the term "intelligibility" exists."* (Kim, 2008, p. 9).

Before defining the target, a distinction must be applied to separate the concepts of intelligibility and comprehensibility, and that is what scholars and linguists attempt to achieve. Nazari (2014) has accumulated that *"intelligibility refers to word or utterance recognition, whereas, comprehensibility relates to word or utterance meaning and interpretability is the meaning behind word or utterance."* (p. 28302). This distinction serves as a mark of clarification, that is due to the fact that sometimes the terms 'comprehensibility' and 'intelligibility' are used interchangeably (Smith, 1992).

The cause for how intelligibility is overly correlated and interchangeable with the concepts of comprehensibility and interpretability is logical. Intelligibility should be used as a general and almost umbrella term that is categorically inclusive of intelligibility, comprehensibility, and interpretability as a three-level system (Smith & Nelson, 1985). Thus, intelligibility is a set of factors inclusive of expression recognition, knowledge of its meaning, and sociocultural significance of that meaning (Bamgbose, 1998, as cited in Kim, 2008). Therefore, when talking about intelligibility, one has to definitively and particularly clarify which aspect they are addressing, intelligibility, comprehensibility, or interpretability.

Knowing the distinctions between such systematic elements, the current study is concerned with intelligibility as one of the three levels. The meaning of the concept according to Kenworthy (1987) is the contextually/situationally dependent listener's ability to understand; meaning that the listener is the deciding factor in realizing the concept in their ability to accurately pinpoint items or words.

A functionally helpful restriction to the meaning of intelligibility can be drawn from the aforementioned views. We accordingly define intelligibility as the directly recognizable and accurate identification of lexical items provided that recognition is separated from the intended meaning or assumed/perceived interpretation.

1.3.2. Intelligibility in the EFL context

In the EFL setting the concept of intelligibility is of prominent discussion between scholars. Since English is taught as a foreign language, an inherent debate manifests itself due to the controversial nature and complexity of language, and that is exemplified in the subject and target of intelligibility in that context.

Since the discussion is around intelligibility, then the follow-up is the question of who the intelligibility is targeting. The aspect of the supposed listener that determines intelligibility is at question, and that is through identifying whether intelligibility applies only on the NS as that is the seeming gold standard, or are NNS of credible measurement of intelligibility,

> Any reference to unintelligibility of course begs the question 'unintelligible to whom?' Evidently the many L1 speakers of English, teachers or otherwise, who still regard their role as that of privileged 'native speakers' of the language, meaning unintelligible to themselves. In this connection, we notice that even the most recent communicative speaking examinations such as the CAE—which stipulates the examining of candidates in pairs and minimal input from the two (usually 'NS') examiners—judgments of intelligibility are based on whether these two examiners understand the candidates, rather than on whether the latter understand one another. (Jenkins, 2000, p. 92-93)

All of which means that testing intelligibility should not be restricted to native speakers, for even the testing methods fall flat of the examiners' intended purpose due to unclear methodology. Jenkins (2000) has further expanded on the idea contextualized through an EIL scope in which she has explains that the purpose of interest is not for the NS in saying:

> As far as the EIL is concerned, however, we are interested not in the intelligibility for 'native-speaker' receivers but for participants in interlanguage talk, i.e. NBESs. And here, the prospect of mutual unintelligibility does need to be taken seriously. Above I quoted Crystal's

comment about the recency of EIL and the consequent difficulty of making sound predictions about mutual intelligibility. The general consensus, nevertheless, appears to be that mutual intelligibility in EIL will probably be safeguarded by virtue of international technology and telecommunications. (p. 93-94)

Intelligibility is not a concept that strictly the native speakers can definitively solidify. Smith (1992) has argued that NS are not as a generally completive rule more intelligible than NNS, and thus they are practically not the definitive judges for what is regarded or recognized as intelligible; meaning that the metric for intelligibility is not restricted solely to the native speakers, and that just because they are native that does not mean that their level of intelligibility always trumps the non-natives'.

In conclusion, measuring intelligibility in an ESL, EFL, or EIL contexts is not demanding of the inclusion of the native speakers due to the fact that they are not the targeted purpose of the foreign learners' attempts to reach intelligibility, and to the fact that NS are not inherently more intelligible than NNES.

1.4. The Interrelationship Between Pronunciation and Intelligibility

Since EFL teaching has a goal of learners' attainment of successful communicative skills, then the question at hand is that of pronunciation and intelligibility's roles in that process. Morley (1991) has stated that "*intelligible pronunciation is an essential component of communication competence*" (p. 488), meaning if given that a purpose for using language is successful communication and thus the competence for it, then intelligible pronunciation should be regarded as a condition to be met in order to avoid miscommunication. All of which is evidence on the importance of pronunciation and its intelligibility. Therefore, there is an undeniable relationship between the two concepts.

Further evidence points to the interlinking between intelligibility and pronunciation regarding the communication process according to scholars. Jenkins (2000) has concluded in the realm of EIL the apparent need for setting internationally established basis for phonological intelligibility to guarantee that successful communication is not hindered. This conclusion takes as a presupposition that the phonological accuracy is congruent with intelligibility, and thus, with the communication process.

The aspect of intelligible pronunciation is called to question by academics due to its elusive nature. It is not easy to physically give an actualized conception to the intelligible pronunciation because intelligibility is listener-dependent (Kenworthy, 1987; Jenkins, 2000 as cited in, Nazari, 2015). That is to say that there is no universally modelled basis for objectively and physically judging and determining intelligible pronunciation due to the fact that the listener is what intelligibility depends on. Moreover, that effect is amplified in the case of non-native listeners because respective L1s will influence different standards for intelligible pronunciation (Jenkins, 2000, as cited in Nazari, 2015).

Though to define intelligible pronunciation is difficult, it is an aim to be met in the teaching of English. It is recognized that *"the ultimate goal of L2 pronunciation learning has shifted to "intelligible" pronunciation that can foster successful L2 communication"* (Chen, 2016, p. 30); which entails the exclusion of the aim of achieving pronunciation that is close to natives. Therefore, the main elemental factors for the aim from pronunciation are intelligibility and comprehensibility (Derwing & Munro, 2005; Field, 2005; Setter & Jenkins, 2005, as cited in Chen 2016, p.30)

From what is cited, the utmost importance is given to intelligible pronunciation without the requirement of reaching the NS level of pronunciation. Jenkins (2002) has cited Kenworthy's (1987) belief that learners should acquire an intelligible accent or the achievement of, at least, a certain comfortable intelligibility. Furthermore, that should be the

ultimate goal of pronunciation and its teaching due to the accommodation of this idea to the infinite reality of teachers' diversity (Miranda, 2014). Moreover, the communication aspect of language makes intelligibility the main purpose from a relatively correct pronunciation as clarified by (Miranda, 2014):

> In all the diversity of "Englishes", the goal for people to be able to communicate is not the adoption of one unique model of pronunciation, but a general level of intelligibility that may allow people to understand each other comfortably. (p. 3)

In conclusion, communication is an axiomatic basis for EFL teaching; and to attain the goal for a successful communication, comfortable intelligibility must be met. This latter is inherently interlinked with pronunciation, for without intelligible pronunciation, not necessarily to NS listeners, and intelligible conversation or interaction is not realized. Therefore, in relation with the current study, if something is to obstruct pronunciation like the phonetic or phonological influence of the French language as a previously learned code on English, then intelligibility is not met.

1.5. The Cross-Linguistic Influence of French on English (Phonetics and Phonology)

Cross-linguistic influence has been explored by scholars widely in many EFL contexts and that goes for contexts that include French and English as codes that interfere with one another.

1.5.1. In French-English, English-French Bilinguals (Canada)

There is plenty of evidence that the phonologically cross-linguistic influence of one code on another affects speakers of two or more codes. Behavioral studies on such an aspect of language are conducted on multilingual, and especially bilingual, individuals to figure whether there is an activation of both codes,

Results from these behavioral studies suggest that, even though bilinguals functionally manage to use their two languages successfully, more fine-grained cross-linguistic effects between the bilinguals' two languages can be detected at the syntactic level as a consequence of having their two languages active in their minds at all times. Thus, overall, research seems to indicate that cross-linguistic effects in bilinguals can be evidenced (1) across different linguistics domains. (Luque et al, 2018, p.18)

Studies show that bilinguals' phonological representations are activated in both languages. Jared & Kroll (2001) have confirmed that notion in their study on whether the process of item-naming done by bilinguals is accompanied by the activation of both languages' phonological representations. They consequently find the latter to be true in the case of French-English and English-French bilinguals, and the influence is dependent on whether the printed word was in their less or more dominant language.

The aforementioned is later confirmed in another study that indicates similar results. Bilinguals' activation of lexical codes in both languages when reading in one is factually present (Freisen, Jared, & Haigh, 2014). Which could entail that people who are speakers of both the English and French languages may have a cross-phonological influence from one code to the other as it is confirmed in the following:

> Despite the fact that bilinguals are able to functionally manage their languages, previous research has shown that the constant co-activation of bilinguals' languages lead them to interact and influence each other at a fine-grained level, even when one of their languages is not being used: Effects of one language on the other have been shown in the lexical and phonological domains. (Luque et al., 2018, p. 4)

The activation of the phonological representation of items is automatically actualized. According to Dijkstra & Van Heuven (2002), the process during which bilinguals recognize lexical items or words visually and activate the phonological representations in both codes is automatic. This is essential to note because it indicates the lack of intentionality in the activation process at the level of bilingual individuals.

1.5.2. In the North-African Context

1.5.2.1. The Linguistic Situation and Cross-Linguistic Influence of FL1 on FL2

Due to the colonial history of North-African countries, they do share similarities when it comes to their linguistic situation. In Tunisia, French is learned early in primary schools before English is introduced, thus having the complex linguistic situation namely in their mother tongue being TA, L1 is MSA, L2 is French, and L3 is English. In that vein, Bouchhioua (2016) has confirmed that the existence of CLI of French as (L2) on English as (L3) by indicating a significant effect of the former on the latter in terms of linguistic transfer that impacts pronunciation due to the presence of typological and orthographical similarities; meaning that French's linguistic system as L2 is impactful of the correct production of English as L3.

As far as the linguistic situation is concerned, Algeria and Tunisia are quite similar. In the Algerian context, French is introduced in primary schools, while English is introduced in middle schools. Thus, the linguistic situation is as follows: ADA is generally the mother tongue, though some varieties of natives such as Berber and Tamazight are also in that category. MSA is L1 as it is the first language learned in schools. French is L2 while English is L3.

In correlating the aforementioned, one can deduce that the same results found in Tunisia may apply in the Algerian context. In fact, *"findings have revealed that the informants' pronunciation of English sounds seems to be more influenced by French than by Arabic"* (Ghlamallah, 2018). The latter indicates that MSA's (as L1) influence on the pronunciation of English is insignificant in comparison to that of French (as FL1), and that is probably due to the fact that learners generally produce inter-code forms when learning L3 which are comprising of L2 forms that can be phonological in nature (Murphy, 2003 as cited in Bouchhioua, 2016). Therefore, this confirms that, due to the introduction of a new phonological structure and a new basis for perception and production accompanied by a new language in the realm of learning and acquisition influences, the production of a foreign language is generally influenced. (James, 1988 as cited in, Ghlamallah, 2018). However, the previously mentioned study done in Algeria is admittedly at the hypothesis testing level and does not confirm the extent of French's influence on English in the country.

Although studies on the extent of phonetic and phonological influence of FL1 on FL2 in the Algerian context are not largely definitive, there are some that confirm the existence of such influence. Belabbes (2019) has reported that at the level of Algerian EFL learners, there is a significant effect of L2 on L3 phonological acquisition due to the typological similarity between French and English. However, the small sample size leaves large room to investigate the extent of the CLI between the two codes in the Algerian context.

1.5.2.2. Learning FL2 with the Use of FL1

The French and English codes are extremely similar regarding the written form, and the similarities between them are used as a tool by Algerian EFL learners. Previous knowledge of L2 is often relied upon by Algerian learners of L3 in terms of structure in their quest of learning the latter being EFL, and they regard it as a helpful tool (Negadi, 2015). Moreover, Hanafi (2014) has concluded that EFL learners in Algeria will learn English with taking their previous knowledge of French as a basis.

1.6. The Impact of Cross-linguistically Influenced Pronunciation on Intelligibility

The present chapter has established the relationship between pronunciation and intelligibility, and that the latter is dependent on the relatively correct production of the former. Logically, if pronunciation is to be influenced by the phonetic and phonological system of another code in a negative way hindering its intended form, then intelligible pronunciation is not realized.

Segmental features are an essential part to pronunciation and therefore to intelligibility. In a study conducted in Cameroon on intelligibility of Cameroon English speakers to British and American English speakers and the other way around, Atechi (2007) has concludes that level of intelligibility failure is present due to phonotactic, supra segmental, and segmental differences; entailing that segmental features that are cross-linguistically influenced alter pronunciation and therefore intelligibility.

Phonetic and phonological discrepancies may cause ultimate lack of intelligibility. That is highlighted in the aforementioned study, and it reaffirms that among NNS, certain features like stress and some segmental ones are integrally important to reach intelligibility (Jenkins, 1998, 2000, as cited in Holland, 2016, p. 10). Thus when a code is cross-linguistically influenced at the phonologically segmental level, then intelligibility may be impacted, presumably and in accordance with Atechi's (2007) study, revealing the ultimate failure of intelligibility.

1.7. Unfamiliar Words in the EFL Context

People often resort to familiar lexicon when pronouncing unfamiliar words. Fitt (1998) has cited Murray's (1986) anecdotes by residents of St. Louis "explaining" the origin of place names like Ferrier (from the French language) as being "Fairy Air" and has deduced that:

> Presumably this is not an effect of production, but of either initial perception of the input, or the mental processing which occurs between input and output, matching the name with more familiar words or word-elements in the mental lexicon. Although it is usually reported in cases where the change has happened over a period of time, during which various other factors come into play, such as the development of myths 'explaining' the origin of the name, there is evidence of such processes in the experiments reported later in the current study. (Fitt,1998, p. 8-9)

This suggests that the mental lexicon with a basis of familiarity is influential in aiding in the pronunciation of unfamiliar words, and that per se may be something that applies to the current study. That is in the implication that if the mental lexicon of Algerian EFL learners is filled with the prior knowledge of FL1 (French), that may or may not be a crutch that learners may fall on when pronouncing words in FL2 (English).

The perception of written words is also suggested to guide phonological encoding. It is also proven that the activation of phoneme rules or lexical properties of familiar rules,

> The presence of errors due to phonological activation of written forms,
>
> although few, supports claims that perception of written words initiates
>
> phonological encoding. Since this takes place for unfamiliar as well as familiar
>
> words, it is evidently not a question of a simple match between the written form
>
> and a stored lexical item, but involves either grapheme-to-phoneme rules or
>
> lexical activation of similar words, or a combination of both. (ibid. 269)

This means that segmental rules and stored lexical items may respectively or simultaneously be involved in errors in the phonological encoding of perceived written words. Thus, entailing that if a code is cross-linguistically influenced at the phonological level like with FL1 on FL2, phoneme rules of FL1 may be impactful on the production of FL2 at the level of phonological rules and relying on the familiar. However, when it comes to the meaning of unfamiliar words, learners use inferencing as a main strategy (Cai & Lee, 2012). Therefore, when learners are given a word that is not in any context they are on their own and may in accordance with Fitt (1998) rely on the mental lexicon or familiar words after breaking it into sectioned parts.

1.8. Conclusion

Intelligible pronunciation is an essential component to the achievement of a successful communicative process. In order for the intelligibility condition to be met, as close to correct of pronunciation as possible, and that does not necessarily mean that it has to be native-like. In the case of the Algerian context, FL1 is proven, though not definitively, to be phonologically influential on the pronunciation of FL2 in regards to EFL learners. However, the extent of it or whether that cross-linguistic affects intelligibility has not been investigated in the Algerian context taking into account the variables of gender, and written unfamiliar words processing. That is what the present study aims to investigate.

Chapter Two

Field Work

2.1. Introduction

The present chapter is concerned with describing the tools used for the research and the presentation of the results retrieved on the effect of cross-linguistic influence of French (as FL1) on the intelligibility of English (as FL2) pronunciation, as well as the extent of that phonological influence and the gender factor in relation to that effect. In order to validate the research, its data and hypotheses, it adapts the descriptive analytical method and utilizes sound-recording in classrooms, recordings of pupils reading texts, and transcriptions of what advanced EFL speakers hear from some of the recordings. Thus, this chapter contains four parts; the classroom observation (measuring extent of apparent cross-linguistic influence), the cross-linguistic influence test (measuring the gender factor and the reliance on FL1 in unfamiliar words' production), and the intelligibility test.

2.2. Research Methodology

The current research means to study intelligibility of cross-linguistically influenced pronunciation; however, it covers the extent of the influence, the gender factor, and the reliance on another code to produce unfamiliar words as well. To investigate effectively, the study employs audio recording to collect data on the first phase's target; the pupils' percentage of seemingly phonologically influenced items within all the mispronounced ones. The second phase uses another tool that is text-reading on top of recording in order to definitively mark whether there is indeed an undeniable influence and confirm its extent; plus, determine whether gender plays a role in the equation, and whether learners rely on their previously learned code to produce unfamiliar words. Finally, the third tool is transcribing what advanced EFL speakers and teachers hear from a sample of the recordings from the second phase, and that is to gauge intelligibility.

2.2.1. The Classroom Observation

The first phase uses audio recording in the most normal of conditions in order to guarantee natural speech. The researcher does not partake in the study and employs the teachers of the target classrooms to do the recording instead in order to avoid the disruption of natural speech through the observer's paradox (see Appendix 1).

The recording is done in regular classes, meaning that the sessions do not have predetermined lessons for an aim of orienting the results towards a specific target, because that is what the second phase deals with. Thus, this phase is more on the broader more general side which includes the aspect of mispronunciation.

Classroom observation in this case has a main logical aim that the following explains. The tool aids in marking the extent of cross-linguistic influence in terms of mispronunciation. That is to say, gauging mispronounced English items, and whether the seeming cross-linguistic influence of French as FL1 on English as FL2 is extensively present. To further clarify, it is to identify mispronounced items in general, and then finding out within the latter the percentage of items seemingly influenced by the French phonological system.

2.2.1.1. Sample

The classroom observation was conducted in the second trimester during the month of January in 2020. It was conducted with three classes of third, and three classes of fourth year levels at Ould Brahim Said Middle School, Tiaret. The ages of the learners range from 14 to 17 years old. The samples of third year students are as follows:

Sample A: 39 Pupils. 9 Males & 30 Female.

Sample B: 32 Pupils. 14 Males & 18 Female.

Sample C: 38 Pupils. 20 Male & 18 Female.

The samples of fourth year students are as follows:

Sample D: 42 Pupils. 19 Male & 23 Female.

Sample E: 39 Pupils. 18 Male & 21 Female.

Sample F: 29 Pupils. 17 Male & 12 Female.

The reason behind choosing third and fourth year learners is due to their relatively new introduction to the English language, yet they have slight experience with it in the span of three to four years. Thus, theoretically, they probably do not completely divorce the new FL2 code from FL1, so they are of good measurement as to whether FL1 is largely influential on their FL2 production.

2.2.1.2. Data Analysis

In this phase, the items uttered by the learners are in accordance with the lesson, and mispronunciation is easier to spot since teachers usually correct it for the most part. The researcher's task after the collection of data here is simply to spot and phonemically transcribe mispronounced items of each sample or classroom, and then identify within the latter the items that are mispronounced due to seeming phonological influence of French as FL1. After which, the results show the percentage of items mispronounced because of French revealing the extent of cross-linguistic influence in terms of mispronunciation. It is worthy to note that both the segmental and some supra-segmental aspects such as stress and intonation are taken into account in this phase unlike the other two phases that focus on the segmental aspect alone.

2.2.1.3. Results

The results that the following section reports aid in the knowledge of the extent of cross-phonological influence of FL1 on FL2 in regard to mispronunciation.

2.2.1.3.1. The Mispronounced Words

The following titles present the mispronounced words that the researcher identified from each sample. The latter are categorized into mispronounced words seemingly influenced by French's phonological system, and mispronounced words influenced by other factors that do not relate to the current study. The former category demonstrates the words along with phonemic transcription in accordance with how the pupils uttered them during regular class.

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors	Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors
Did /diːd/	Watching	While /hwiːl/	Fell
While /wiːlə/	Rang	Captain /kaˑpiːt/	Asleep
Plan / plaːn/	Letter	Called /kaːld/	During
Reading /rɪdiːng/	Were	Delivered /deliːvrəd/	Bath
Future /fʏtʏʁ/	Starting	Snow boarding /snɔbɔaːrdɪng/	Threw
Hot /hɔt/	Having	Walked /walkəd/	Caught
Delivered /dɪliːvɪd/	Listening	Several /severaːl/	Started
Broke /brɒk/	Listening	Minute /mɪnʏt/	Rain
Waiting /wɪtiːng/	Turn	Called /kaːləd/	Alarm
Come /kɔːm/	Oven	Stop /stɔp/	Turn
Children /ʃɪldrən/	Waiting	Japan /ʒæpən/	Stealing
While /wiːl/	He	Engine /ɪndʒiːn/	Studying
Rang /raːng/	Night	Miss /miːs/	Long
Picnic /piːkniːk/	Delivered	Cause /kəuz/	Speak
Hear /hɪeər/	Leg	Pray /praɪ/	Simultaneous
While /wiːl/	studying		Is
Call /kaːl/	Saw		Were
Rain /rɛːn/	Listened		Going
	Walking		Quran
	Sleeping		

Table 2.1 The Mispronounced Words from Sample A

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors
Himself /hiːmsəlf/	Plus
Teaching /tiːtʃɪng/	Edison
Miss /miːs/	Teaching
Chewing gum /ʃʊːiːngʌm/	Cairo
Irregular /iːrəgʊːlər/	Talk
Note book /nɔtbʊːk/	
I.N.G /iːəndʒiː/	
Affirmative /aːfɪrmaːtɪv/	

Table 2.2 The Mispronounced Words from Sample B

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors
City /siːtiː/	Elva
Teaching /tiːʃɪng/	Learning
Scholar /skɔlaːr/	Elva
Verb /veərb/	Learning
Affirmative /aːfɪrmaːtiːv/	Cairo
Living /liːvɪng/	Were
Action /aːksjɔn/	Number
Activity /aːktiːviːtiː/	Talk
Happening /hæpiːniːng/	Particular
Particular /paːrtiːkʏlaːr/	Talk
Miniaturization /miːnjaːtriːʒeɪʃn/	Plus
Camera /kaːmɪraː/	
Period /pɪrjɔːd/	
Continue /kɔntɪnʏ/	
Miniaturization /mɪniːtʏriːasjɔn/	
Pronouns /prɔɔːnɔːnz/	
Simple /sɛːmpl/	
Simple /sɛːmpɔl/	
Revising /rɪviːzɪng/	
Action / æksjɔn/	

Table 2.3 The Mispronounced Words from Sample C

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors
Cat /ka:t/	Oven
Airport /aɪrpɔ:rt/	Murder
Sorry /sɔri:/	Plane
Over /ɔvər/	Towards
Pilot /paɪlɔt/	Check
Journalist /dʒʊ:rna:li:st/	Holiday
Horrific /hɔri:fɪk/	Giant
Plane /plæn/	Busy
Miraculous /mi:rakɔl/	Matter
Crash /kra:ʃ/	Passengers
Miraculously /mi:rakʏləsli:/	Relaxed
Survives /sɛ:rvi:vd/	Busy
Child /ʃi:ld/	Co-pilot
Dinner /di:nər/	

Table 2.4 The Mispronounced Words from Sample D

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors	Mispronounced Words Seemingly Influenced by French
Slang /sla:ng/	Oven	Miraculous /mi:ra:kʏləs/
Apologize /əpɔ:lɔ:dʒi:z/	Through	Survived /sɔrvi:vd/
Check /ʃək/	Fall	Miraculously /mi:ra:kʊ:sli:/
Fifteen /fi:fti:n/	Busy	Pilot /pi:lɔt/
Opened /ɔ:pənd/	Busy	Airport /aɪrɔ:pɔ:rt/
Co-pilot /kɔ:pi:lɔ:t/	Mother	Child /tʃi:ld/
Air /aɪər/	Miss	Adult /a:dʏlt/
Dinner /di:nər/	Hundred	
Engine /i:ndʒi:n/	Pilot	
Crash /kra:ʃ/	Busy	

Table 2.5 The Mispronounced Words from Sample E

Mispronounced Words Seemingly Influenced by French	Mispronounced Words Influenced by Other Factors
Ideal /iːdiːəl/	Copying
Recover /riːkɔːvər/	Cant
Given /giːvən/	Met
Correct /kɔːrəkt/	Partners
Rich /riːtʃ/	Disappointed
Told /tɔːld/	Thought
Misery /miːsəriː/	Known
Freedom /friːdɔːm/	Recover
Is /iːz/	Said
Brought /brɒgt/	Experience
Radio /raːdjɔː/	Against
Director /diːrəktɔːr/	Human
Arrived /aːriːvəd/	Endured
Closed /klɔːsɪd/	War
Cheaply /ʃiːpliː/	Endured
Whole /hɔːl/	Suffered
Won /wɔːn/	Reached
	New
	Looked

Table 2.6 The Mispronounced Words from Sample F

2.2.1.3.2. The Statistical Results of the Extent of Influence

2.2.1.3.2.1. French's Influence on Mispronunciation in Each Sample

The method to calculate the percentage in this entire phase is through the following:

percentage = (value/total value)×100%.

Sample	A	B	C	D	E	F
Number of Mispronounced Words	72 (100%)	13 (100%)	31 (100%)	27 (100%)	27 (100%)	36 (100%)
Number of Mispronounced Words Seemingly Influenced by French	33 (45,83%)	08 (61,54%)	20 (64,52%)	14 (51,85%)	17 (62,96%)	17 (47,22%)

Table 2.7 French's Influence on Mispronunciation in Each Sample
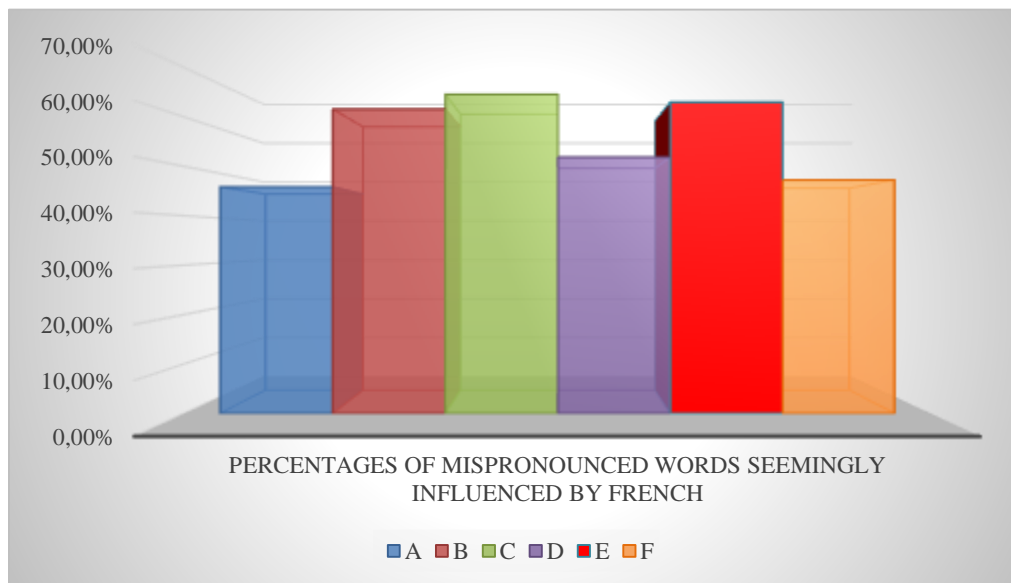
Figure 2.7.1 French's Influence on Mispronunciation in Each Sample

Figure 2.7.1 demonstrates that in each of the samples, more than 45% of the identified mispronunciations are correlated with influence from French's phonological system with the highest being sample C with 64,52% of the mispronounced words influenced by French and the lowest being 45,83% in sample A.

2.2.1.3.2.2. French's Influence on Mispronunciation in All Samples

	All Samples	Percentage
Number of Mispronounced Words	206	100%
Number of Mispronounced Words Seemingly Influenced by French	109	52,91%
Number of Mispronounced Words Influenced by Other Factors	97	47,09%

Table 2.8. French's Influence on Mispronunciation in All Samples
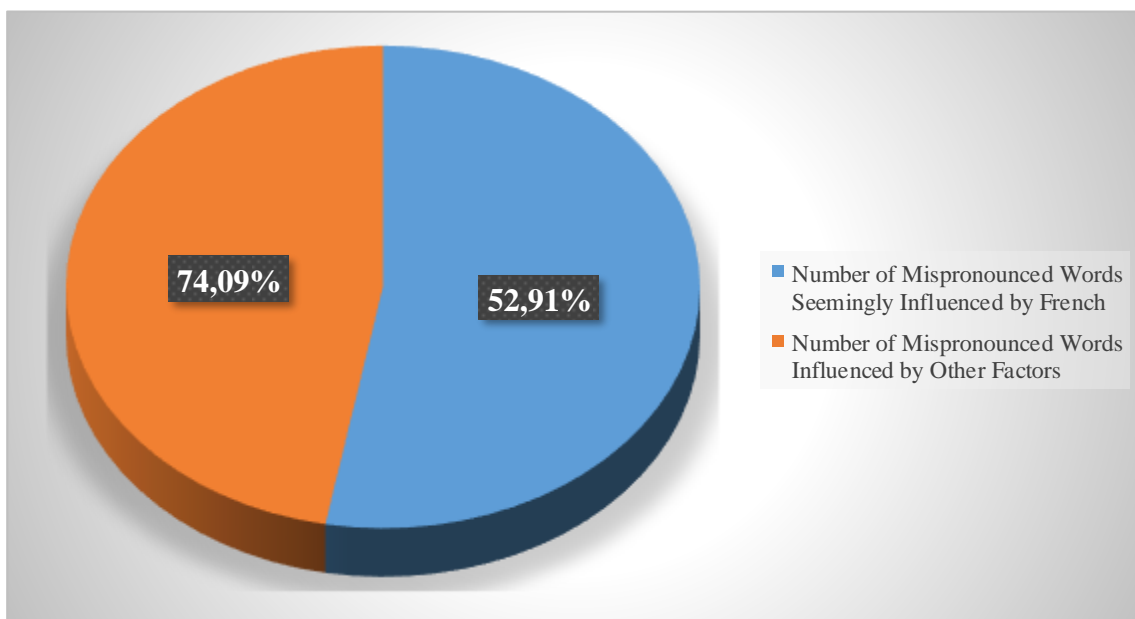
Figure 2.8.1 French's Influence on Mispronunciation in All Samples

Figure 2.8.1 indicates that more than half of the mispronounced words identified through the classroom recordings of all samples combined are ones affected by the French's phonological system.

2.2.2. The Cross-Linguistic Influence Test

In this phase, the learners read a written text while the researcher records them. The written tool comprises of four main sections and a fifth additional one. First, a section with eight sentences written in English, the second with five sentences written in French, then the third contains five in English, four in Arabic, and five in French. The fourth section contains 11 words in English that are extremely difficult and unfamiliar to most learners of that level, and finally a section with three pictures that the learners name as well (check Appendix 1).

There is a reason behind choosing every section and what it contains. The overall theme of the written text is words that are aesthetically similar and accordingly so at the segmental level. For instance, words like 'paste' in English and ' vaste ' in French share a

certain similarity in typography; however, the pronunciation is completely different with 'paste' being /peɪst/ and ' vaste ' being /vaːst/. Thus, the first objective of this phase is to identify mispronunciations of English lexical items that overlap with French ones, for example if learners pronounce ' paste ' as /paːst/. The items that overlap in both languages are within the first three sections and the fifth one as an additional one. The latter are apparent in the following table:

	English	French		English	French		English	French
a	Paste	Vaste / Contraste	**f**	Victims	Minimes / Victimes	**k**	I / Is / Liberty / Eminem	Il
b	Ones / Won / Odds	On a	**g**	Black	Lapin / Attaque	**l**	Should / Hour	Lourd
c	Matches	Matche	**h**	Concisely / Prize / Exercice	Précise	**m**	Place	Date
d	Theories	Théorie	**i**	Choose / Cheap / Chalk	Charlotte / Chou / Chocolat / Chance	**n**	Comfort / Savor	Adore
e	Wrote / Lot	Charlotte	**j**	Number	Une	**o**	Squirl	Bruit

Table 2.9 The Target Items in the Written Text

The following table identifies the phonetic difference between each English lexical item and its similar French counterpart through phonemic transcription in received pronunciation:

	English	French		English	French		English	French
a	/peɪst/	/va:st/ /kɔntra:st/	**f**	/vɪktəmz/	/mi:ni:m/ /vi:kti:m/	**k**	/aɪ/ /ɪs/ /lɪbəti:/ /emənem/	/i:l/
b	/wʌnz/ /wʌn/ /bɒks/ /ɒdz/	/ɔna/	**g**	/blæk/ /mæn/ /lændma:k/	/la:pə/ /a:ta:k/	**l**	/ʃʊd/ /aʊə/	/lʊ:ʁ/
c	/mætʃəz/	/ma:tʃ/	**h**	/kənsaisli:/ /praɪz/ /əksəsaɪz/	/pxɪsi:z/	**m**	/pleɪs/	/da:t/
d	/θi:ri:z/	/tɪɔʁi:/	**i**	/tʃʊ:z/ /tʃi:p/ /tʃɔ:k/	/ʃa:ʁlɔ:t/ /ʃʊ:/ /ʃɔkɔla/ /ʃɔns/	**n**	/kʌmfət/ /seɪvə/	/adɔ:ʁ/
e	/rəʊt/ /lɒt/	/ʃa:ʁlɔt/	**j**	/nʌmbə/	/ɤn/	**o**	/skwɛ:l/	/bʁwi:/

Table 2.10 The Phonemic Transcription of Target Items in the Written Text

The reason for the existence of the fourth section is for the measurement of the other variable, that being the reliance on French when pronouncing unfamiliar and quite difficult words. Thus, the researcher asks the learners whether they recognize the words and whether they find them difficult after they finish reading.

It is worthy to note that in this phase does not take into account the supra-segmental aspect of cross-linguistic influence of French on English, nor it takes into account mispronunciations of the target English lexical items that do not correspond with the cross-linguistic influence of FL1 on FL2. Moreover, the meaning of the sentences and terms used in the written text as a tool is unimportance since the main focus is strictly pronunciation.

Also, the items written in Arabic are there to divert the attention of learners from finding out the objective of the research. If they notice that all items are in both French and English, they may realize some of the intentions of the word and accordingly deviate from how they usually pronounce the items. Finally, the phonemic transcriptions are in accordance with Received Pronunciation (RP) due to it serving as a good baseline for conducting studies in the EFL context on pronunciation and intelligibility according to Atechi (2007).

2.2.2.1. Sample

The recording process took place throughout the year 2020, and the sample included in this research- the second phase- is 10 pupils from each of the previously chosen classroom; meaning 10 pupils from each of the samples A, B, C, D, E, and F. The respondents are selected through proportional stratified random sampling, and the reasoning behind it is to guarantee the gender-based representativeness and the randomization for generalized representativeness of the entire population of EFL learners in the Algerian context. The following table demonstrates how the sampling was done in accordance with proportional stratified random sampling with the aid of the equation

percentage = (value/total value)×100%.

	Total	Female	Male	Samples for the Second Phase	Total	Female	Male
Sample A	39 (100%)	30 (77%)	9 (23%)		10 (100%)	8 (77%)	2 (23%)
Sample B	32 (100%)	18 (56%)	14 (44%)		10 (100%)	6 (56%)	4 (44%)
Sample C	38 (100%)	18 (46%)	20 (53%)		10 (100%)	5 (46%)	5 (53%)
Sample D	42 (100%)	23 (55%)	19 (45%)		10 (100%)	6 (55%)	4 (45%)
Sample E	39 (100%)	21 (54%)	18 (46%)		10 (100%)	5 (54%)	5 (46%)
Sample F	29 (100%)	12 (41%)	17 (59%)		10 (100%)	4 (41%)	6 (59%)

Table 2.11 Proportional Stratified Random Sampling Employed in the Second Phase

The choice of choosing these learners to work with is essentially the same as in the first phase. They are relatively new enough to the English language, yet competent and relatively experienced enough to read without hugely exerted efforts that will surely take-up time in the process of data collection. Thus, first and second year pupils are not optimal to conduct the investigation with and on. Moreover, the work includes 60 respondents because the number is optimally representative of the population and the data derived is valid due to this number that is large enough to represent, yet not too large for feasible analysis.

2.2.2.2. Data Analysis

The data compiles of the selected sample of 60 pupils whose reading of the text is what the researcher analyses through listening to each audio recording. First, this phase identifies in each recording the overlap between the targeted items in both the English and French languages, revealing the extent of cross-linguistic influence at the segmental level.

Moreover, the gender variable is analyzed by classification of what each gender scores in terms of percentage of overlap and thus cross-linguistic influence. Furthermore, the researcher identifies observationally if learners rely on the French language in pronouncing unfamiliar words by replacing English vowel or consonant sounds with French ones, if learners do so in five or more words indicates the reliance on FL1. As an additional reminder, the calculation of the percentage is through: percentage = (value/total value)×100%

2.2.2.3. Results

The results demonstrate the overlap between the two codes' segmental properties at the level of targeted items.

2.2.2.3.1. Results Based on Level

2.2.2.3.1.1. Third Year Results

The following table demonstrates the overlap of targeted items, for instance pronouncing 'paste' and 'vaste' in the same manner at the level of the shared vowel letter, with the number one being a confirmation of overlap:

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	%
A1 F	1	1	0	0	1	1	0	1	0	0	1	0	0	1	0	46.67
A2 F	1	1	0	0	1	1	0	1	1	1	1	0	0	1	0	60.00
A3 M	0	1	0	0	1	1	1	1	1	0	1	0	0	0	0	46.67
A4 M	1	1	1	0	1	0	1	1	0	0	1	0	0	1	0	53.33
A5 F	1	1	1	1	1	0	0	0	1	0	1	1	0	1	0	60.00
A6 F	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	80.00
A7 F	1	1	1	0	1	1	0	1	1	0	1	1	0	1	0	66.67
A8 M	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	46.67
A9 M	1	1	1	0	1	1	1	1	1	0	1	0	1	0	1	73.33
A10 F	1	0	1	0	1	1	0	1	1	0	1	1	0	1	1	66.67
B1 M	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	86.67
B2 F	1	0	1	1	0	0	0	1	1	0	0	1	0	1	0	46.67
B3 F	1	0	1	0	1	0	0	0	0	0	1	0	0	1	1	40.00
B4 F	1	0	1	0	1	0	1	1	0	0	1	1	0	1	0	53.33
B5 F	1	1	0	1	1	1	1	1	1	1	1	0	0	1	0	73.33
B6 M	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	73.33
B7 F	0	1	1	1	1	1	1	1	1	0	1	1	0	1	0	73.33
B8 F	0	1	1	0	1	1	1	1	1	0	1	1	0	1	0	66.67
B9 M	0	1	0	0	1	0	1	1	1	0	1	1	1	1	0	60.00
B10 M	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	73.33
C1 M	1	1	1	0	1	1	0	1	0	0	1	1	0	1	0	60.00
C2 M	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	46.67
C3 M	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	80.00
C4 M	0	1	1	0	0	0	1	1	0	0	0	1	0	1	0	40.00
C5 F	1	1	1	1	0	1	0	1	1	0	1	1	0	1	1	73.33
C6 F	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	73.33
C7 F	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	86.67
C8 F	0	1	0	0	0	1	0	1	1	1	1	1	1	1	1	66.67
C9 F	0	0	1	0	1	1	0	1	1	0	1	1	0	1	0	53.33
C10 F	1	1	1	0	1	1	1	1	1	0	1	0	0	1	0	66.67

Table 2.12 The Mispronunciation of English Items in Overlap with French Items: Third Year EFL Learners (Samples A, B, and C)
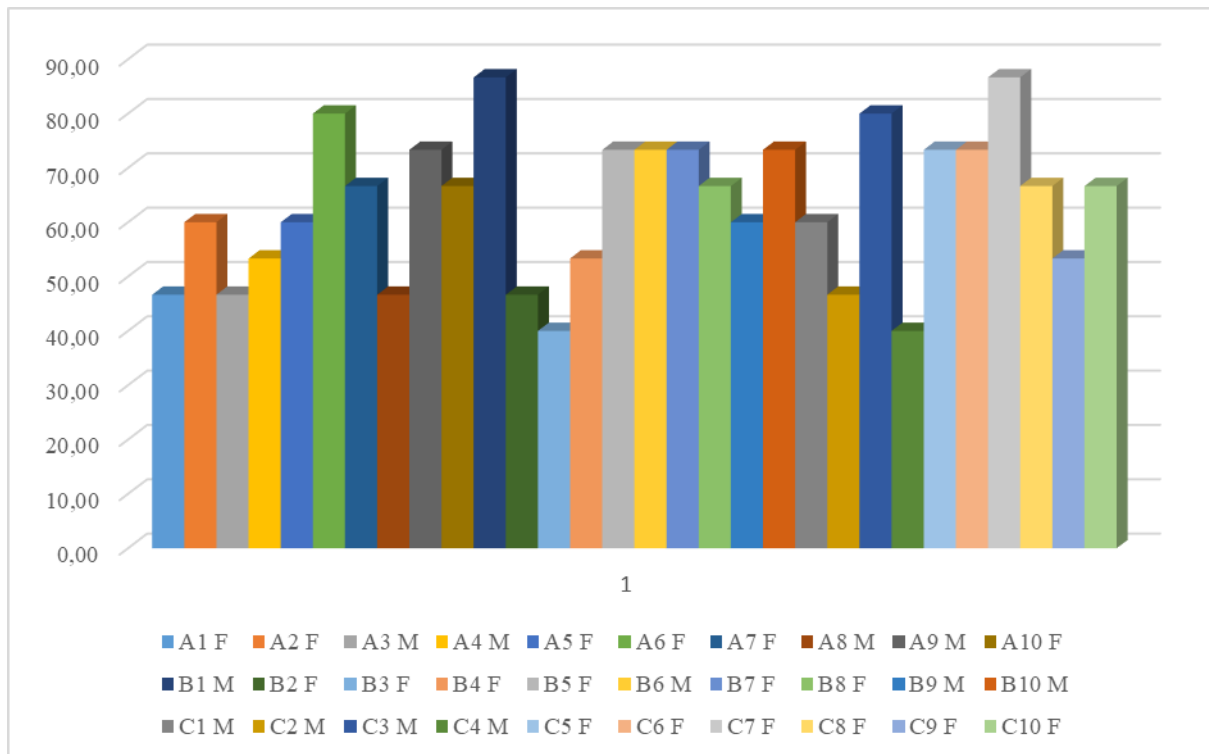
Figure 2.12.1 The Mispronunciation of English Items in Overlap with French Items: Third Year EFL Learners (Samples A, B, and C) (1)

As indicated in figure 2.12.1, each pupil demonstrates overlap in the targeted items in at least 40% of them. They do so with the largest percentage of segmentally overlapped words being 86,67%. Additionally, all learners manifest the overlap 40% or more of the targeted items, and most learners do so in more than 50% of those items.
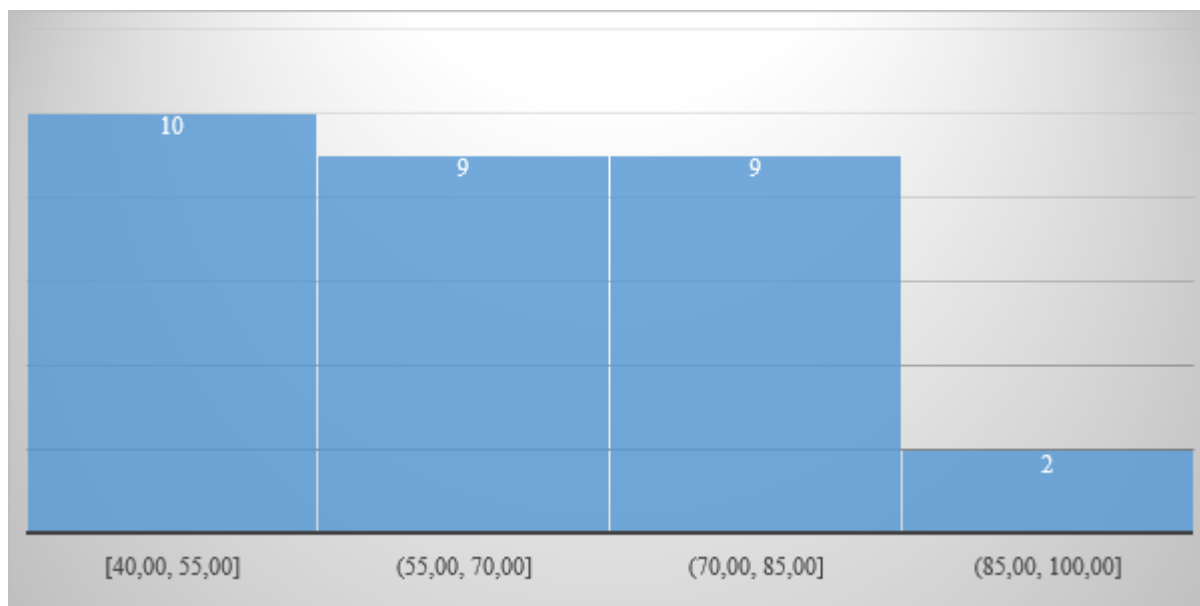
Figure 2.12.2 Average of Mispronunciation of English Items in Overlap with French Ones: Third Year EFL Learners (Samples A, B, and C) (2)

Figure 2.12.2 demonstrates that most pupils show overlap in an average about 40 to 85% of the words. 10 pupils indicate overlap of French and English items in an average of 40 to 55%, nine pupils do so in an average of 55 to 70%, and nine others in about 70 to 85%. The averages help to determine whether there is a consistent pattern of influence and overlap among learners.

Manifestation of Overlap In:	Percentage of Learners
> 50 % of the Targeted Features	76.67
< 50 % of the Targeted Features	23.33

Table 2.13 Third Year Learners' Manifestation of Overlap
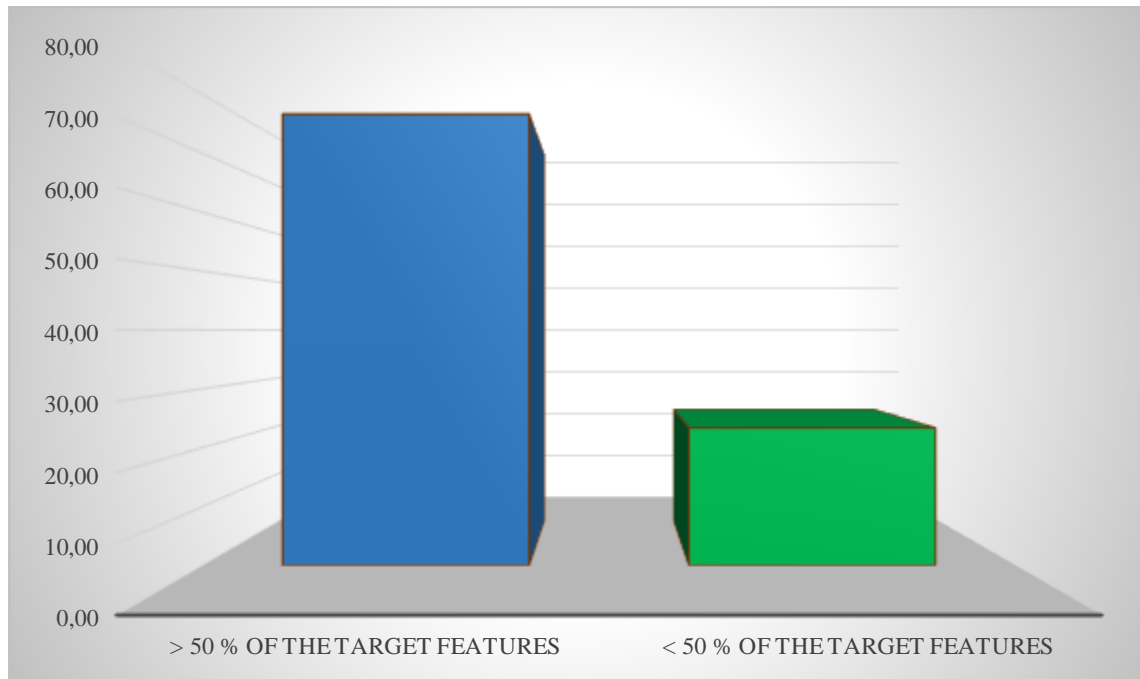
Figure 2.13.1 Percentage of Third Year Learners Who Manifest Overlap

Figure 2.13.1 indicates that 76,67% of learners manifest segmental overlap of the English and French codes in more than half of the words. Accordingly, 23,33% of learners demonstrate the manifestation in less than half of the selected items.

2.2.2.3.1.2. Fourth Year Results

The following table demonstrates the overlap of targeted items, for instance pronouncing 'paste' and 'vaste' in the same manner at the level of the vowel letter, with the number one being a confirmation of overlap:

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	%
D1 F	1	1	1	1	1	1	0	1	0	0	1	1	0	1	0	66,67
D2 F	0	0	1	0	1	1	0	1	1	0	1	0	0	1	1	53,33
D3 M	1	1	1	1	1	0	0	0	0	0	1	1	1	1	0	60,00
D4 F	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	73,33
D5 F	1	0	0	1	0	0	0	1	0	0	1	1	0	1	1	46,67
D6 F	1	1	1	0	1	1	0	1	1	0	0	1	1	0	0	60,00
D7 M	1	0	1	0	1	1	1	1	1	0	1	0	0	1	0	60,00
D8 F	1	0	1	0	1	0	0	1	1	0	1	1	1	1	0	60,00
D9 M	1	1	1	0	1	0	1	1	1	0	1	1	0	0	0	60,00
D10 M	1	1	1	1	1	0	0	1	1	0	1	1	1	1	0	73,33
E1 F	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100,00
E2 M	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	20,00
E3 F	1	0	0	0	1	1	0	1	1	0	1	1	0	1	0	53,33
E4 M	1	1	1	0	1	0	1	1	1	0	1	1	0	1	0	66,67
E5 F	1	0	0	1	1	1	0	1	0	0	1	1	0	1	1	60,00
E6 M	1	1	0	1	1	0	0	1	1	0	0	1	0	1	0	53,33
E7 F	1	1	1	0	1	1	1	1	0	0	1	1	0	1	0	66,67
E8 M	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	80,00
E9 M	0	1	0	0	1	0	0	1	1	0	1	1	0	1	0	46,67
E10 F	1	1	0	0	1	0	0	1	1	0	1	1	0	1	0	53,33
F1 F	1	1	0	0	0	1	1	1	1	0	1	1	0	1	1	66,67
F2 F	1	1	1	0	0	1	1	0	1	0	0	1	0	1	0	53,33
F3 F	1	1	1	0	0	1	1	1	1	0	1	0	0	1	0	60,00
F4 M	1	1	1	0	1	0	1	1	1	0	1	0	0	0	0	53,33
F5 M	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	73,33
F6 M	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	86,67
F7 M	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	80,00
F8 M	1	0	1	0	1	0	0	1	1	0	0	0	0	1	0	40,00
F9 M	1	1	0	0	0	0	1	0	1	0	1	1	0	0	0	40,00
F10 F	1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	46,67

Table 2.14 The Mispronunciation of English Items in Overlap with French Items: Fourth Year EFL Learners (Samples D, E, and F)
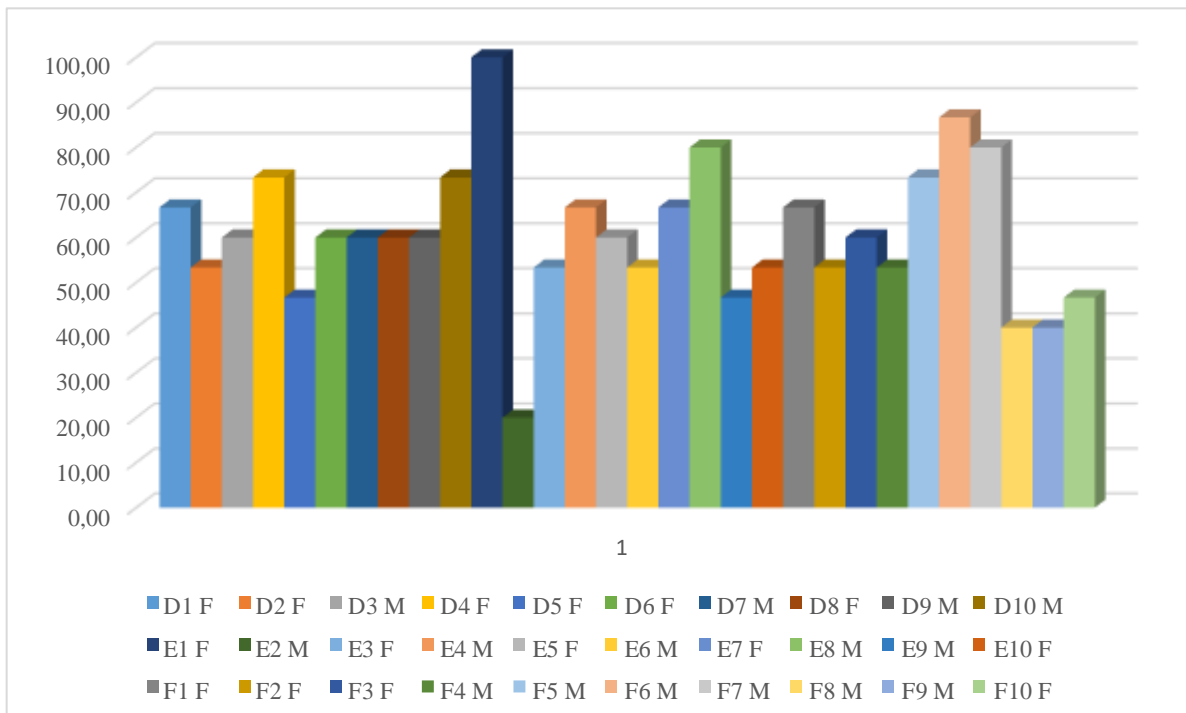
Figure 2.14.1 The Mispronunciation of English Items in Overlap with French Items: Fourth Year EFL Learners (Samples D, E, and F) (1)

As Figure 2.14.1 indicates, each fourth year pupil demonstrates overlap in the targeted items in at least 20% of them. They do so with the largest percentage of segmentally overlapped words being 100%. In fact, most learners manifest the overlap in more than 50% of the targeted items and a mere one pupil scored less than 40% with the learner E2 M scoring the lowest with 20%.
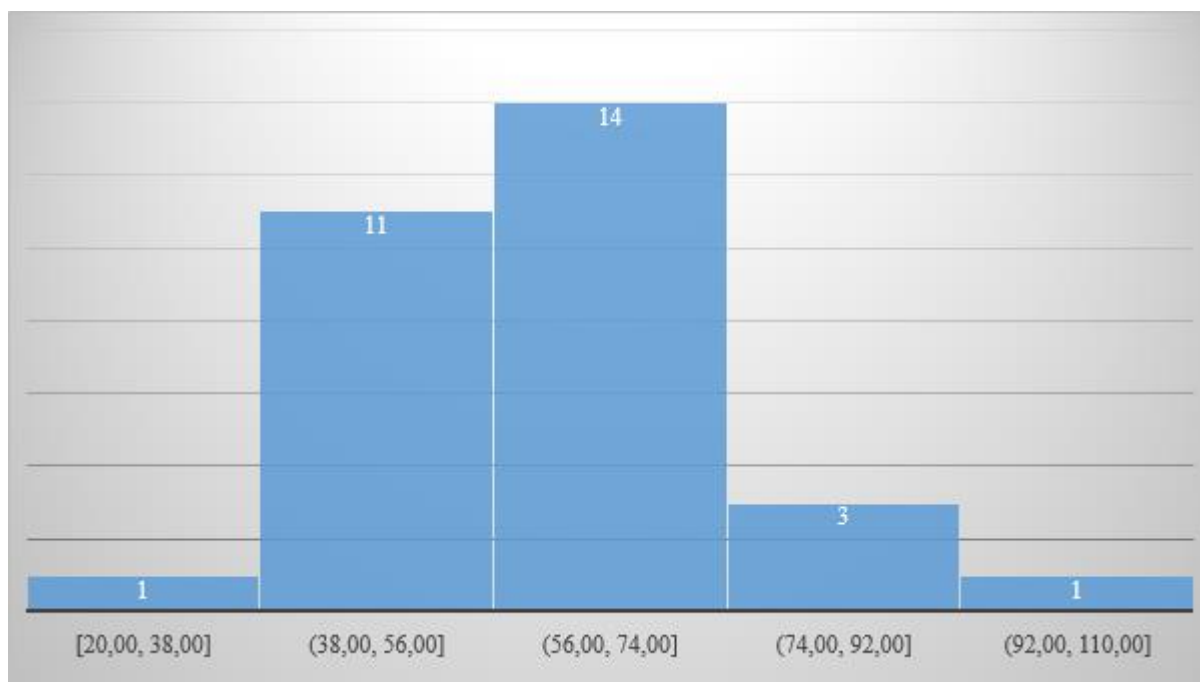
Figure 2.14.2 Average of Mispronunciation of English Items Correspondent with French Ones: Fourth Year EFL Learners (Samples D, E, and F) (2)

Figure 2.14.2 demonstrates that most pupils show overlap in an average about 38 to 74% of the words. 11 pupils indicate overlap in an average of 38 to 56%, and 14 pupils do so in an average of 56 to 74%. The objective of the graph is to establish whether there is a pattern of influence that exists within the learners and whether it is a constant among them. It also helps to further establish and investigate the extent of cross-phonological influence among the pupils.

Manifestation of Overlap In:	Percentage of Learners
> 50 % of the Targeted Features	80.00
< 50 % of the Targeted Features	20.00

Table 2.15 Fourth Year Learners' Manifestation of Overlap
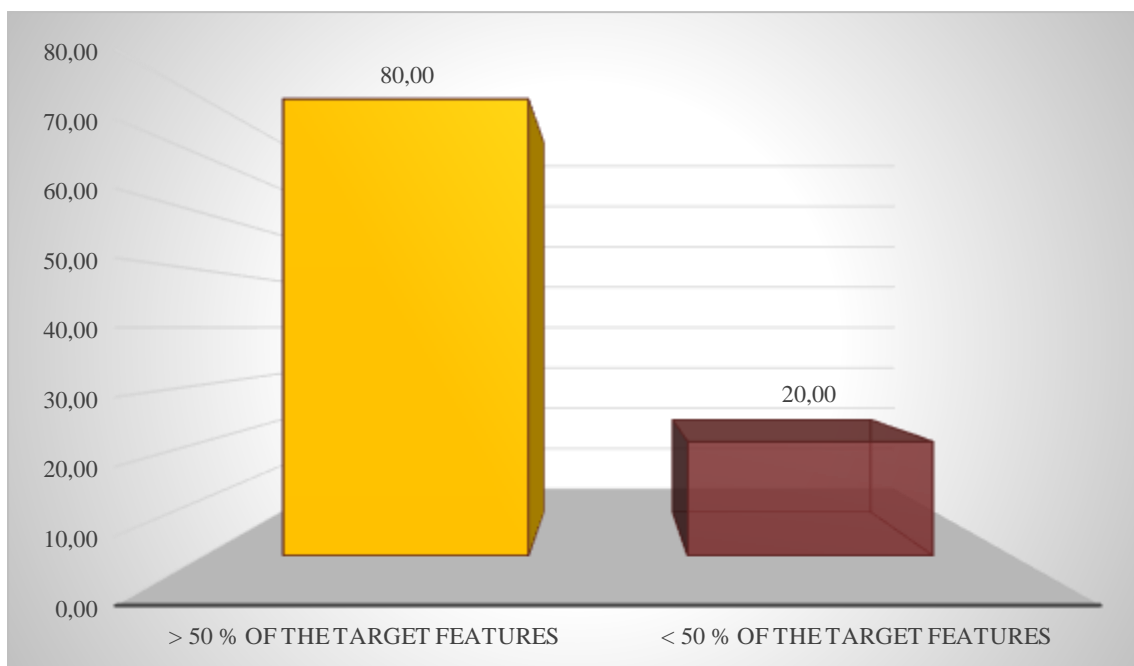
Figure 2.15.1 Percentage of Fourth Year Learners Who Manifest Overlap

The main aim is to demonstrate the manifestation of overlap in order to measure the extent of cross-linguistic influence. Figure 2.15.1 indicates that 80% of learners manifest segmental overlap of the English and French codes in more than half of the words. Thus, 20% of learners demonstrate the manifestation in less than half of the selected items.

2.2.2.3.2. Results Based on Gender

Manifestation of Overlap In:	Percentage of Females	Percentage of Males
> 50 % of the Targeted Features	84.85	70.37
< 50 % of the Targeted Features	15.15	29.63

Table 2.16 Manifestation of Phonological Overlap Between Males and Females
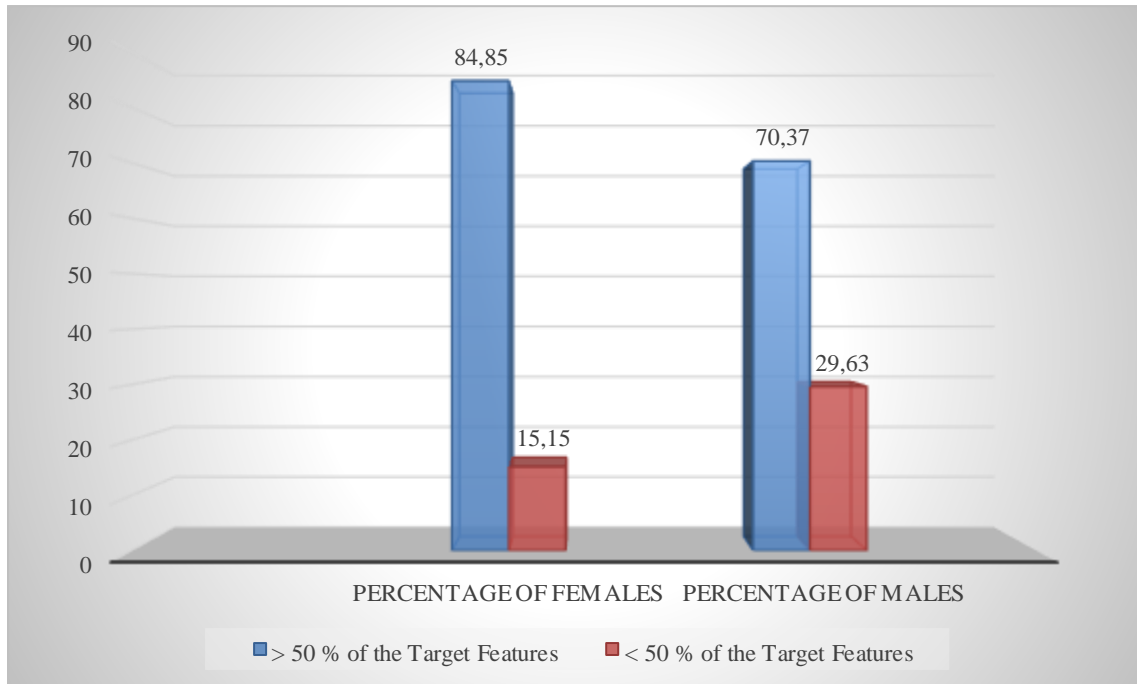
Figure 2.16.1 Manifestation of Phonological Overlap Between Males and Females

The table and figure above demonstrate that 84,85% of female learners manifest segmental overlap of the English and French codes in more than half of the words. Conversely, 70,37% of males are in accordance with the latter. All entailing a difference of 14,48% in which more females demonstrate the cross-linguistic influence in more than half of the words.

2.2.3. The Reliance on French in Pronouncing Unfamiliar Words

This phase on a surface level the reliance on French's segmental and supra-segmental properties in pronouncing English lexical items. If the pupils replace English vowel sounds, consonant sounds, or stress patters and intonation by French ones in five or more words out of 11, the researcher records them as indicating a level of reliance on the phonological system of French when pronouncing words that are unfamiliar and extremely difficult for them in English.

2.2.3.1. Sample

The sample for measuring this variable is identical to the previous phase's, as it is part of the same data collection process with the use of the same tool (check Appendix 1).

2.2.3.2. Data Analysis

The collected data is analyzed manually through listening to the audio and marking whenever there is a manifestation of the French phonological system in the pronunciation of five or more words. Thus, the analytical process is on the more general and broad side of the study, where this phase gauges the percentage of learners who rely on FL1 when pronouncing unfamiliar words in FL2.

2.2.3.3. Results

The following table demonstrates the level of reliance on French when pronouncing unfamiliar words in English with the number one being a confirmation of showing reliance in five or more words, this latter would depict a gap in the foreign language which entails the usability of French to find the appropriate equivalent:

A1 F	1	C1 M	1	E1 F	1
A2 F	1	C2 M	1	E2 M	0
A3 M	1	C3 M	1	E3 F	0
A4 M	1	C4 M	1	E4 M	1
A5 F	1	C5 F	1	E5 F	0
A6 F	1	C6 F	1	E6 M	1
A7 F	1	C7 F	1	E7 F	1
A8 M	1	C8 F	1	E8 M	1
A9 M	1	C9 F	1	E9 M	1
A10 F	1	C10 F	1	E10 F	1
B1 M	1	D1 F	1	F1 F	1
B2 F	1	D2 F	0	F2 F	1
B3 F	1	D3 M	1	F3 F	1
B4 F	1	D4 F	1	F4 M	1
B5 F	1	D5 F	1	F5 M	1
B6 M	1	D6 F	1	F6 M	1
B7 F	1	D7 M	1	F7 M	1
B8 F	1	D8 F	1	F8 M	1
B9 M	1	D9 M	1	F9 M	1
B10 M	1	D10 M	1	F10 F	1

Table 2.17 Reliance on French When Pronouncing Five or more Unfamiliar Words

Reliance on French in Pronouncing Five or More Words:	No Reliance on French in Pronouncing Five or More Words:
56	4
93.33%	6.67%

Table 2.18 Percentage of Reliance on French When Pronouncing Unfamiliar Words
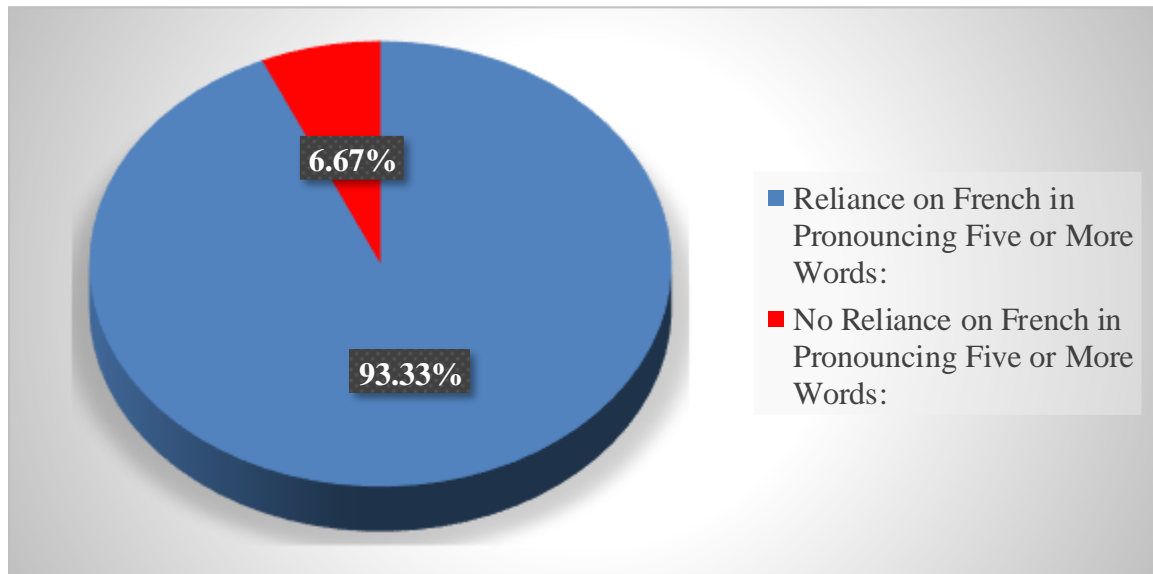
Figure 2.18.1 Percentage of Reliance on French When Pronouncing Unfamiliar Words

The table and figure above indicate that 93,33% of the pupils manifest a reliance on the segmental or supra-segmental properties of French when pronouncing unfamiliar words in the English language. However, 6,67% of them either indicate reliance in less than the five words or none at all. It is worthy to note that all the pupils with the exception of four said that they do not recognize any of the words. However, the four who did, only recognized some of the words as the following clarifies:

- A4 M → Recognized one word ' leisure ' due to its borrowed nature.

- A5 F → Recognized two words ' leisure ' and ' onomatopia ' due to the same reason.

- E2 M → Recognized two words ' leisure ' due to its borrowed nature, and ' gorgeous ' because he is familiar with the word.

- E3 F → Recognized one word ' leisure ' due to its borrowed nature.

2.2.4. The Intelligibility Test

In this phase, the main concern is to detect intelligibility through measurements in relation to mispronunciation caused by cross-linguistic influence of FL1 on FL2 at the segmental level. To measure, a small sample of the recorded responses from the second phase is what the researcher employs. The recording comprises of audio snippets of one pupil that manifested a phonological overlap of each class from all levels, the following further clarifies:

- Pupil D10 M reads the sentence → They <u>wrote</u> in Japanese.

- Pupil A8 F reads the sentence → <u>victims</u> <u>won</u> the <u>black</u> prize.

- Pupil B10M reads the sentence → <u>concisely</u> <u>choose</u> a number.

- Pupil C5 F reads the sentence → <u>I</u> copy and <u>paste</u> of other <u>ones</u>.

- Pupil E5 F reads the sentence → <u>theories</u> of books are a lot.

- Pupil F5 M reads the sentence → <u>cheap</u> or costly <u>chalk</u>.

The underlined words are the targeted items that are influenced in pronunciation by the French language as analysed in the second phase. The pupils pronounce the previous items as follows:

- Pupil D10 M pronounces the word <u>wrote</u> as→/rɔːt/

- Pupil A8 F pronounces the words <u>victims</u>; <u>won</u>; <u>black</u> as→ /viːktiːmz/; /wɔːn/; /blɒk/

- Pupil B10M pronounces the words <u>concisely</u>; <u>choose</u> as→ /kɔːnsiːseliː/; /ʃʊːz/

- Pupil C5 F pronounces the words <u>I</u>; <u>paste</u>; <u>ones</u>; as→ /ɪ/; /paːst/; /ɔnəs/

- Pupil E5 F pronounces the word <u>theories</u> as→ /θɪəriːz/

- Pupil F5 M pronounces the words <u>cheap</u>; <u>chalk</u> as → /ʃiːp/; /ʃɔːlk/

To measure intelligibility, the researcher has to simply get the recordings of the aforementioned sentences and relay them on the hearing of listeners. After that, the researcher transcribes what the listeners repeat as it is the appropriate method to gauge intelligibility (Kenworthy, 1987).

2.2.4.1. Sample

The transcription was conducted with 50 EFL speakers of advanced level, meaning English language graduates and teachers with a grasp on the language and ability to speak fluently. That was conducted in the year 2021 throughout the months of February and March in the city of Tiaret.

2.2.4.2. Data Analysis

The analysis of the data is by classification of the 12 targeted items and whether the intended utterance is successfully achieved or not. To determine the level of intelligibility, the researcher identifies the percentage of recognizability of each targeted word by the 50 EFL-speaking listeners. That is to say, the aim is the calculation of how many times each word affected by French is successfully recognized by the respondents.

2.2.4.3. Results

The following results crystallize the level of intelligibility of items that are cross-linguistically influenced by the French language with the use of the equation percentage = (value/total value)×100%.

Items	Wrote	Victim	Won	Black	Concisley	Choose
Number of Instances the Items Were Correctly Identified	4	1	0	6	0	7
Percentage of Instances the Items Were Correctly Identified	8%	2%	0%	12%	0%	14%
Items	I	Paste	Ones	Theories	Cheap	Chalk
Number of Instances the Items Were Correctly Identified	2	0	0	49	0	0
Percentage of Instances the Items Were Correctly Identified	4%	0%	0%	98%	0%	0%

Table 2.19 The Intelligibility of the Targeted Items
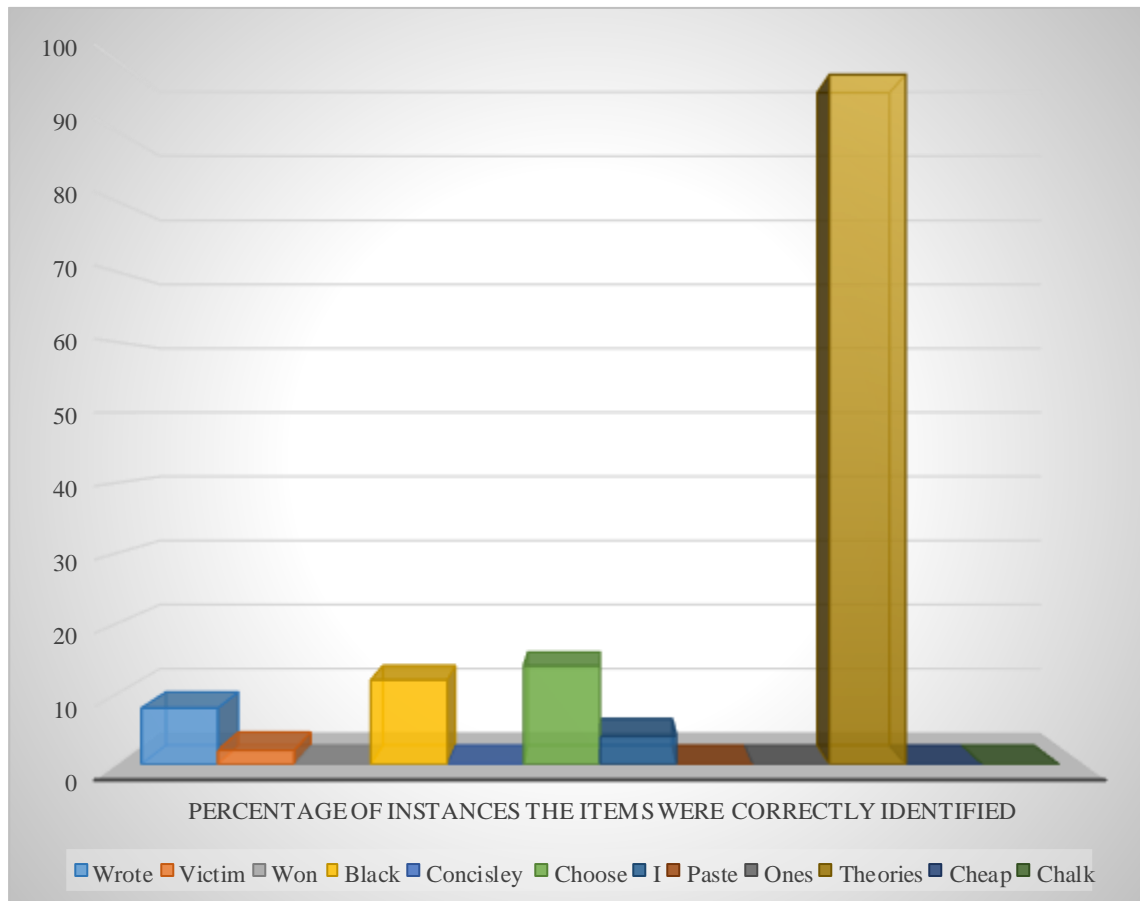
Figure 2.19.1 The Targeted Items' Intelligibility

Figure 2.19.1 demonstrates that most of the items were not correctly identified by most of the respondents. With the exception of the item ' theories ' which was identified by 98% of the respondents, the intelligible identification of other items does not exceed 14%.

Since there are 50 participants in testing the intelligibility of 12 words, then if every item was to be theoretically correctly identified, then there would be a success rate of 600 correct identifications as 100%. Thus, the following table and figure gauges the intelligibility at that level with the employment of the formula: percentage = (value/total value)×100%.

Items	12
Number of Instances the Items Were Correctly Identified	69
Percentage of Instances the Items Were Correctly Identified	11,50
Percentage of Instances the Items Were Not Correctly Identified	88,50

Table 2.20 The Overall Intelligibility of Cross-Phonologically Influenced Items
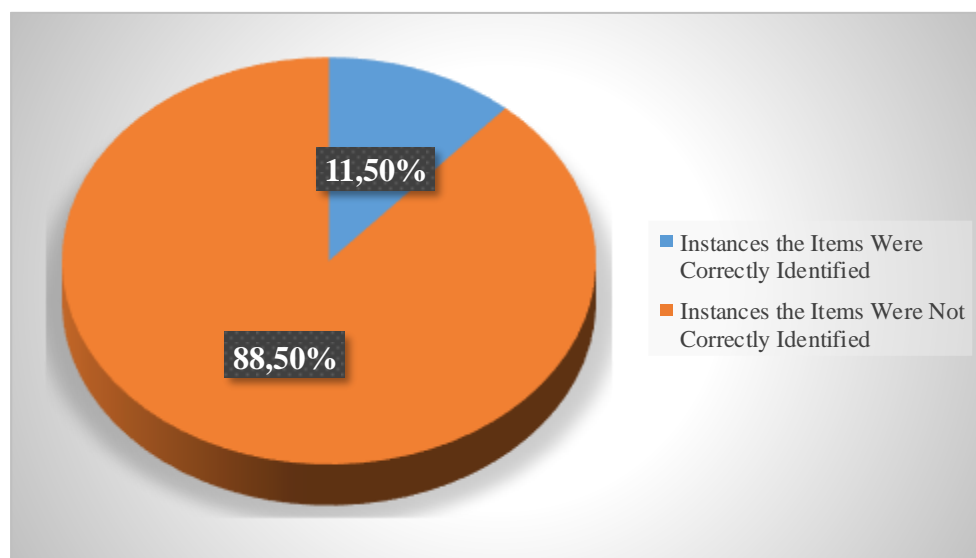
Figure 2.20.1 The Intelligibility of Influenced Items

As figure 2.14.1 indicates, respondents' correct identification the targeted cross-phonologically influenced items is extremely low. A mere 11,50% of the time, the items are intelligible, whilst the remaining 88,50% of the time, the words were not correctly identified by the participants.

2.3. Conclusion

This chapter represents the methodology to measure the aspects of the study. The method is to divide the work into three phases; the first phase aims to identify the degree of cross- phonological influence on mispronunciation, which reveals French influence on learners. The second phase is concerned with identifying the pupils' manifestation of phonological overlap with regard to gender, as well as the extent of reliance on FL1. The third phase results indicate that more than 88% of the time, the cross-phonologically influenced items are not correctly identifiable. Hence, chapter three will be devoted to interpret results further.

Chapter Three

Discussion & Interpretation

3.1. Introduction

This chapter is concerned with discussing the details of the previously presented and obtained results and contextually interpreting them. The discussion and interpretation are in accordance with the steps taken in the second chapter and in the same order. This chapter interprets and analyzes the qualitative and quantitative data collected from; the classroom observation, the audio recordings, and the intelligibility test results. The data analysis is essential to confirm or refute the hypotheses suggested in the general introduction. Finally, a set of recommendations and limitations are included at the end of the chapter.

3.2. Discussion and Interpretation

3.2.1. The Classroom Observation

3.2.1.1. French's Influence on Mispronunciation in Each Sample

Between six of the samples, four scored above 50% in terms of mispronounced words influenced by the phonological structure of French among all the mispronounced words and the remaining two scored above 45% (see Table 2.7), the discrepancy between the two may be due to the samples A and F that scored less consisting of the largest samples sizes, though all results are relatively similar (see Figure 2.7.1) and show significant presence of cross-phonological influence in all samples.

3.2.1.2. French's Influence on Pronunciation in All Samples

Since more than half of the mispronounced words identified are affected by the French's phonological system (see Figure 2.8.1), one could gather that French as FL1 has a significant existence within the mispronunciations of FL2. Thus, French's phonology as FL1 is a largely influential factor on English (FL2) mispronunciation by middle school EFL learners.

3.2.2. The Cross-Linguistic Influence Test

3.2.2.1. Results Based on Level

3.2.2.1.1. Third Year Results

Every single pupil demonstrates overlap in the targeted items in at least 40% and at most 86,67% of those items (see Figure 2.12.1), this confirms that French as FL1 does indeed have an effect on English as FL2, and that each learner is affected to a varying extent by cross-phonological influence.

Most pupils show overlap in an average about 40 to 85% of the words (see Figure 2.12.2) which entails that learners share an extensive amount of overlapping items and that is evidence that cross-linguistic influence exists as a varying pattern; meaning that it is a constant within EFL learners of the third year level according to the aforementioned results that indicate that each learner belongs to a group of learners that exhibit about relatively the same percentage of cross-phonological influence.

76,67% of learners demonstrate segmental overlap in more than half of the words, and the rest demonstrate the manifestation in less than half of the selected items (see Figure

2.13.1), this may be interpreted as a sign that third year learners are largely influenced by cross-phonological influence of French as FL1 on English as FL2 due to how most of them are affected at that level in more than half of the words.

3.2.2.1.2. Fourth Year Results

Every fourth year pupil demonstrates overlap in the targeted items in at least 20% of them (see Figure 2.14.1) which may be an indication that the vast majority of EFL learners of that level are affected by French (FL1)'s phonological influence on English (FL2), and considering that the largest percentage of segmentally overlapped words is 100%, the conclusion would be that such influence could extend to a significantly large extent depending on each individual.

According to (Figure 2.14.2) most pupils show overlap in an average about 38 to 74% of the words which is an indication that the cross-phonological influence is extensively present within fourth year learners pattern wise.

Since 80% of learners manifest segmental overlap of the English and French codes in more than half of the words (see Figure 2.15.1), then fourth year learners are largely susceptible to the cross-phonological influence of French as FL1 on English as FL2.

According to the results based on level, there is no need for differentiation between the third and fourth year levels due to their relatively similar results that indicate that EFL learners newly introduced to English as FL2 are significantly influenced by French (FL1) and its phonological system when pronouncing words.

3.2.2.2. Results Based on Gender

84,85% of female learners manifest segmental overlap of the English and French codes in more than half of the words, whilst 70,37% of males do so (see Figure 2.16.1). The difference of 14,48% where more females demonstrate the cross-linguistic influence indicates that females are more susceptible to French's influence on their pronunciation of English as FL2; however, whether 14,48% is a significant enough of a percentage to constitute the aforementioned conclusion is a rather subjective judgment and open to the interpretation that both genders manifest relatively the same level of influence indicating that there is no large significance to gender in the equation.

3.2.2.3. The Reliance on French in Pronouncing Unfamiliar Words

93,33% of all pupils rely on the segmental or supra-segmental properties of French when pronouncing unfamiliar words in the English language (see Figure 2.18.1), and this is a clear indication of French's deep-rooted existence as an influential factor on the production of English. From an analytical perspective that is due to French being the previously learned language as FL1 and English being the newly introduced one to the pupils as FL2. Thus, when these EFL learners encounter a word that is quite difficult due to its length or unfamiliarity, they revert back to what is familiar which are the phonological properties of the previously learned language with a striking similarity which applies to French and English, especially when the aspects of borrowing and aesthetic similarities are prevalent. Therefore, when it pertains to French as FL1 and its influence on English as FL2 with regard to pronouncing unfamiliar and difficult words, the conclusion to be drawn is the existence of such influence, and that a previously learned code could be phonologically influential as an aiding factor to pronounce unfamiliar and difficult words in a newly introduced language.

3.2.3. The Intelligibility Test

- Pupil D10 M → They <u>wrote</u> in Japanese.

- Pupil A8 F → <u>victims</u> <u>won</u> the <u>black</u> prize.

- Pupil B10M → <u>concisely</u> <u>choose</u> a number.

- Pupil C5 → <u>I</u> copy and <u>paste</u> of other <u>ones</u>.

- Pupil E5 F → <u>theories</u> of books are a lot.

- Pupil F5 M → <u>cheap</u> or costly <u>chalk</u>.

- Pupil D10 M pronounces the word <u>wrote</u> as→ /rɔːt/

- Pupil A8 F pronounces the words <u>victims</u>; <u>won</u>; <u>black</u> as→ /viːktiːmz/; /wɔːn/; /blɒk/

- Pupil B10M pronounces the words <u>concisely</u>; <u>choose</u> as→ /kɔːnsiːseliː/; /ʃʊːz/

- Pupil C5 F pronounces the words <u>I</u>; <u>paste</u>; <u>ones</u>; as→ /ɪ/; /paːst/; /ɔnəs/

- Pupil E5 F pronounces the word <u>theories</u> as→ /θɪɔriːz/

- Pupil F5 M pronounces the words <u>cheap</u>; <u>chalk</u> as → /ʃiːp/; /ʃɔːlk/

The aforementioned data indicate the cross-linguistic influence manifested in each word, the following attempts to analytically interpret the influence existent in each word:

- The first word ' wrote ' was pronounced /rɔːt/ instead of the correct /rəʊt/, and the word is juxtaposed in the study with the word ' Charlotte ' /ʃaːʁlɔːt/; thus one may conclude that the letter ' O ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The second word ' victims ' was pronounced /viːktiːmz/ instead of the correct /vɪktəmz/, and the word is compared in the current research with the word '

  minims '/miːniːm/; thus one may conclude that the letter ' I ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word, plus since it is a borrowed word shared in both languages one would deduce that the learners' familiarity with the item in the already acquired or learned language is a largely essential factor in how the word was pronounced by the learner.

- The third word ' won ' was pronounced /wɔːn/instead of the correct /wʌn/, and the word is placed in comparison with ' ona ' /ɔna/; thus one may conclude that the letter ' O ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The fourth word ' black ' was pronounced /blɒk/ instead of the correct /blæk/, and the word is juxtaposed in the study with the word ' attaque ' /aːtak/; thus one may conclude that the letter ' A ' was pronounced in the midst of the targeted word in

close proximity to the way it was pronounced in the indicating French word since the phonemes /ɑ/ and /a:/ are quite similar in pronunciation.

- The fifth word ' concisely ' was pronounced /kɔːnsiːseliː/instead of the correct /kənsaɪsliː/, and the word is placed in comparison with the word ' precise ' /pxɪsiːz/; thus one may conclude that the letter ' I ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The sixth word ' choose ' was pronounced /ʃʊːz/ instead of the correct /tʃʊːz/, and the word is compared with the words ' chocolat ' /ʃɔːkɔːla/ and ' chance' /ʃɔːns/; thus one may conclude that ' CH ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French words.

- The seventh word is the personal pronoun ' I ' which was pronounced /ɪ; / instead of the correct /aɪ/, and the word is juxtaposed in the study with the word ' Il ' /iːl/; thus one may conclude that the letter ' I ' was pronounced in the midst of the targeted word close to the way it was pronounced in the indicating French word since the particular pupil pronounced ' Il ' as /ɪl/.

- The eighth word ' paste ' was pronounced /paːst/ instead of the correct /peɪst/, and the word is paralleled with ' vaste ' /vaːst/; thus one may conclude that the letter ' A ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The ninth word ' ones ' was pronounced /ɔnəs/ instead of the correct /wʌnz/, and the word is paralleled with ' on a ' /ɔna/; thus one may conclude that the letter ' O ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The tenth word ' theories ' was pronounced /θɪɔriːz/ instead of the correct /θiːriːz/, and the word is compared in the current research with the word ' theorie ' /tɪɔʁiː/; therefore, one may deduce that the word was pronounced the same as the French word due to both being commonly shared in the two codes because of borrowing. That leads to the conclusion that whichever one is previously acquired imposes its phonological nature on its equivalent in the newly introduced code, and in this case the phonological system of French (FL1) influenced that of English (FL2).

- The eleventh word ' cheap ' was pronounced /ʃiːp/ instead of the correct /tʃiːp/, and the word is paralleled with ' Charlotte ' /ʃaːʁlɔːt/; thus one may conclude that ' CH ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French word.

- The last word ' chalk ' was pronounced /ʃɔːlk/ instead of the correct /tʃɔːk/, and the word is compared with the words ' chocolat ' /ʃɔːkɔːla/ and ' chance ' /ʃɔns/; thus one may conclude that ' CH ' was pronounced in the midst of the targeted word the way it was pronounced in the indicating French words.

Most of the items were not correctly identified by most of the respondents; in fact, exactly half of the items were not correctly identified by a single student, and the rest scored a low percentage in identification by the learners (see Table 2.19). The most intelligible item was ' theories ' which was identified by 98% of the respondents (see Figure 2.19.1), and that may be due to the borrowed nature of the word as previously explained. To further expand on that, the word has adopted the phonological property of its equivalent in the other code; meaning the word was correctly identified by most people because the particular pronunciation /θɪɔriːz/ may have come to be accepted as correct by most EFL speakers in Algeria at least.

The second most recognizable word first ' choose ' was significantly lower than the first with 14% (see Figure 2.19.1), however it was more than most other items and that is probably due to context clues within the sentence ' Concisely choose a number ' as it is less likely in the mind of the 14% of respondents that the sentence would be ' Concisely shoes a number. ' Although, it is worthy to note that most people identified the word as ' shoes ' in accordance with the pupil's pronunciation as /ʃʊːz/.

The third most intelligible item was ' black ' by 12% (see Figure 2.19.1), and that may be due to the closeness of the two phonemes /æ/ and /ɑ/.

The items ' won, ' ' concisely, '' paste, ' ' ones, ' ' cheap, ' and ' chalk ' scored 0% (see Table 2.19), that may be due to the drastic alteration of their phonological structure by altering one or more phonemes in each item, and that alteration is by the influence of French as FL1 as previously established in the current study.

Respondents' correct identification the targeted cross-phonologically influenced items is significantly low as 11,50% of the time, the items are intelligible, while the rest 88,50% of the time, the words were not correctly identified by the participants (see Figure 2.20.1). This may clearly indicate that the alteration of phonemes caused by French's phonological system,

as FL1, on English as FL2 affects intelligibility to a significant extent; for most instances where items in the third phase of the study should have been identified correctly displayed an opposite result proving that cross-phonological influence has its effect on intelligibility at least in the context of the current study.

3.3. Recommendations

The following is an assortment of general recommendations in order to further expand on aspects of the research and perhaps help solve the problems that the cross-phonological influence may cause as well as its possible benefits.

3.3.1 Teaching Phonetics and Phonology

The most obviously available and possible solution to how the problem of cross-linguistic influence that causes mispronunciation may be teaching the aspect of phonetics and phonology in abundance since they govern pronunciation, and also for FL learners to learn how to pronounce sounds rather than about those sounds in great detail may be greatly beneficial (Burgess & Spencer, 2000).

3.3.2 Raising Awareness

Many EFL teachers and learners may not be aware of the existence of such influence and its drastic effects on the pronunciation process, and increasing awareness of that might be helpful in combatting its causing of mispronunciation.

3.3.3 Demonstrating the Difference Between the Codes

The two codes of English and French have undeniable similarities that cause learners to merge the two in an EFL context and heavily rely on the one that is previously learned to pronounce the other. Perhaps, when teaching the English language to new learners there should be an emphasis on demonstrating the difference between the codes at the level of phone.

3.3.4 Coming-up with Strategies to Familiarize Learners with Difficult Words

EFL learners generally do not have contact with difficult and unfamiliar words prior to their introduction to the language, thus familiarizing them bit by bit with words of that nature through the usage of means such as art, films, and music may be helpful in avoiding reliance on French in pronouncing words of that nature.

3.3.5 Further Study

Further study may be helpful in identifying whether this cross-linguistic influence could be utilized in a positive way, and that is in terms of if new ways could be found to use the positive aspects of the influence in learning the new language.

3.4. Limitations

The following demonstrates a few limitations that the current research has dealt with. First, one of the main tools of research has been audio recording, and although effective in gathering the data, there have been problems in terms of location of the recording process as it has been conducted in a sub-optimal location. Thus, there were slight issues in regard to noise. Furthermore, the original intent was to expand the case study to other states to conduct the same procedures in order to form a more generalized conclusion to a larger span and

increase accuracy and representativeness. However, due to COVID-19 travel has been restricted at the time the research has been conducted. Finally, the amount of data was quite detailed and extensively large, and has been analyzed by merely a single person. Though the utmost care and attention possible has been paid by the researcher to analyze the recordings, there is a small margin for human error. However, it is not large enough to significantly affect the data, results, or the conclusions drawn from the research.

3.5. Conclusion

The current chapter's main focus is the discussion and interpretation of the results that are represented in the figures and tables in the previous chapter. In accordance with the division of the work into three phases, the following will conclude what the results indicate:

The first phase employing classroom observation identifies the extent of cross-phonological influence of French as FL2 on mispronunciation as being quite significant, as more than half of mispronounced words by middle school EFL learners are influenced by French (FL1), thus the conclusion to be drawn is that the aforementioned influence in the EFL context plays a significant role in mispronunciation.

In the second phase which is on pupils' manifestation of phonological overlap, with the gender factor being included, as well as the extent of reliance on FL1 indicates that Algerian EFL learners of the third and fourth levels alike are largely susceptible to cross-phonological influence of French as FL1 on English as FL2. Furthermore, females are more likely to demonstrate that influence although it is up to debate whether the relatively small difference between the male and female results validates with certainty the role of gender as an intervening factor in the equation. Finally, when it pertains to pronouncing difficult and

unfamiliar words in English (FL2), middle school EFL learners in Algeria heavily rely on French (FL1) and its phonological system due to their familiarity with the previously learned code. Thus, the second phase does indeed confirm the existence of French's influence as FL1 on the pronunciation of English as FL2 by middle school EFL learners in Algeria.

The third phase simply confirms that the cross-linguistic influence verified in the second phase drastically affects the intelligibility of cross-phonologically influenced items due to the manner in which their structure changes as indicated by the evident results.

General Conclusion

General Conclusion

The current study mainly embarks on pronunciation and intelligibility in the Algerian EFL context. The question of cross-linguistic influence is of interest to many linguists and scholars, and the current study should shed more light on this aspect through the EFL scope in the Algerian context as a special case. This descriptive analytical study is concerned with gauging the phonological influence of a previously learned code on a new one.

Many studies have confirmed that a given code's phonological system can affect another in an EFL context, and especially in one that is extremely similar to the Algerian context, these studies are highlighted in the first chapter of this paper. This study is to add to the understanding of cross-phonological influence in a non-native context and its effect on the conduction of communication when it pertains to the English language with taking into account variables like gender, mispronunciation, and pronunciation of difficult and unfamiliar words.

The research was conducted on third and fourth year EFL middle school learners in Ould Brahim Said, Tiaret, with three classes from each level, as well as EFL fluent speakers and teachers. To select respondents from each classroom the proportional stratified random sampling technique was used. The tools that were employed were class observation, individual audio recording, and transcriptions; all were helpful in answering the main research question Plus, they aided in testing the main hypothesis which was; the cross-linguistic influence of French on English may significantly affect intelligibility of middle school EFL learners in the Algerian context.

The study was divided into three phases to accommodate the tools of research and their purpose in answering questions and testing hypothesis. The first phase employed classroom observation to test the hypothesis; the cross-linguistic influence of FL1 on FL2 may be extensively influential in terms of mispronounced items. The second phase used audio recordings of selected respondents from each class to gauge influence, access the gender variable, and the reliance on that influence when pronouncing difficult and unfamiliar words. Finally, the third phase was to test the aspect of intelligibility and so answer the main general question; what is the effect of the cross-linguistic influence of French on English on the intelligibility of middle school EFL learners in the Algerian context? Thus, test its according main hypothesis.

In actuality, the hypotheses proposed by the study have been confirmed by the findings. The first phase found that more than 50% of words mispronounced by the EFL learners are seemingly cross-phonologically influenced by French as FL1, confirming that the cross-linguistic influence of FL1 on FL2 in the Algerian context is influential to a largely significant extent when it comes to mispronunciation. Furthermore, the second phase found that 76,67% of the third year learners manifest segmental overlap of the English and French codes in more than half of the words and that 80% of the fourth year learners do the same, confirming that the FL1 is extensively influential on FL2 in the Algerian EFL context at the middle school level. It also found that 84,85% of female learners manifest segmental overlap of the English and French codes in more than half of the words, whilst 70,37% of males do the same, which entails that gender relatively plays a role in the influence of FL1 on FL2 and that females are more likely to manifest the cross-phonological influence by a relatively small margin; however, that is up to further research since a larger sample size may demonstrate more or less of a difference between the genders on the spectrum of influence, and the difference of 14,48% is as well debatable on whether it is significant enough to constitute a

verifiable difference between males and females in the context of the study since that judgement is relatively subjective. Moreover, results found that 93,33% of all pupils in the study rely on the segmental or supra-segmental properties of French when pronouncing difficult and unfamiliar words in the English language, confirming that learners rely heavily on FL1 in pronouncing words that are difficult and unfamiliar to them in FL2. Finally, the third phase found that 88,50% of the time, the cross-phonologically influenced words were not correctly identified by the proficient EFL speakers which answers the main research problem and confirms the hypothesis that the cross-linguistic influence of French as FL1 on English as FL2 in the Algerian EFL context at the middle school level has a large impact on intelligibility.

In conclusion, this study examined the cross-phonological influence of French as a second language on English as a foreign code and the impact of that influence on intelligibility. Through that lens, the aspects of that influence and its extent and effect on mispronunciation as well as the variable of gender and reliance on such influence in pronouncing difficult and unfamiliar words. The methods employed in the research proved to be quite successful in gathering necessary data, and the data was clear enough to provide a confirmation of the proposed hypotheses.

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Appendices

Appendix 1

This piece of paper contains an amount of words and sentences to be read by you to help us in our study on the English language. This is **NOT** a test or an exam; so THERE ARE NO WRONG ANSWERS. **DO NOT WORRY ABOUT MAKING MISTAKES.** Please just read freely. Thank you for your participation.

I) The following sentences are in English, please read them:

a - I copy and paste of other ones.
b- He matches two odds in the exercise.
c - Theories of books are a lot.
d - Victims won the black prize.
e - They wrote in Japanese.
f - Concisely choose a number.
g - Comfort is an excellence at the hotel.
h - Cheap or costly chalk.

II) The following sentences are in French, please read them:

a -Charlotte mange les pâtes.
b - Vous avez une chance précise.
c - On a la théorie, et il a les minimes vastes.
d - La microscopie attaque la défense au contraste match.
e - Le préférence de chou est le lapin, ce n'est pas le chocolat.

III) Read the following words:

a -**In French**: Lourd - Date - Adore - Bruit - Victimes.
b -**In Arabic**: يوم - عربه - قطار- حصان
c -**In English**: Savor - Should - Place - Hour - Squirrel.

IV) The following words are in English, please read them:

a - Constituents - Gorgeous -Leisure - Distinguish - Patterning.

b - Anathema - Ignominious - Onomatopoeia - Posthumous - Segue- Serendipitous.

V) Give a word to each of the three images in English:

EMINEM
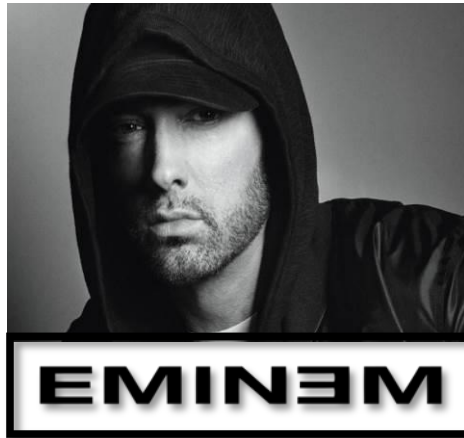
Transcriptions of the Audio Recordings :

- **Please Repeat Exactly What You Hear :**

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