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## Linguistic Relativity and Bilingualism: Investigating the Influence of Foreign Language and Culture on English Language Learners' Expressiveness and Emotionality. <br> The case of Algerian students of English, University of 8 mai 1945, Guelma.

A dissertation submitted to the Department of Letters and English Language in partial fulfilment of the requirements of Master's Degree in English Language and Culture.

## Board of Examiners

Chairperson: Miss Samiya HARIDI (MA/A) University of 8 mai 1945 - Guelma
Supervisor: Miss Meriem SERHANI (MA/A) University of 8 mai 1945 - Guelma
Examiner: Mrs Katia MEBARKI (MA/B) University of 8 mai 1945 - Guelma

## DEDICATION

To my grandmother and first mother, Louiza, she would have been proud.
To my mother, to whom I will forever be indebted.
To the teacher who taught me the English alphabet, Mrs Bounnar.
To the teacher who made me love Linguistics, Miss Serhani.
To everyone who believed in me.

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#### Abstract

This study investigated the influence of English as a foreign language on Arabic-English coordinate bilinguals' expressiveness and emotionality through a questionnaire and a test. Therefore, it was hypothesised that learning English as a foreign language would influence Algerian learners' expressiveness in their dominant language and second language (English). The questionnaire aimed at garnering information about students' self-perceived level of proficiency and exposure to the target language's culture, amongst other factors. Spearman's correlation tests were computed to test a possible association between the latter factors and emotional expressiveness, whereupon coefficients recorded a positive correlation between expressiveness and self-perceived proficiency level ( $r=0.332$ ), and exposure to the target language culture ( $r=0.250$ ). Further, a qualitative analysis of students' emotional productions was carried out through a test assessing participants' language choice in six situations testing their expressivity, which allowed gaining insights into the participants' expression of emotions, language choice, and code-switching. The results of this study suggested a complex relationship between the learners' language choices regarding expressiveness and emotionality and a set of influential factors. This research concluded that both the dominant language (L1) and less dominant language (L2) are employed in emotion expressivity depending on the intensity of the emotion and the nature of emotional materials.


Keywords: emotion, expressiveness, emotionality, bilingualism, code-switching, EFL.

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## LIST OF ABBREVIATIONS

| ANOVA | Analysis of variance |
| :---: | :---: |
| APA | American Psychological Association |
| BEQ | Bilingualism and Emotion Questionnaire |
| CS | Code-Switching |
| EFL | English as a Foreign Language |
| ELL | English Language Learner |
| FL | Foreign Language |
| FLL | Foreign Language Learning |
| IM | Instant Messaging |
| KWH | Kruskal-Wallis H (Test) |
| L1 | First Language |
| L2 | Second Language |
| LoI | Length of Instruction |
| LR | Linguistic Relativity |
| LRH | Linguistic Relativity Hypothesis |
| MSA | Modern Standard Arabic |
| OCEAN | "The Big Five" personality test: Openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism |
| SLA | Second Language Acquisition |
| SPSS | Statistical Product and Service Solutions |
| SWH | Sapir-Whorf Hypothesis |
| TL | Target language |

## GENERAL INTRODUCTION

Bilingualism today is not uncommon any longer; quite the reverse, it has become mainstream (Grosjean, 2010; Chumbow, 2018). Further, learning a new language means handling dual linguistic and conceptual systems. According to some hypotheses, this would make a second-language speaker's production of an utterance affect his or her ways of perceiving and representing aspects of the world in particular contexts, including, but not exclusive to, perception, categorisation, and expression of emotions. Hence, there is a possibility of an influence of the second language on the expression of emotions.

## 1. Statement of the Problem

Research on emotions and language highlights the link between expression of emotions, language, and its associated culture. Further, the increasing number of conducted studies on how such a relationship is linked to bilingual speakers reported a more complex connection between emotional expressiveness and a set of determining factors, such the nature of emotion and intensity of emotion. Moreover, the linguistic situation in Algeria is rather complicated (Daoudi, 2018). For a relevant case in point, Algerian English Language Learners (ELLs) across the country are speakers of more than one language: Algerian Arabic (Ad-dārija) or Tamazight (depending on the region) is their native tongue, Modern Standard Arabic (MSA) is the first language they learnt in school but is used chiefly as a language of instruction and on official or formal occasions, French is the first foreign language they learnt, and English is the second foreign language (learnt since middle school) and the language in which EFL university students pursue their programme. Certainly, their levels of proficiency in either of these languages vary relatively to each student's education, environment, and priorities. It is important to note that this study restricts its focus on the two languages spoken by Algerian bilinguals
studying English as a foreign language: Arabic and English; since the former is their mother tongue and the latter is the language of instruction in their field of study. Also, both Algerian Arabic (Darija) and MSA will be referred to as L1, while English will be referred to as L2. All things considered, a condition of such solicits the following questions:

- Can English language be a better renderer of the Algerian student's emotional expressiveness than his or her mother tongue in some particular contexts? If so, what would be the reasons behind such preferences?


## 2. Aims of the Study

This study gears towards exploring how Algerian learners of English perceive their different languages and express emotionality in their first language and the target language. To this end, this research has a three-fold purpose: (a) it inspects the language choices and direction of code-switching in their expressiveness of emotions in specific contexts; (b) it investigates the influence of either Arabic or English linguistic and cultural norms and properties on their attitudes towards emotion concepts and emotional expressiveness; and, (c) it inquires whether or not their level of proficiency in English, as well as their exposure to English language and culture, would influence their language choices. Thus, three core questions are confronted in the inquiry of this subject:

- Do Algerian students of English prefer to use either of the languages exclusively to discuss particular topics and express certain emotions?
- What are the factors that influence an Algerian ELL's choice of expressing oneself in one language rather than the other?
- Does ELLs' level of proficiency in English language and exposure to the target language culture play a role in their language choices and emotional expressiveness?


## 3. Research Hypotheses

In this study, an influence of language and its associated culture on emotional expressiveness is assumed. If the perception and expression of emotions were influenced by the corresponding cultural background, then Algerian learners would demonstrate preferences in expressing themselves in one language rather than the other depending on the context:

- $\quad \mathbf{H}_{1}$ : Algerian students would prefer to express themselves in one language rather than the other in certain contexts.
- $\mathbf{H}_{0}$ : Algerian students would always prefer to express themselves in their mother language.


## 4. Research Methodology and Design

### 4.1. Research Method

This research combines qualitative, quantitative, and comparative analyses. The qualitative data aims at accounting for students' language choices in the expression of particular emotional concepts, in addition to the reasons lying behind such choices. For this purpose, a test was conducted to stimulate natural and spontaneous emotional productions, regardless of linguistic or formal considerations. Also, a questionnaire was administered to students to assess the proficiency levels of the students in English alongside exposure to English language and culture, in addition to the students' linguistic habits and preferences and emotionality and expressiveness in their first and second languages. Statistical analysis followed the questionnaire to test a correlation between
the factors shaping the variables of self-perceived proficiency level and exposure to the target language culture with factors related to emotional expressiveness.

### 4.2. Population of the Study

In this research, sixty-two (62) postgraduates at the Department of Letters and English Language, out of the whole theoretical population (220), were selected randomly. The choice of postgraduates was motivated by the fact that these students, after having gone through the longest length of instruction possible for an Algerian ELL, they would have conceivably improved their levels of proficiency and gained sufficient exposure to the target language and culture. While on the subject, the latter two elements are assumed to be the factors that influence Algerian learners of English emotional expressiveness.

### 4.3. Research Tools

Research data were gathered through two different tools: a test and a questionnaire. Both research tools were administered to bilingual participants, who are Algerian learners of English as a foreign language, with Arabic (MSA/Darija) as their native language (L1). The test was designed to provoke negative and positive emotions that stimulate natural and spontaneous productions to express them. The questionnaire preceding the test aimed at drawing information about the participants' age, length of instruction (LoI), and motivation to learn English. Moreover, it elicited details about their proficiency levels and exposure to the target language (TL) and culture to observe whether these two variables have any possible influence on their emotionality and expressiveness in L1 (Arabic/Darija) and L2 (English). Furthermore, the questionnaire examined the participants' attitudes, habits, and beliefs they hold about language use and choices in relations to specific emotional experiences.

## 5. Structure of the Dissertation

This research consists of a theoretical part which, in turn, is divided into two chapters; plus, a third chapter that is devoted to the field investigation. Chapter One encompasses controversial views about emotionality and expressiveness, coupled with discussions about the influence of language, cognition, and culture on perception, expression, and experience of emotions. In order to delve into this influence, the chapter highlights the relationship between language and thought, the history of Linguistic Relativity Hypothesis, the claimed emotional Sapir-Whorf Hypothesis, and the relationship between cultural norms and emotional experiences. The second chapter introduces the area of bilingualism and emotions. It covers controversial views about who is considered a bilingual, in addition to a focus on types of bilingualism and its language use modes. Further, the chapter discusses the connexion between bilingualism, personality, and emotions. The third chapter comprises a field investigation. It defines the methodological framework of the study through its procedure, population, and experiment. Besides, it presents an analysis of the data gathered throughout the research and aims to provide answers to the research questions. Lastly, the research concludes with a general conclusion highlighting the main findings of the study, underscoring its shortcomings, and recommending further possible investigations.

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## Introduction

Human language is a powerful faculty by which homo sapiens are imbued and distinguished from the rest of the creatures in this world. As Anshen (1995) puts it, "it is by virtue of the provocative power of language which grasps, shakes, and transforms that human beings become human" (p. 10). In addition to its power-asserting nature and faculty of encoding experiences into symbols, language generously allows for the manifestation of emotions, needs, beliefs, and thoughts. Emotion, on the other hand, is an indispensable phenomenon we live by and showcase in our daily encounters. Besides, language can be a window into the emotional psyche because the way humans put emotions into words offers insights into the human mind. In the modular view of mind, promoted by Chomsky (1965) and Fodor (1983), language and emotion are assumed not to overlap when processed or represented. Contrariwise, newer approaches to human psychology through psychological constructivism allude to that "an emotional reaction can be influenced by any aspect of the ongoing situation, such as the language being spoken" (Caldwell-Harris, 2014, p. 1). This chapter will try to unravel the areas in which language, thought, and emotion interlace.

### 1.1. Emotion and Expressiveness

### 1.1.1. Emotion

Emotion is a complicated humanly feature that is often linked with impermanent states of happiness, anger, sadness, euphoria, disgust, or fear. While it is frequently used synonymously with "feeling" amongst laypersons, emotion is in fact too perplexing to settle for such a synonymy when defined. Wierzbicka (1999) maintains that choosing between the two often "confused" (p.5) terms opens a contentious discussion involving the two disciplines of "Human Biology" and "Language and Culture". For this reason,
the study of emotion is regarded as being "more objective" than the study of feelings by dint of its "biological foundation" (p.1).

The English term "emotion" was brought from the French language (émotion) in the 1600s but only until 1800s that it was used in the scientific investigation of the human mind. Earlier on, what we know today as 'emotion' was formerly alluded to using the terms "passion", "affection", and mental "active powers" (Dixon, 2012). A handy definition for emotion can be found on the widely-accessible Britannica Encyclopaedia: "A complex experience of consciousness, bodily sensation, and behaviour that reflects the personal significance of a thing, an event, or a state of affairs" (Solomon, 2019). Alternatively, Michel Cabanac stresses the factors of intensity and pleasure in his proposed definition, "emotion is any mental experience with high intensity and high hedonicity" (2002). Wierzbicka (1999, p.5) holds that the term 'emotion' per se refers to thought, feelings, and the body. Likewise, anthropologist Michelle Rosaldo (1984, p. 143) ties emotion to bodily and thought-related vibrations by arguing that "emotions are thoughts somehow 'felt' in flushes, pulses, 'movements' of our livers, minds, hearts, stomachs, skin. They are embodied thoughts, thoughts seeped with the apprehension that 'I am involved'" (as cited in Wierzbicka, 1999, p. 2). When emotion was first introduced into English glossary, it came to denote "the bodily stirrings accompanying mental feelings" (Dixon, 2012); however, it was Scottish philosopher Thomas Brown who instilled the term with an academic aura by incorporating the category of emotions in his highly-significant theoretical studies on the human mind. Ironically enough, Brown himself admitted the indefinability of the term 'emotion' (Dixon, 2012). Still, he proposed that if there were any conceivable definition to the term it would be worded as "vivid feelings, arising immediately from the consideration of objects, perceived, or remembered, or imagined, or from other prior emotions" (Brown, 1820, as cited in Dixon,
2012). All in all, there are enormous perspectives from which emotion is studied according to Solomon (2019), which justifies the scholarly disagreement on a unique definition to the term that is "taken for granted in itself" (Cabanac, 2002, p. 2).

Apart from the fact that emotions are "biologically constrained" (Mesquita, Boiger, \& De Leersnyder, 2017), emotions are bound to their socio-cultural terrain. Also, emotion theories seem to concur on the verity that emotions bring about action and give import to the accompanying conditions. Hence, emotions eclipse the particularity of personal experience and put human beings within their peripheral socio-cultural setting. For example, when we are angry, we show to the interlocutor that we disapprove of their demeanour and that we expect a more decent behaviour from them. By so doing, a negative meaning is assigned to the other person's behaviour that made us feel angry, and this requires them to rectify their behaviour. Consequentially, by having an emotion, humans uphold a position with the intention of connecting with their surroundings (Frijda, 1986; Mesquita, 2003, 2010; Solomon, 2003, as cited in Mesquita, Boiger, \& De Leersnyder, 2017, pp. 95-96).

### 1.1.2. Expressiveness and Emotionality

Listening to speech prompts us to think unprecedented thoughts in our minds (Pinker, 2015). In the same vein, language is essential for humans to transfer the information as well as to express subjectivity in one's speech. Roman Jacobson names six language functions in his model (1975): "Referential, poetic, emotive, conative, phatic, and metalingual". Accordingly, the expressive power of language is manifested when users employ words in order to expose their internalised thoughts, feelings, and emotions; which makes speakers dependent on the linguistic repertoire available in their language for that to happen as seamless as possible. According to Alexandrova (1984, p. 7), the
emotive, or expressive, function of the language echoes "the emotional state of the speaker, his/her subjective attitude towards the phenomena and objects of extralinguistic reality" (as cited in Apresyan, 2018, p. 8). As a result, tension-infused thought is rendered into linguistic units festooned by the speaker's expressive performance (Apresyan, 2018, pp. 7-8).

Apresyan (2018) notes that Russian linguistics marked the cleavage separating "expressiveness" and "expression" and rejected the traditional assumption that connected both concepts to the speaker's emotive condition, individual experience, and attitudes. In this light, emotionality and expressiveness can intertwine in various respects. For instance, emotionality is considered as one of several co-functioning subcategories of expressiveness (including figurativeness, tension, and imagery, etc.), and it represents "the psychological state of the speaker"; i.e. it is a fraction of expressiveness since it is the expression of feelings resulting from one's intention (p. 9). Furthermore, expressiveness serves to magnify the utterance's "communicative function", whereas emotionality adds extra meaning to the utterance expressing an emotion which in turn relates to the meaning of the word. Moreover, it can occur either when transmitting information or in peculiar emotional occasions.

Unquestionably, the expression of emotions either through writing out feelings or through eye-to-eye conversations is not a futile, random phenomenon. In fact, communicating affective states is a vital social performance since it fosters psychological and corporeal wellness (Averill, 1982; Fussell, 2002, as cited in Dewaele, 2010).

### 1.2. Cognition, Language, and Emotion

The distinction between emotion and feeling is not exclusively built on a biological ground, but it is also linked to socio-cultural and cognitive aspects (Wierzbicka, 1999).

Deigh (2004, p. 19) states that "an emotion is a process that continues via the cerebral hemispheres and thus by way of thought and self-recognition". Henceforth, emotions involve thought as well as feelings (Wierzbicka, 1999; Deigh, 2004). Mesquita et al. (2016), further claim that emotions are not simply subjective experiences, but they are defined to a great extent by the representation of the world.

In investigating the relationship between language and the perception of emotion, Lindquist et al. (2006), claim that the perception of emotion is "intrinsically" shaped by language (p. 125). The view that language has a potential impact on how reality is perceived, widely known as Linguistic Relativity Hypothesis (LRH), will be discussed in the following title.

### 1.2.1. Language and Thought

The relationship between language and thought attracted the interest of many researchers in the fields of language, psychology, and anthropology. Numerous approaches emphasise a connection that is more controversial than it seems. Nick Lund (2003) counts four notions in this vein: (1) "the language we speak determines or influences the way we think", i.e. Linguistic Relativity; (2) "the way we think determines the use of language"-Piaget's view, (3) "language and thought are independent but gradually become interdependent during infancy"-Vygotsky's view; and (4) "language and thought are independent"-Chomsky's view (p. 10). Thereby, rationalist approaches to language saw it as an instrument to express thought and this view was advocated by von Humboldt (1836) and more recently by generative linguistics (Asoulin, 2016, p. 2).

Lucy (2015) reports that opponents to universalism, namely Locke, Condillac, Diderot, Hamman, and Herder inspired further formulations about the issue of the "intellectual significance of the diversity of language categories" (p. 904), which resulted
in the foundation of an interpretation of cross-linguistic variances in terms of a classified system of appropriateness regarding the two components of reality and reason.

Meanwhile, Sapir (1949) and Whorf (1956) went as far as to claim that language shapes the human perception of reality, according to the gist of interpretations concerning their stance on the issue. Alternatively circulated as Linguistic Relativity (LR) or SapirWhorf Hypothesis (SWH), their claims have been subject to controversy ever since their proposal.

### 1.2.2. Linguistic Relativity: Sapir-Whorf Hypothesis

It is virtually inevitable to talk about any possible relationship between language and cognition without referring to the Linguistic Relativity Hypothesis (LRH). The term 'Sapir-Whorf Hypothesis' was first used in 1954 by Harry Hoijer to be subsequently propagated by John B. Carroll in 1956 through his posthumous publication of Whorf's papers entitled Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf (Koerner, 2002, p. 39). LRH encompasses three core notions: (a) that words of different languages are distinct in terms of semantics and syntax to a substantial degree, (b) that the semantics of a given language alter the speakers' perception and conceptualisation of their worldviews, and (c) the two previous proposals on language's effect on thought add up to the assumption that speakers of different languages think in different ways (Wolff \& Holmes, 2011, p. 253).

The original sketch of SWH before it came to light is often credited to Wilhelm von Humboldt (Koerner, 1992, p. 174; Lucy, 2015, p. 904) whose conception of the hypothesis "connects the 'inner form' of a language with the particularity of a worldview of the nation that speaks it" (Pütz \& Verspoor, 2000). Koerner (1992) contends that Humboldtian ideas can always be detected in North American anthropological studies,
namely by Franz Boas, Edward Sapir, and Benjamin Lee Whorf; nevertheless, the similarity is especially relevant to their proposals on 'Linguistic Relativity' (p. 184). In Humboldt's words:

The mental individuality of a people and the shape of its language are so intimately fused with one another, that if one were given, the other would have to be completely derivable from it. Language is, as it were, the outer appearance of the spirit of a people; the language is their spirit and the spirit their language; we can never think of them sufficiently as identical (Humboldt, 1836 [1999], p. 46, as cited in Leavitt, 2015, p. 22).

Kay and Kempton (1984) argue that empirical research on SWH focused on two traditions: first, construing whether a native language structure either influences or fully determines the worldview of its speakers; and alternatively, the Whorfian (by tacit reasoning) tradition of noting an unconstrained variability of meanings relative to diverse languages.

### 1.2.3. Linguistic Relativity: Linguistic Determinism or Linguistic Influence?

Linguistic Relativity stands in the middle of two theses that differ according to the degree of language's influence on thought. The strong version holds an extreme stance and asserts that language shapes thinking in most possible respects and it referred to as linguistic determinism, while the weak version holds that language only influences the way we perceive the world and does not fully determine it - linguistic influence.

The possibility of translatability across languages belied the validity of the hypothesis in its 'strong form' on the one hand (Kramsch, 1998, p. 13). On the other hand, a 'weaker version' of the hypothesis has earned more support on account of findings in the enterprise of cognitive linguistics (Evans \& Green, 2006), whose conceptual approach
focalised on the organisation of patterns and concepts in language. That is, addressing the linguistic conceptualisation of categories of "space and time, scenes and events, entities and processes, motion and location, and force and causation" (Talmy, 2000, p. 3).

Slobin's Thinking-for-Speaking Hypothesis (Slobin, 2000; 2003) is another framework of LRH in which the link between language and thought was further experimented through even more dynamic "online" approaches. It is considered as a "modified" form of linguistic relativity since 'thought' and 'language' are respectively replaced by activities of 'thinking' and 'speaking' (Cadierno, 2013); therefore, it focuses on the influence of language on thinking in online processes of interpreting and formulating messages.

### 1.2.4. Emotional Sapir-Whorf Hypothesis

According to Leonid Perlovsky (2009), the emotional effects of language can influence differences amongst cultures as well as conceptual effects. "Semantic differences" (p. 518) of words coordinate languages and cultures' conceptual contents to a certain degree. Perlovsky refers to this as the emotional version of SWH. By way of illustration, Guttfreund (1990) reported that Spanish-English bilinguals demonstrated less emotional intensity during psychological interviews when they were carried in English, regardless of whether their L1 was either of the two languages. Perlovsky (2009) holds that emotionality is present in our everyday speech in fluctuating degrees, and it is particularly present when "affectivity is specifically intended" (p. 520). That being the case, empirical evidence derived from skin conductivity and functional magnetic resonance imaging can assist to further verify the relationship between languages’ emotionalities and grammars. Thus, enabling the evaluation of Emotional SWH through
simultaneous research in psychology and anthropology (pp. 524-525). To delve in the study of human emotionality and people's vicissitudinous complex of linguistic behaviour, state of mind, and culture; it is necessary to further examine such ties within the context of cognition, that is the perceived knowledge and understanding of the environment.

Whilst contestable, Lindquist et al. (2006) affirm that existing empirical evidence is consistent with the hypothesis of linguistic relativity in the perception and interpretation of emotions. Russel (1991) points out that members of different linguistic and cultural communities "divide the world into different basic emotion categories" (as cited in Lindquist et al., 2006, p. 126). Thus, emotion concepts and emotional experience vary across languages and cultures.

Away from the sheer focus on linguistic elements, other scholars turned their attention to the element of culture in the enquiry on the variation of perception and the expression of emotions. This shift was due to the discovery that differences between language communities go beyond the perceptible variations in 'words and grammar' to embrace the colourful nuances of 'norms and attitudes' pertinent to populations speaking different languages and belonging to varying cultures. Lindquist et al. (2015) refer to such an assumption as "cultural relativity in perception of emotion" (p. 102). Additionally, they draw back on "evidence that linguistic concepts interact with visual sensations to influence the emotion seen on another person's face" (p. 105) in their argument on the impact of language on emotion.

### 1.3. Culture, Language, and Emotion

Shweder et al. (2008) view culture as both a symbolic and behavioural phenomenon. In this regard, specific attitudes, values, practices, and language behaviours are
distinguished as accepted, appropriate, and beautiful in their respective cultural communities. Consequently, the members of a cultural community internalise these practices and values from an early age.

Culture is an all-encompassing concept by nature; and emotion is, in a way or another, not beyond its grasp since it cannot be detached from language and culture. When we think, we are using linguistic codes to conceptualise and categorise sets of ruminations and ideas by relying on our worldviews and cognitive system. By this token, when we project our emotions, we are using language that is shaped within the borders of the culturally converged norms of 'appropriate' perception and categorisation of emotions. Besides, Shweder et al. (2008) assert that the "conceptualization and interpretation [of emotion happen] automatically [and] un-self-consciously" (p. 410) as they follow cultural patterns of a community.

Hochschild (1983) highlights the role that feeling rules and social norms play in influencing emotional acts in certain situations (as cited in Eid and Diener, 2001). Simply put, the cultural differences define the occurrence, suppression, or regulation of emotions in a specific scenario. Mesquita et al. (2016) maintain that the cultural differences of emotions give an account on the power of social and cultural worlds in affecting emotions, stating that "cultural differences in emotions show the plasticity [emphasis added] of emotions, and their adaptation to the specific socio-cultural environment in which they occur" (p. 393).

Researchers approach cultural differences in emotion concepts and emotional experiences from different lines of research, which generates a variety of interpretations that will be introduced hereby.

### 1.3.1. Morality and Ideology

Rosaldo (1984, p. 304) views emotions as "self-concerning, partly physical responses that are at the same time aspects of a moral and ideological attitude; emotions are feelings and cognitive constructions, linking person, action, and sociological milieu [emphasis added]" (as cited in Ożańska-Ponikwia, 2012a, p. 203). Here, the connexion between the notion of emotion and the aspects of language and culture is underscored through the use of "ideologies", "morality", and "sociological milieu" to define emotions. In a similar vein, Shweder et al. (2008), posit that cultural differences in emotions are partly defined by the differences in morality in the interpretations they represent.

According to Mesquita et al. (2016), the nature, frequency, and intensity of emotions are dependent on their social and moral contexts. In other words, the moral connotations associated with a given emotion influence individuals' emotional attitudes. In such conditions, several options arise for individuals towards the emotion in question: they can either seek or avoid the situation in which the emotion occurs, or try to maintain regulate, or suppress the emotion (p. 394). Shweder et al. (2008) compared the English word "anger" with its Tibetan 'equivalent' "lung lang". Although literally translating the latter poses "being angry" as its match in English, the moral connotations associated to both terms in their respective cultures are not entirely identical. Regarding the dimensions of autonomy and assertiveness in the American culture, anger is a natural response that is normally accepted or expected. Whereas lung lang is considered in Buddhism a destructive feeling as it opposes the Buddhist ethical code of speaking and acting in a non-harmful way.
'Moral goods' vary across cultures depending on three ethics: the ethics of autonomy, of community, and of divinity. The "relative weight" with which cultures endow these
ethics influences the experience and expression of emotions, and more importantly the conceptualisation of emotions (Shweder et al., 1997, as cited in Shweder, et al., 2008, p. 421).

### 1.3.2. Enculturation

It is beyond any doubt that language constitutes a weighty fragment of culture. The previous insights on the relationship between societal aspects and emotional differences illuminate a cross-examination on the origin of those inherent variances amongst people speaking distinct languages.

These discrepancies, according to Wang (2011), could be partially due to variances in the perception of emotions illustrated by people with a common cultural background who underwent a period of day-to-day enculturation. By means of evidence provided by Wang, individualist societies view emotion as an outspoken manifestation of the psyche, whereas collectivist societies believe that it damages the group's unity and prosperity. For that reason, a person from an individualist culture, is more successful at assessing stories' emotional quality or expounding emotional moments than their counterpart from a given collectivist community. In the aggregate, there is an indication that the processing and utilisation of emotions within various linguistic communities fulfil a part in daily mental processes.

### 1.3.3. Emotion and Lexicons

Emotion words from different languages may not always be of a matching semantic weight. These semantic distinctions between languages set potential setbacks in the way of cross-cultural studies because language is the main medium that allows investigating an individual's frame of mind. Besides, divergences in emotional lexical meanings from one language to another offer valuable insights into human psyche and the way emotions
are categorised and conceptualised in different cultures. Amidst these fluctuations, language acts as a mediator in people's socialisation process (Goddard, 2002, pp. 19-22).

Emotional words stand for particular interpretations of social realities in different cultures. Therefore, they are not independent of the conditions justifying the occurrence of that emotion, the actions that the emotion demands, and the events that are influenced by the emotion. For instance, some cultures judge shyness, shame, and embarrassment as decent, strong emotions that reflect civility and social order control (Shweder, 2008, p. 218-220). Thus, emotional words are culturally defined.

Cultures around the world promote distinct stances to emotions that can be perceived in the speakers' emotional vocabulary. Accordingly, concepts of emotions across languages differ in ways that are more complex than palpable morphological representation (Wierzbicka, 1994, p. 140). In view of this, Wierzbicka (1992) takes on the idea proposed by Izard and Buechler (1980) on "fundamental emotions", i.e. terms describing emotions that are present in all languages, with scepticism grounded on the fact that those so-called "universal human emotions" were labelled in reference to English language terms. Wierzbicka illustrates by pointing to the lack of an exact equivalent to the term "disgust" in Polish language and furthers a question on whether the same term would have still been chosen as one "fundamental emotion" had the psychologists who founded such taxonomy of human emotions been native speakers of Polish (Wierzbicka, 1992, p. 119). Additionally, Wierzbicka asserts that even a simple word like 'anger' does not have an equivalent in the Polish language that is close enough in meaning, and that every attempt to portray in Polish terms the same emotion as understood in English would not be as accurate, and in certain contexts, results would be "humorous" (1999, p. 32). Therefore, the identification of universal emotions implies a faulty conception of the universality of human emotion because of its inherent

Anglocentric view. Wierzbicka (1992) cites Lutz (1985, p. 38) to provide an analogous analysis on the issue from a non-Western angle:

American psychology has taken English emotion words (such as 'fear', 'love', and 'disgust'), has reified what are essentially American ethnopsychological concepts, and has accepted them . . . as the conceptual apparatus of scientific inquiry. Given the limited cultural base, it would be surprising if the emotions, exactly as . . . experienced in American society, emerge as universals. . . . While it has been considered of great importance to ascertain whether some non-Western peoples 'feel guilt', the question does not arise as to whether Americans experience the New Guinea Highlanders' emotion of popokl 'outrage over the failure of others to recognize one's claims' (Strathern, 1968).

In a similar context, in their investigation on the Sanskrit text of the Rashādāya "nine (eight plus one) basic emotions" as hypothesised by Hindu philosophers of poetics and drama, Shweder et al. (2008) claim that there is neither standard English translation of these terms, nor equivalents in the contemporary non-Hindu societies. In their comparison, they mention a Sanskrit list of eight (plus one) "basic emotion": "sexual passion, love or delight [rati]; amusement, laughter, humour, or mirth [hāsa]; sorrow [śoka]; anger [krodha]; fear or terror [bhaya]; perseverance, energy, dynamic energy, or heroism [ustāha]; disgust or disillusion [jugupsā]; and amusement, wonder, astonishment, or amazement [vismaya]" (p. 411); plus a ninth emotion word for "serenity or calm [sama]" (p. 411). This Sanskrit list was benchmarked against Paul Ekman's notable contemporary list of nine (six plus three) "basic emotions": "anger, fear, sadness, happiness, surprise and disgust, plus interest, shame, and contempt". Shweder et al. (2008) found that although the two lists meet on some commonalities, yet they are not entirely coordinated. In the "Rashādāya", three of the nine basic emotions (sorrow,
anger, and fear) seem familiar and have equivalents in Ekman's contemporary basic emotions. Nevertheless, Shweder et al. (2008) claim that their source, the ways in which they should be acted, and the mental states they go along with are different. In other words, the three emotions in both lists overlap. Moreover, if the six emotions are considered, "the way in which consciousness is partitioned or hierarchically-structured into basic and non-basic states in the 'Rashādāya' seems less and less familiar, despite any initial appearances to the contrary" (p. 412). Shweder et al. (2008) do not only propose a cultural connection but also a temporal-spatial one.

On the relationship between culture and emotions, Wierzbicka (1999) contends that culture moulds thoughts and feelings (p. 5). Moreover, categorising feelings hinges on the "introspective" (p. 31) lexicon of people, and it is thus language and culture dependent. This conveys that forms in which feelings can be categorised differ from one culture to another (James 1890, p. 485, as cited in Wierzbicka, 1999).
"Emotion words" such as anger reflect, and pass on, certain cultural models; and these models, in turn, reflect and pass on values, preoccupations, and frames of reference of the society [emphasis added] (or speech community) within which they have evolved. They reflect its "habits of the heart" (Bellah et al., 1985) and the concomitant "habits of the mind" (pp. 32-33).

Wierzbicka maintains that alongside vocabulary, the effect of syntax, modes of expression, body movements, tones, linguistic instinctive reactions, obscene language, etc. prevalent in a culture specify cues to its overall emotional universe (1999, p. 34). Finally, she sees that although the attribute of emotion is common to all humans by birth, culture does take a part in shaping their mental states by putting under their disposal a framework with which they conceptualise emotions; in the process, people's ways of feeling, thinking, and self-expression are honed to it (1999, p. 240).

### 1.3.4. Cultural Differences in Emotional Experience

Mesquita et al. (2016) distinguish different approaches of cultural differences in emotional experience:

First, cultural differences in the prevalence and intensity of emotions. The rationale behind this first approach is that emotions existing across cultures such as anger and happiness, for instance, overlap in the ways they are experienced cross-culturally at the levels of prevalence and intensity. These differences have their roots in moral connotation, "emotions that are conducive to important cultural ideals tend to be more prevalent and intense, and emotions that violate cultural ideals tend to be rare and suppressed" (Mesquita et al., 2016, p. 394).

In this regard, Eid and Diener (2001) conducted a study on college students from the United States, Australia, Taiwan, and China. The choice of these four cultural groups was motivated by their respective individualistic or collectivistic orientations. The subjects from the different samples completed a questionnaire to allow for the measuring of "their life satisfaction, experience of emotions, and personality" (p. 873). The first aim of the study was to analyse the influence of differences in individualistic and collectivistic cultures on emotion norms, while the second aim was to investigate if these emotion norms influence intensity and frequency of emotions across cultures. The researchers reported that on a scale of 1 to 10 (from the least to the most individualistic). Countries' scores were as follows: United States (10), Australia (9), Taiwan (5), and China (2). To compare between countries sitting at the two extremes of the scale, participants from the United States were the most individualistic, whereas the Chinese were the most collectivism-oriented cultural group as per this study sample.

Eid and Diener (2001) report a consistent association between desirability and positive emotions, and between desirability and the frequency and intensity of emotion. That is,
individuals who think that a particular positive emotion is highly desirable, report a more frequent experience of that emotion. This association results from what is known as emotion regulation. Thus, individuals who find a particular emotion desirable, they seek the situations in which that emotion occurs and feel free to live it intensely. Conversely, those who find a particular emotion undesirable, they tend to thwart the situations in which that emotion occurs and suppress or downregulate it (pp. 881-882).

A striking finding which Eid and Diener report is that unlike the participants from the United States and Australia, Chinese partakers scored the lowest in frequency and intensity of both positive and negative emotions. The aforenamed researchers justify such a result with the Chinese culture's generally prevailing tendency to consider emotions 'perilous' and extravagant, which consequently leads to the moderation of emotions to be favoured and appreciated.

As for Taiwan, participants scored very similarly to Australians and Americans in almost all positive attitudes, except the one of pride in which the Taiwanese subjects were more similar to the Chinese participants. With respect to the negative emotions, Taiwanese participants displayed equivalent results to those of Australians and Americans regarding the frequency of emotions, and similar results to those of Chinese subjects regarding the intensity of these emotions. According to the researchers, these results confirm that Taiwan's culture is still philosophically and historically bound to the Chinese culture but is now moving towards individualistic values (pp. 882-883).

Second, "cultural varieties of emotional concepts" (p. 395). While the previous approach considers the cultural differences at the levels of intensity and prevalence, this one emphasises the cultural differences in relation to the quality or nature of the emotion concepts. At the forefront of attention, the approach considers the degree to which an
emotion concept corresponds a particular experience. Alternatively, it focalises on the assumption that individuals of a given cultural community use a particular emotion concept to refer to a variety of experiences (p. 396). For instance, under this approach, researchers focus on contrasting the ways individuals from different cultural communities construe from a particular situation what Mesquita et al. (2016) referred to as "cultural differences in appraisal" (p. 397). In this respect, Scollon et al. (2004) conducted a study aiming at measuring pleasant and unpleasant emotions in subjects that come from different cultural communities, through the use of different methods. The participants consisted of five culture samples, and in which three of them were within the United States (European American, Asian American, and Hispanic). While the other samples came from outside Western tradition (India and Japan). The main finding from this study was that European Americans and Hispanics revealed high levels of pleasant emotions and low levels of unpleasant ones; whereas Asian Americans, Japanese and Indians showed low levels in pleasant feelings and high ones in unpleasant feelings. Their results were consistent with the initial predictions built on past research reporting that North American and European cultures are inclined to enhance pleasant and positive emotions in contrast to Asian cultures who have a tendency to emphasise unpleasant and negative emotions.

The third and ultimate approach to cultural differences in cultural experience by Mesquita et al. (2016) is that of "cultural differences in the experiences recognised as emotion [emphasis added]" (p. 399). In other words, what elements are required in a particular cultural community to instigate an emotion. Anthropologist Paul Heelas (1986, p. 257) hypothesises that:

Emotion talk functions as a kind of spotlight. Depending on culture, it dwells on whatever is taken to be associated with those raw experiences necessary for emotions.
.. . How raw experiences are constituted as emotions depends on how they are illuminated. . . . Emotional elements which have no light thrown on them remain in the dark. And emotions which are focused on become enriched and highlighted in experience. (as cited in Mesquita et al., 2016, p. 399)

Heelas's vision propounds that the expression of emotions arises from differences in experiences that emerge from cultural dimensions governing behaviours and situations. For example, in individualistic cultures such as the United States, patterns of emotions, thoughts, and behaviours are conceived from the focus on the individual. Contrastively, in collectivistic cultures with the likes of China, it is the relationship between individuals that conceives such patterns. Eid and Diener (2001) report a study by Stipek (1998) in which she investigated the emotion of pride in Chinese and in American participants. One conclusion of the study was that for collectivistic cultures (i.e. China), pride is more acceptable and cherished when achievements benefit others rather than when they are motivated by individualist thrust.

### 1.4. Personality and Emotion

Beside the hitherto reviewed cultural and linguistic distinctions in emotions, subjectivity is also one of the characteristics of emotions. As already discussed above, the frequency of recurrence of emotions is partly related to cultural properties such as morality and ideology. Lazarus (1990) highlights that the recurrence and frequency of emotions can also be dependent on individual properties oft-referred to as "personality traits" (as cited in Kubzansky \& Wining, 2016, p. 616). Similarly to cultural differences,
personality traits may provide information about individuals' emotional experiences in particular situations. Brody et al. (2016) state that "each type of emotional process is influenced by interpersonal, situational, personality [emphasis added], biological, cognitive, motivational, and cultural factors, as well as interactions among them" (p. 369).

Brody et al. (2016, pp. 379-380) account for a set of past studies on gender and emotions to argue that gender differences in emotional experiences and emotional regulation are due to gender-related personality traits. Females, for instance, are found to regulate anger in order to protect others and to avoid loss of connection, while males regulate anger to maintain control. Such differences could be understood in relation to the difference in females and males' personality traits. According to that, females focus more on connection and interdependence dimensions, unlike males who premeditate status and individualistic dimensions (independence).

## Conclusion

Language and human cognition are arduous to decipher, and the relationship between the two remains an unsettled quandary (Perlovsky \& Sakai, 2014). The multidisciplinarity that defines their connexion renders it more of a 'causality dilemma', which, in absence of conclusive answers, leaves many questions about which affects or engenders which up for contemplation. However, studies on bilingualism and emotion offer a window into human perception and thought. For instance, the increasing evidence in the field of bilingualism enables researchers to glean further into issues and intricacies surrounding the effect of Second Language Acquisition (SLA) on the human mind and emotional expressivity.

## CHAPTER TWO: BILINGUALISM AND EMOTIONALITY

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## Introduction

Learn a new language and get a new soul.
— Czech proverb
The previous chapter discussed views on language's effect on the human mind. This captivating idea led many scholars to interpret the consequences of this relationship on perception, expressiveness, emotionality, and even personality. However, if there were a possibility for language to affect thought and cognition in whatever way, what would that mean for those speaking more than one language? Bilinguals and multilinguals were granted participance in research on language and cognition only recently as globalisation and "ethnolinguistic diversity" (p. 20) forced their integration in the study of the relationship between language and thought (Pavlenko, 2014). This research uses the term 'second language' (L2) to refer to any additional, foreign language learnt after the acquisition of the first native language (L1), and 'bilinguals' to describe speakers of more than one language.

### 2.1. Bilingualism

### 2.1.1. Who is a Bilingual?

The term bilingualism is used at the societal level to denote a situation in which two languages are in adjacency within a speech community, thereby leading to the use of two linguistic codes. Bilingualism also entails the concept of bilinguality: the state of an individual who can communicate in two languages (Hamers \& Blanc, 2000).

Although the word bilingual may seem autological at first glance, there are conflicting views on the 'bilinguality' of an individual and by which criteria should someone be considered bilingual. According to Bloomfield (1935, p. 56, as cited in Hamers \& Blanc, 2000), bilingualism equals a perfect "native-like control of two languages". This
approach is shared by Thiery (1987) who likewise refers to "true bilingualism" (p. 145) and believes that a bilingual person should be as proficient as a monolingual from either of the two linguistic communities. This belief is known as the "monolingual (or fractional) view of bilingualism" (Grosjean, 2008, p. 10). In fact, François Grosjean dedicated an entire article (1989) entitled "Neurolinguists, beware! The bilingual is not two monolinguals in one person" to object that view. However, Macnamara (1967a, as cited in Hamers \& Blanc, 2000) does not exclude those with an unbalanced 'dual' proficiency as he counts as bilingual anyone with the slightest ability in either of the four skills of a language other than his or her native one. In a similar vein, Haugen (1969) proposes that bilinguality depends on the individual's ability to construct "complete, meaningful utterances" (as cited in Serras Robert, 2017). Titone (1972) shows a rather inbetween stance to bilingualism, he asserts that a bilingual must not rely on his or her native language during the processing and production of L2 and should be capable to follow solely the abstraction and systems of the language in use; therefore, he stresses that the two languages should not interfere in one another's formation and understating "concepts and structures" (as cited in Hamers \& Blanc, 2000).

These definitions given to bilingualism seem to exclude a huge portion of people who can speak two languages in reality and therefore, by implication, fit within the borders of the etymological meaning of the term: "double-tongued" (Harper, n.d.). Also, the notion of "native-like competence" is not clearly exemplified as it is not clear whether the term is applicable to those who for instance learnt to speak a classical language for years, those who took a language course, or those proficient language users whose 'foreigner's accent' distinguishes them from others who are deemed 'native speakers'. The absolute focus on so-called perfect proficiency in both languages in the aforementioned definitions renders them one-dimensional (Hamers \& Blanc, 2010). Thus, more lenient, practical approaches
to defining the term are needed to consider the phenomenon of bilinguality from all perspectives since "for the vast majority of bilinguals, 'bilingual competence' is not measurable in terms of monolingual standards" (Hoffman, 1991, p. 23, as cited in Bassetti and Cook, 2011, p. 144). According to findings that proved conceptual changes in schoolchildren after mere short periods (hours) of second language (L2) learning (e.g. Yelland, Pollard, \& Mercuri, 1993; Boroditsky, 2011), assuming that "cognitive consequences of bilingualism" can only be witnessed in "maximal bilinguals" would produce a mistaken claim (Bassetti \& Cook, 2011, p. 144).

According to Grosjean (2013), the meanings of the words "bilingualism" and "bilingual" are relative to their usage. From knowing and using two or more tongues, to presenting information in two languages, and to recognising two linguistic systems, bilingualism is best defined "as the use of two or more languages (or dialects) in everyday life" (p.5). Additionally, as attested by Grosjean (2010), the view that bilinguals mastering two languages fluently is a "common misconception" because "the majority of bilinguals do not have equal fluency in their languages, as many have an accent in at least one of their languages, and many acquired their language(s) when they were adolescents or adults" (p. 7). Besides, Grosjean (2013) states that many researchers (e.g. Weinreich, 1968; Mackey, 2010) solved the issue of the level of fluency needed for someone to be considered bilingual by stressing that "language use" (p. 7) should be the central aspect of bilingualism. Therefore, this research relies on the aforementioned Grosjean's definition of bilingualism as the use of two languages. This definition conforms to the aim of this research since the sample of the study does not include "native" speakers of the target language, but individuals with varying levels of proficiency considering the fact they are advanced foreign language learners who were first exposed to the target language when they were adolescents.

### 2.1.2. Types of Bilinguals

As contended by Grosjean (1997, p. 176), research on bilingual cognition typically identifies trichotomous types of bilinguals: (a) coordinate, (b) compound, and (c) subordinate. Coordinate bilinguals possess a binary meaning system together with language-specific means of expression, and this denotes that the two languages are independent units. Coordinate bilinguals have learnt their L1 and L2 in different contexts. Compound bilinguals retain a single system of meaning alongside dual-language mechanisms of expression, which suggests that meaning is common to terms from distinct languages that are semantically equivalent. Subordinate bilinguals, as its name insinuates, describes a type of bilinguality where speakers process and learn the new language information (L2) through subordination to their first language (L1)'s systems of meaning.

### 2.1.3. Bilingual Language Modes

Grosjean (1997) reports that bilinguals are submerged in disparate language modes that are proportionate to a "monolingual-bilingual mode continuum [emphasis added]" (p. 168). When a given language is activated in the brain of a bilingual, the mode of processing is changed accordingly. For instance, at one extremity of the continuum bilinguals are on a monolingual language mode when they are exchanging words with monolingual speakers of one of their languages, which demands the deactivation of the other language. However, the total neutralisation of the other language resulting in a fluent, 'foreign-accent free' speech production in the second language is quite uncommon. Whereas at the other extremity of the continuum, bilinguals engage in a bilingual language mode during the course of interaction with people speaking the same set of languages as them which allows using code-switching and borrowing. Thus, the
two languages are activated; with the base language remaining "more active" (p.168) than the secondary language (the language to which they switch momentarily). Nevertheless, external elements such as "interlocutor, situation, content of discourse and function of the interaction" (p. 168) place bilinguals at alternating midpoints along the language modes spectrum.

Gardner-Chloros (2009, p. 120) considers mechanisms allowing separate access to language in a bilingual of substantial importance. That is because neither total integration nor total separation of languages in the brain of a bilingual would allow for the two processes of code-switching and translation to occur on seamless terms. The current research questions now do not seek to prove whether bilingual possess a dual or a single lexical store. Rather, they are raised on the manner bilinguals access their lexical store appropriately for different tasks.

Figure 2.1
The Language Mode Continuum.


Note. Adapted from "The Bilingual Individual," by F. Grosjean, 1997, Interpreting, 2 (12), p. 169. Copyright 1997 by John Benjamins Publishing Company.

In Figure 2.1, "the speaker's positions on the continuum are represented by the discontinuous vertical lines and the level of language activation by the degree of darkness of the squares" (Grosjean, 1997, p. 169). Base Language (A) appears activated by default in the three instances of the continuum as it is the main means of interaction, while L2 (Language B) has varying activation degrees on different intervals since it only fills in when necessary depending on the situation.

### 2.1.4. Bilingual Language Choice

For Grosjean (1997, p. 172), language choice that lays the speaker on the bilingual mode depends on several sociolinguistic components: linguistic habits, proficiency, and preferences of the interlocutor; speech event, settings (level of formality needed and place), and other speech participants (whether there are monolinguals present or not); and finally, the subject matter and objectives of discussion. After the main language is selected, bilinguals tend to embed the other language in their speech through codeswitching and code-borrowing.

Bakić and Škifić (2017) conducted a study on bilingual participants to investigate their language choice in the expression of emotions and thoughts. Participants came from different Western cultures where the dominant first languages were English, German, Italian, Hungarian, and Croatian. While their second languages were Croatian, German, and Spanish. Findings of the study highlighted that, despite the variability in their L1 and L2, the majority of the study's subjects view their first languages to be more emotional. By way of illustration, Bakić and Škifić (2017) reported that their participants revealed a greater tendency towards choosing L1 in an anger-triggering situation, and for sincere affectionate expressions such as the emotion-laden phrase "I love you".

### 2.1.4.1. Code-Switching

Bullock and Toribio (2012) argue that the phenomenon of code-switching is exceptionally relevant to the behaviours and cognition of bilinguals on the basis that it is exclusive to them. They give a broad definition to code-switching as "the ability on the part of bilinguals to alternate effortlessly between their two languages" (p. 1). The varieties may be anything from genetically unrelated languages to two styles of the same language. In contrary to monolinguals' case of changing linguistic varieties and repertoires, which Bullock and Toribio refer to as "style shifting" (p. 2), bilinguals instead fluctuate between two sets of repertoires of distinctive languages-"language shifting" (p. 2). Switching can involve a single word or can continue for longer strings of speech. (Myers Scotton \& Ury, 1977). Reasons for bilingual code-switching are relative to the obligations of conversational situations. For instance, Grosjean (1997, pp. 172-173) names distinct reasons reflected in sociolinguistics studies as to why code-switching occurs: first, filling in a verbal necessity due to shortage of vocabulary or expressions in the base language; second, quoting another person in the original language he or she used; third, an intent to dismiss other speech participants; fourth, to tone down certain words and expressions; fifth, to mark the speaker's subjectivity in speech; sixth, to assert the speaker's identity by summoning language as an identity marker; seventh, to better express one's emotions and feelings; and eighth, to assign oneself a different social role within the speech event (Grosjean, 1997, pp. 172-173).

### 2.1.4.2. Emotional Factors in Code-switching

Gardner-Chloros (2009) cites several studies that prove the impact of emotion on the processes of learning, remembering, and using language. On that premise, shifting to the second language in a conversation fulfils a "distancing function" (p. 123) to evade
talking about certain 'sensitive matters' in the first language to which the speaker is more personally involved.

Williams, et al. (2019) note three perspectives upon which the relationship between code-switching and emotion is traceable. To begin with, "cognitive control" ( p . 831) reveals that code-switching stems from the need to choose the most suitable language at a given point during the interaction in question. Because there is more than one language active in the brain of the bilingual speaker, (Costa, Miozzo, \& Caramazza, 1999, as cited in Williams, et al., 2019), controlling which language is to be used on the basis of appropriateness is necessary. Therefore, different language control takes place: competitive control, only one language is used in relative contexts and with different speakers; or cooperative control, two languages interweave in speech in a code-switching context. The second perspective concerns "emotion regulation": bilingual speakers upregulate by switching to their first language to express emotions, or down-regulate by switching to their L2 (Pavlenko 2005; 2014, as cited in Williams, et al. 2019). This implies that the two languages are ascribed to different contexts of emotions because the first language is usually learnt in "more emotional contexts" like family while the second language is learnt in "less emotional contexts" like EFL teaching space (Caldwell-Harris, 2014, as cited in Williams, et al. 2019). Further, emotional reactions are more likely to be compromised in the second language than in L 1 due to a reduced language processing automaticity in the 'weaker language' as experimented by Thoma \& Baum (2018, cited in Williams, et al. 2019). The third and final perspective is cultural frame switching and it shows that bilingual speakers conform to predictable emotional mores of the culture. That is, the speaker's mind is influenced by the community's norms of emotion expression which dictate the levels of certain affects such as exciting sensations, parentchild relationship, words of endearment because cultures across linguistic communities
value and express such affective states differently. Code-switching may also be present in situations where translation from the second language does not supply an equivalent, culturally fitting emotion term in the base language (Williams, et al., 2019, pp. 831-832).

### 2.1.5. Inner Speech and Bilingualism

Inner speech has different purposes in L1 and L2. In first language acquisition, private speech is normally used to help lexical retrieval or storage or to self-evaluate one's decisions through self-reflection. However, in second language learning, inner speech is mostly used to imitate other speakers' speech, to rehearse what to say mentally, and to mentally manipulate language forms (i.e. wordplay) (Pavlenko, 2014, p. 218). On a different note, Guerrero (2005, as cited in Pavlenko, 2014) attests that private speech and inner speech in the second language are used more exclusively for language play and dialogues after gaining enough proficiency in later stages of learning.

### 2.2. Bilingualism and Linguistic and Conceptual/Perceptual Systems

### 2.2.1. Linguistic and Conceptual Systems: Insights from Cognitive Linguistics

In contrast to traditional views on bilingualism that wrongly held it crippled children's cognitive skills, it has been proven that youngsters who learn to use two languages possess a better cognitive system. This distinctiveness is known as "the bilingual advantage" and it translates into brain flexibility that is demonstrated in their "problem-solving, memory, and thought" (Konnikova, 2015).

That said, to better understand how linguistic and conceptual systems work in human cognition, it is worth looking back at what the enterprise of cognitive linguistics stands for and what it aims at. Evans and Green (2006) provide a thorough overview on the enterprise described in Evans (2011) as "a modern school of linguistic thought and
practice, concerned with investigating the relationship between human language, the mind, and socio-physical experience" (Evans, 2011, p. 69). According to Evans (2011), interest in this field surfaced as a reaction to back then prevailing perspective steeped in "formal approaches" to the study of linguistics and philosophy (p. 69). Additionally, the hub of cognitive linguistics is branded by "two commitments": the cognitive commitment and the generalisation commitment. The former refers to the assertion that linguistic models should go hand in hand with "other cognitive and brain sciences" (p. 71), whereas the latter concerns the characterisation of "general principles" (p. 72) that apply to all linguistic aspects instead of the dissection of language into separate "subdisciplines" (p. 72) as in generative linguistics. On the other hand, cognitive linguistics stands on five theses: (a) "the thesis of embodied cognition", (b) "the thesis of encyclopedic semantics", (c) "the symbolic thesis", (d) "the thesis that meaning is conceptualization", and (e) "the usage-based thesis" (Evans, 2011, pp. 69-73).

As far as this research is concerned with, i.e. language and bilingualism; the thesis (c), that of encyclopaedic semantics, holds that "semantic structure" is relative to "the conceptual system" in various ways according to different theories (Evans, 2011, p. 75). For instance, Langacker (1987) couples the two systems within a single equation. Whereas Evans (2009) stresses the distinction between them by adding that "semantic structure [facilitates] access to (some aspects) of conceptual structure" (Evans, 2011). In addition to the representational view, the thesis of encyclopaedic semantics views that semantic structure sets up an immense matrix of "structured knowledge" resembling that of an 'encyclopaedia'. Therefore, "the meaning of [a given word] arises from an interaction between linguistic and conceptual representations" (Evans, 2011, p. 75).

### 2.2.2. Bilinguals and Conceptual and Linguistic Systems

Studies on bilingualism have been preoccupied with forging models for bilinguals' ways of storing and processing of their different languages and manners of interoperation between the linguistic framework and conceptual systems. Amongst the issues addressed in such investigation is the question of whether "bilingual cognition" relies on one merged arrangement of conceptualisations or a 'dual set' of language schemes available for each language. Also, it considers the matter of differences between bilinguals and monolinguals in cognition and information processing or lack thereof (Evans, 2011, p. 102).

Considering the issue of whether bilinguals have binary "internal lexicons" (p. 176), supporters of the single lexicon claim (e.g. Kolers, 1966; Schwanenflugel \& Rey, 1986) believe that there is only one conceptual system for both spoken languages with labels designating the language of each word. Whilst others (e.g. Tulving \& Colotla, 1970; Taylor, 1971) posit that bilinguals possess two separate conceptual systems to each language with translation bridging meaning back and forth between the two languages. Amidst the lack of evidence to back each side, a third view (Paradis, 1980) has risen with the claim that bilinguals possess "three stores": a conceptual store containing the speaker's worldview, plus "two language stores for each language" (Grosjean, 1997, pp. 176-177).

Learning new concepts during adulthood has generated several interpretations. However, according to Cook and Bassetti (2011), findings from research studies in the field of artificial grammar learning (AGL) highlight the consequences of L2 learning in "adults with fully developed language and conceptual systems" (p.153) who were proved to have the ability to "learn new concepts through exposure to another language" (p. 153).

What is more, the concepts learnt via acquiring new vocabulary or grammatical forms would influence the execution of cognitive tasks that are unrelated to language, according to some studies, after only brief sets of exposure to target language concepts (e.g. Boroditsky, Schmidt, \& Phillips, 2003; Casasanto, 2008). Away from psycholinguistic laboratory experimentations, genuinely-conditioned learning of L2 has evidenced that exposure to a new a linguistic concept results in instantaneous yet diminishing but not vanishing changes on cognition (Tversky, Kugelmass, \& Winter, 1991; Kugelmass \& Lieblich, 1979, as cited in Cook \& Bassetti, 2011, p. 154).

### 2.3. Bilingualism and Socio-cultural Backgrounds

Language and culture are intricately entwined. For Sapir, "language does not exist apart from culture" (2004, Language, Race and Culture section, para. 1). Language mirrors experiences of cultural groups not only through their communicative habits but also through the ways individuals use it "to share social expectations and beliefs, to convey social attitudes, to build community, and to maintain cultural norms" (Robinson, 1997, p. 35). The tight relationship between language and culture makes bilinguals undergo mixed experiences relatively to the languages they use, and these experiences are conditioned by the distinct cultural worlds embedded in their different languages. For example, it is maintained by Wierzbicka that many bilinguals view that the diverse languages they speak encode "different modes of experience and different ways of thinking" (2005, p. 278) for them when traversing the frontiers of language and culture.

For Hamers and Blanc (2000), language is both a component and a product of culture. It is transmitted through socialisation across generations, and in turn, it shapes cultural imageries for the speakers. The interaction between language and culture takes effect in particular manners since language plays the role of the "transmitter of culture" (p. 199)
as well as it is a means to internalise it. Despite the state of interdependence between language and culture, the two elements should not be considered analogous (p. 199).

The relevance of this relationship is intriguingly important in multilingual contexts where individuals are wired to one culture, but they have the luxury of an additional (foreign) language that clears a path towards 'openness to otherness', and more appositely to this research, it confers an extra way to express oneself. Besides the obvious, direct ways in which a culture may assert authority over linguistic codes of a community, culture pushes for linguistic choices of members of its group in many indirect ways. This is done through adjustment of which themes are allowed to be tackled and which are not according to the group's standards, etiquettes, and norm. Now what is unequivocally clear is that bilinguality serves as an asset for an individual to confront such cultural restrictions. Because in cases where a sensitive topic may be a taboo in one's culture and hence the speaker would be unwilling to speak about it in his or her native language that carries the hefty emotional weight of personal involvement (Gardner-Chloros, 2009; Pavlenko, 2002; Mesquita et al., 2019), the same person would feel comparatively less reluctant and even comfortable to discuss it in his or her second language. Bond and Lai (1986) add:

All cultures erect sanctions around the discussion of certain topics by most people in most situations (Lonner, 1980). Parents and other socializing agents enforce these sanctions by punishing violations of the social order.

In the vast majority of settings, this learning occurs in the child's first language productions. The consequence is the tendency to avoid the emotional arousal associated with their utterance by decreasing their output. (pp. 179-180).

### 2.4. Bilingualism, Emotion, and Personality

Bilingualism offers novel visions on emotions that would help discover new prospects or validate prior findings. In current times, bilingualism is as essential as emotion is to mankind with the increasing number of bilinguals around the world today as compared to earlier centuries. Wherefore, the intersection of emotion and bilingualism illuminate to a better understanding of concerns surrounding the triangle of "languages, culture, and self" (Wierzbicka, 2004, p. 94)

In one of the earliest attempts in the study bilingualism and emotions, Kwok and Chan (1972) refer to a Chinese native student who would only tolerate confessing to priest in his L2 (English) because so doing in his native L1 (Cantonese) "would hurt too much" (p. 70, as cited in Bond \& Lai, 1986, p. 179). Similarly, it has been observed that many bilinguals would prefer the use of L2 when it comes to certain 'emotionally disturbing' situations such as swears, disclosure of personal issues, and other societal taboos (Bond \& Lai, 1986).

To explain such peculiarity, Aneta Pavlenko posits that the emotional effect of languages on the individual may vary if the two were learnt at different stages of life. The first language learnt during childhood is the language of "personal involvement", while the second language (when learnt in post-puberty) represents "the language of distance and detachment" and it holds a relatively softer emotional impact on the speaker (2002, p. 47). Despite that, late bilinguals are not downright emotionally detached from their L2. To give an example, those who went through negative events (e.g. wars) in their L1 may get detached from it for all the atrocious traumas and dogmas it represents to them. Also, for other multilinguals, new languages infuse them with "new and different emotional selves" (2002, p. 49) dissimilar to that in their first language. Many bilinguals,
when operating in the second language, feel such "emotional distance" which fulfils along code-switching a "distancing function" (2002, p. 48) that enables communicating thoughts that would be otherwise too distressful to put into L1 words (Bond and Lai, 1986, as cited in Pavlenko, 2002). By the same token, it has been found that late bilinguals demonstrated more anxiety towards emotion-triggering linguistic content such as swearwords when presented in their native language (2002, p. 48).

For Wierzbicka (2004), "[the] two languages of a bilingual person differ not only in their lexical and grammatical repertoires for expressing and describing emotions but also in the sets of 'emotional scripts' regulating emotion talk" (p. 101). Studies on emotions and bilingualism linked the variances in emotion words across languages and cultures to differences in the ways bilinguals perceive and express emotions. For a case in point, Ervin-Tripp $(1954 ; 1964)$ used a TAT (Thematic Apperception Test) in addition to other tasks administered in the two languages spoken by the subjects. Participants described the same situations when they switched languages in the two sessions differently with certain degrees of contradiction in some cases. For example, a Japanese-English bilingual showed more intense emotions and involved more personal matters when answering in Japanese (L1), whereas his answers in English (L2) were rather reserved and emotionless (Ervin-Tripp, 2011).

Within the same context, Bond and Lai (1986), attest that L2 is usually learnt in "more emotionally neutral settings" (p. 179) as compared to L1, which acclimatises less stimulation towards the second language in bilinguals. Thence, L2 eases off the embarrassment felt during the discussion of certain 'sensitive' ideas and issues. In order to reconfirm such insight, Bond and Lai through made eighty-four (48) CantoneseEnglish bilingual students interview one another on both embarrassing and neutral matters in their two languages. Conclusions of the study displayed that participants
largely avoided discussing embarrassing topics in their native language. Meanwhile, this also indicates how code-switching is utilised as a "distancing function" (p. 179) for bilinguals to convey what would have been too discomfiting to utter.

Wierzbicka (2004) provides a fascinating testimony as to how can one be emotionally involved to his or her native language, and how can individuals construct their own "emotional worlds" to which they are devotedly connected through language:

I have a baby granddaughter, who lives far away from me but whom I often visit. When I come back from these visits and when my Anglophone friends ask me how she is, I am often stuck for words. I just can't find English words suitable for talking about my tiny granddaughter. It is not that I am not familiar with the register of English used for talking about babies but I feel that this register does not fit the emotional world to which this baby belongs for me. (pp. 99-100)

Wierzbicka further proclaims that she describes herself differently in her two languages: Polish and English. She does not only see that the personas she wears when speaking two languages are different, but also the experience shaped when speaking the two languages. She writes "I do not only project a different persona but am in fact a different person in my Anglophone and Polophone relationships" (2004, p. 99).

The perception of emotion has had considerable attention in research on emotion and language. Rintell (1984, as cited in Ożańska-Ponikwia, 2012a) investigated foreign language learners' perception of verbal emotion in contrast to natives to test whether factors of age, gender, and language proficiency affect how individuals perceive emotions and their intensity. Participants, who were native speakers of Arabic, Chinese, and Spanish, were asked to point out emotions then evaluate their intensity when listening to English conversations. Findings of the study revealed "a strong correlation . . . for language proficiency and a native language" (Ożańska-Ponikwia, 2012a, p. 204), and no
impact was recorded for gender and age. The study was replicated by Graham, Hamblin, and Feldstein (2001, as cited in Ożańska-Ponikwia, 2012a, p. 204) on Japanese-Spanish bilinguals and divulged identical results.

Gao, Luo, and Gou (2019) investigated emotional reactions to stimuli in different languages by subjecting bilinguals to praise and criticism directed at them in their two languages, one language at a time: Chinese (L1) and English (L2). Results revealed that although critical comments unsurprisingly triggered more unpleasantness in the participants, the same statements when received in English were rated by them to be 'less unpleasant' than when worded in Chinese, their native language. Findings were anticipated in advance because previously conducted studies (Caldwell-Harris \& Ayçiçeği-Dinn, 2009; Harris, Aycicegi, \& Gleason, 2003; Hsu, Jacobs, \& Conrad, 2015, as cited in Mesquita, et al., 2019) proved a reduced emotional involvement in FL.

Ożańska-Ponikwia (2012a) led a study on the possibility for variables of "selfperceived L2 proficiency, frequency of L2 use, context of acquisition, contact with the L2, length of stay in an L2 country, age, gender or education" (p. 215) to impact the expression of emotion in a foreign language. Research output confirmed that a regular usage of FL , coupled with adequate exposure to the language in question, foretells the capability of emotional expression in a foreign language. Surprisingly enough, the duration of residence in the country of L2 was not as strongly tied to emotional expression in that given language as were the factors of "self-perceived L2 proficiency and exposure to an L2 via media, reading books, magazines, exchanging e-mails, surfing online" (p. 215). Thus, it was conjectured that recurrent contact in whatsoever manner with L2 together with a routine practice enhance emotional expressiveness and selfassessed linguistic skills in the learnt language.

## Conclusion

Philosopher Ludwig Wittgenstein writes, "the limits of my language mean the limits of my world". Our lexical repertoires, as diversified as they can be, influence our perception of the world; and as Wittgenstein sees it, if we get to learn more words, we will be able to broaden our perspectives and enhance our perception (Konnikova, 2015). Similarly, Geoffrey Willans affirms that "you can never understand one language until you understand at least two" (Stavans \& Hoffmann, 2015, p. 288). Bilingualism does not only open windows upon other cultures and ways of life, but it also permits individuals to re-evaluate their own languages and review their otherwise unnoticed linguistic attitudes. Furthermore, it makes them aware of the differences inherent in languages and cultures alike. Hence, it empowers them to see a bigger picture of the world with the capacity to alternate between two linguistic systems or more, and possibly, to recondition their worldviews.

## CHAPTER THREE: FIELD INVESTIGATION

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## Introduction

The earlier two chapters dug into the range of factors interfering in the relationship between language and emotion together with several reported studies on bilingualism, emotionality, and expressiveness. Taking that into account, this closing chapter puts forwards findings from a study conducted with Algerian sub-coordinate bilingual students to investigate the influence of learning English as a foreign language on their language choice and emotional expressivity. The herein investigation included a test entitled "Express Yourselfie! [sic]" to throw a shade of informality over the test and incite participants to answer freely and more naturally in the most viable way. The test was preceded by a questionnaire to check participants' linguistic habits, preferences, and background. The qualitative analysis of the test aims at providing in-depth insights about language choice, the expression of emotion, and bilingualism. On the other hand, the questionnaire was administered to the participants with the aim of examining their length of instruction (LoI), level of proficiency, exposure to the target language culture, and their attitudes and beliefs about their language behaviour in emotional situations. Data from the student questionnaire and the statistical qualitative analyses obtained from the student test are presented in graphs and tables showcasing results and proportions in number and percentage. Furthermore, the chapter covers the discussion and interpretation of the findings before concluding with an overall summary of the study.

### 3.1. Population and Sample of the Study

The participants of this study were 62 postgraduates ( $\mathrm{S}=62$ ), at the Department of Letters and English Language, University of 8 mai 1945 in Guelma (Algeria), enrolled for the academic year 2019-2020. First-year and second-year postgraduate students ( $\mathrm{N}=$ 220) enrolled for the master's programme would have spent at least 11 and 12 years
respectively learning English as a foreign language, and they would have gained enough exposure to both the target language and culture. Being ideally more proficient than the rest of the department's students makes them a suitable target sample for this study.

### 3.2. Administration of the Student Questionnaire and Test

Due to the conditions shaped by the pandemic, data had to be collected online. Therefore, both the questionnaire and the test were combined into one online form and administered through the platform of Google Forms, "a survey administration app that is included in the Google Drive office suite and Google Classroom" ("Google Forms", 2020, para. 1). Participants were solicited via Facebook because most students of the population did not seem to respond to emails delivered by other candidates during that period. Hence, they were directed to the link to the form where it was open for submissions for two weeks and was shared to the two private Facebook groups of which first-year and second-year Master students are members. To assure maximum anonymity, no names were present on the introductory section of the form, and participants were reassured that their answers would remain anonymous as no email addresses or personal identifiers would have to be collected. The students, by and large, showed no interest in filling out the form as only 62 students out of the whole theoretical population (220) did cooperate to complete the questionnaire and test. However, positive feedback was received from respondents both via the form comments and in the Facebook comment section under the posts on the groups.

### 3.3. Student Questionnaire

### 3.3.1. Description of the Student Questionnaire

A twenty-nine-item questionnaire was tailored on basis of the scoured literature about emotional expression variability in relation to languages, cultures, and bilingualism
discussed in the previous chapters. Besides, some of the items were adapted from Dewaele and Pavlenko's (2001-2003) conventional Bilingualism and Emotion Questionnaire (BEQ). The questionnaire was semi-structured in order to gather statistically adequate information on participants' subjective experience with their languages; therefore, it consisted of a series of open-ended and closed-ended questions. The latter ranged between dichotomous, multiple-choice, ranking, checkboxes, and rating (a five-point scale in most items) questions. Follow-up questions in which respondents were asked to explain their responses succeeded only four questions and, in quest of good-quality answers, responding to them was not compulsory: students had a choice to provide an answer or to leave a blank field. The questionnaire (see Appendix A) was comprised of three sections: (a) Background Information, (b) Language Background, and (c) Language Use and Attitudes.

The first section, Background Information, was designed to identify the participants’ overall context and sociolinguistic environment. Accordingly, it consisted of five questions about the respondents' gender, age, LoI, their prior motivation to learn English or lack thereof, and their graduation scores. The second section, Language Background, encompassed eight (08) items that intended to evaluate the respondents' linguistic skills and preferences through self-reported assessment. It aimed at language proficiency, frequency of language use inside and outside the classroom, and exposure to the target language and culture. The third and concluding section, Language Use and Attitudes, comprised 16 questions. It was devised to gather information about the respondent's attitudes towards their native language (Arabic/Darija) and the target language (English), their expressiveness and emotionality in both languages, and their language choice in a variety of emotional contexts. Overall, the questionnaire concentred on participants'
native language (Algerian Arabic and MSA were both considered interchangeably as L1) and English Language (L2).

### 3.3.2. Analysis of Findings from the Student Questionnaire

## Section One: Background Information

Question One: Gender.

Figure 3.1
Student Distribution According to Gender


Most of the participants were female $(91.90 \%)$ with a female to male ratio of 11.4 to 1 , whereas only $8.1 \%$ of them were male with a ratio of 0.087 to 1 . This was an expected finding since females constitute the vast majority of postgraduates at the department of Letters and English Language. In fact, this female-domination phenomenon is ubiquitous across most Algerian universities and is tackled by Ouadah-Bedidi (2018) who reports that, by the end of the twentieth century, Algerian universities have been recording more enrolment rates in favour of girls. For instance, the 2010-2011 academic year witnessed many more fields being numerically dominated by the female gender; namely, "natural and earth sciences", "medical sciences", and language and "literature" (p. 91).

Considering the significant imbalance in the size of the two gender groups, testing the association between sex and emotional expression would not bring ashore reliable cues from this sample.

Question Two: How old are you?

## Table 3.1

Student Distribution According to Age ( $N=$ counts).

| Age | N | Percentage |
| :---: | :---: | :---: |
| 21 | 08 | $09.68 \%$ |
| 22 | 10 | $16.13 \%$ |
| 23 | 27 | $43.55 \%$ |
| 24 | 11 | $17.74 \%$ |
| 25 | 04 | $06.45 \%$ |
| 26 | 01 | $01.61 \%$ |
| 29 | 01 | $01.61 \%$ |
| Total | 62 | $100 \%$ |

The table atop shows that the sample is homogeneous in terms of age (mean $=23.03$ ). We note that 56 out of the 62 participants' ages range from 21 to 24 years to constitute the dominant proportion of the sample $(90.3 \%)$. Therefore, the age variable cannot be tested as an influential factor in the participants' attitudes and language choices in emotion expression. However, it is still an indicator of how this group of learners potentially share particular interests regarding methods of language instruction and linguistic attitudes.

Question Three: For how many years have you been learning English?

Table 3.2
Student Distribution According to LoI

| Period (Years) | N | Percentage |
| :---: | :---: | :---: |
| 05 | 05 | $08.06 \%$ |
| 10 | 01 | $01.61 \%$ |
| 11 | 12 | $19.35 \%$ |
| 12 | 33 | $53.22 \%$ |
| 13 | 05 | $08.06 \%$ |
| $15-18$ | 03 | $04.38 \%$ |
| N/A | 03 | $04.38 \%$ |
| Total | 62 | $100 \%$ |

The students were asked to provide the number of years they have spent learning English. Because the question did not require a numerical value for response validation, participants had the freedom to provide detailed and often unstandardised answers about their instruction. For example, few students, $08.06 \%$ (5), took into account only the years they spent at university (i.e. five academic years); while one student (1.61\%), stated that he or she had spent 10 years learning English. We assume that the latter was a first-year Master's student who did not consider the current year when counting LoI. Also, three responses $(04.38 \%)$ were invalidated because it was not possible to determine the period of language learning from them, e.g. "before 6 years old [sic]". The majority of the students, $53.22 \%$ (33), has spent 12 years learning English, including the current year. Meanwhile, $08.06 \%$ (5) of the respondents have been learning English for 13 years. Accordingly, $61.29 \%$ (38) of the students have been learning English for 12 to 13 years.

Question Four: Was your choice to study English Language and Culture intrinsically motivated?

## Figure 3.2

Student Prior Motivation to Learn English as a Foreign Language


The great majority $88.7 \%$ (55) of the learners revealed positive attitudes towards the English language and culture since they confirmed having had an intrinsic motivation to study English. On the other hand, only $11.3 \%$ (07) of the students were persuaded to learn English for specific aims or they did not choose to learn English themselves (e.g. due to an administrative choice). Positive attitudes towards a language and its culture are crucial factors for successful language learning and enhanced perception and acceptance of the target culture's specificities. This fact would influence their verbal behaviour, resulting in a tendency to prefer FL as a means to express some emotional materials because operating in the language would assist them to picture a different emotional world.

Question Five: What was your graduation score range?

## Figure 3.3

Student Academic Achievement (Average Graduation Score)


The sample of the study consists of a majority of postgraduates, whose aggregate graduation score range between 12.00 and 14.00 out of 20.00 ( $53.20 \%$ ). In parallel with this, $27.4 \%$ (17) of the students scored higher averages that range between 14.00 and 16.00. Lastly, $19.4 \%$ (12) of the students scored relatively average graduation scores. None of the students who scored below average (08.00-10.00) took part in the questionnaire. The current study neither can nor does it aim to test any influence of the aforementioned factors on the expression of emotion. Still, the results serve to contextualise the sample as they demonstrate that a good majority pulled off a decent (above average) academic achievement ( $80.60 \%$ ). The sample's above average / average division on account of graduation score is reminiscent of the 80/20 Pareto Principle.

## Section Two: Language Background

Question Six: Your strongest languages are:

## Figure 3.4

## Students' Strongest Languages



A high percentage of students, $74.2 \%$ (46), have Arabic/Darija and English as their strongest languages, i.e. the languages in which they can express themselves more effortlessly and readily. Moreover, $22.6 \%$ (14) of the participants reported that they are equally proficient in Arabic, French, and English when speaking their mind. Notably, two respondents (3.2\%) pursuing English studies, claimed to be proficient in Arabic and French, but not in English. All in all, the sample consists of $96.8 \%$ (60) of the students who self-reported a proficiency when it comes to expressivity in Arabic and English. These two languages are expected to be the students' main means of communication in their day-to-day interactions. Consequently, the sample is overall appropriate for this study which considers Arabic and English as the participants' L1 and L2 respectively regardless of a potential proficiency in other languages.

Question Seven: Rate your English proficiency level in the four skills.

Figure 3.5
Self-Assessed Proficiency Levels


The students were asked to self-assess their English proficiency in the four skills according to an adapted description of the scales (How IELTS is scored, n.d.) of the widely used International English Language Testing System (see Appendix A, p. 129 for the employed scale). The results were as follows: Regarding listening skill, only two (03.22\%) participants rated themselves as limited users, while 11 (17.74\%) reported to be modest listeners. Further, $37.09 \%$ (23) of the respondents rated themselves as competent users of the skill of listening, $30.64 \%$ (19) believed they are very good users, and $11.29 \%$ (07) of the participants thought that they are expert users.

As for the speaking skill, only one student ( $01.61 \%$ ) was a limited user, whilst $19.35 \%$ (12) were modest users. Moreover, $40.32 \%$ (25) of the respondents described themselves as good users, $29.03 \%$ (18) were very good users, and finally, $09.67 \%$ (06) were expert users.

Self-assessed results of the reading skill were quite higher than the other three skills, with only $01.61 \%(01)$ and $03.22 \%(02)$ of the respondents rating themselves as limited
and modest users, respectively. However, $41.93 \%$ (26) of the users evaluated themselves as good readers, $38.70 \%$ (24) as very good users, and $14.51 \%$ (09) as expert users.

Finally, the respondents self-evaluated their writing abilities as follows: $03.22 \%$ (02) of the sample identified as limited users, $16.12 \%$ (10) as modest users, $41.93 \%$ (26) as good users, $29.03 \%$ (18) as very good, and $09.67 \%$ (06) as expert users.

In general, the respondents' proficiency levels in the skills of listening, speaking, reading, and writing vary considerably between modest, good, very good, and expert. Yet, the majority of the respondents reported that they have a high proficiency level (i.e. good, very good, and expert) in the four skills: $79.04 \%$ of the students were proficient in the listening and speaking skills, $80.66 \%$ in the writing skill, and $95.17 \%$ in the reading skill. Also, speaking and writing self-recorded proficiency levels were quite similar. Although these percentages represent self-assessed data by the participants themselves, and it is in by no means indicative of their real command of English language, the tangible proficiency variability recorded amongst students would allow testing whether there exists a correlation between the level of proficiency and the likelihood of emotion expression in that language

Question Eight: On a typical day, how often do you use English actively inside the classroom?

Figure 3.6
English Language Use Inside the Classroom


Twenty-five of the participants ( $40.3 \%$ ) claimed that they actively engage in classroom tasks or discussions using the English language all along the sessions. Twentyone of them use it frequently (33.9\%), and 15 ( $24.2 \%$ ) use it occasionally. As a peculiar case, only one respondent claimed to rarely use English in a classroom context. Active classroom interaction in the target language helps students develop their communicative skills and improve their level of proficiency. This would result in a more natural expressivity in the given language.

Question Nine: On a typical day, how often do you use English outside the classroom?

## Figure 3.7

## English Language Use Outside the Classroom



As Figure 3.7 indicates, responses to this question revealed that a vast majority ( $92.00 \%$ ) of the students uses English outside the classroom for different purposes to be displayed in the following question-item. Twenty-four students (38.70\%) use it sometimes, $33.90 \%$ (21) use it frequently, and $19.4 \%$ (12) use it all the time. However, only a slim minority of $08.10 \%$ (05) rarely uses English outside the classroom, and none $(00.00 \%)$ of the students reported to never use it. The use of foreign language outside classroom context enhances the leaners' command of the language by putting the communicative skills they acquire into practice. At the same time, it boosts their
confidence in using their linguistic repertoire in a variety of situations, including emotional ones. Furthermore, these results indicate that most of the students try to free themselves from the usual habits of using TL for formal purposes to make use of it in rather more natural contexts; e.g., throughout their quotidian chitchats or casual recreations where they would act more spontaneously.

Question Ten: What do you believe has contributed the most to your English language learning?

Table 3.3

The Materials Contributing the Most to the Students' FL Learning

| Materials | N | Percentage |
| :--- | :---: | :---: |
| Formal classroom instruction | 49 | $79.03 \%$ |
| Real-life interaction with non-native speakers | 29 | $46.77 \%$ |
| Real-life interaction with native speakers | 09 | $14.51 \%$ |
| Texting with non-native speakers | 21 | $33.87 \%$ |
| Texting with native speakers | 16 | $25.80 \%$ |
| TV, films, music, podcasts, or video games | 53 | $85.48 \%$ |
| Reading English books | 37 | $59.67 \%$ |
| Listening to audiobooks in English | 15 | $24.19 \%$ |

Note. $\mathrm{N}=$ number of times the option was selected as one of the four most used materials by students.

The students were asked to select and order four of the suggested materials they believe they have contributed the most in their learning. The table above shows counts for each material selected by students, regardless of the frequency of usage.

Audio-visual materials such as TV, films, music, podcasts, or video games gained the lion's share of students' selections with a total $85.48 \%$ of times to make it the most contributing asset to their learning of English language. Secondarily, formal classroom
instruction was present in $79.03 \%$ of students' choices (49 counts). Next, reading books in English gained a decent recognition by students by featuring as a tool of language mastery in $59.67 \%$ of their responses ( 37 counts). Relatedly, listening to English audiobooks received only $24.19 \%$ selections ( 15 times). Further, engaging in real-life interaction with non-native speakers, i.e. with peers or teachers, was chosen by participants (29) as a factor that had enhanced their English language learning in $46.77 \%$ of the submissions. On the other hand, conversations with native speakers were reported to have played a part in students' English language learning by only $14.51 \%$ of the answers (9). Instant messaging (IM) was one of the options students had to choose from considering the implications of technology on students' communication and language learning today. Whether be it with corresponding non-native or native speakers of English, the margin between the two was fairly inconspicuous: with $33.87 \%$ (21) for the former, and $25.80 \%$ (16) for the latter.

Figure 3.8
Most Contributory Materials to Students' English Language Learning


Figure 3.8 illustrates the order of materials that contributed the most to the improvement of students' language proficiency. None of the students believed that texting native or non-native speakers was the most contributory throughout their FL learning journey as both options received no selections as a first choice. However, a slim minority of them ( $2,6,2$, plus 4 ) thought that real-life interaction with non-native speakers, real interaction with native speakers, reading English books, and listening to English audiobooks, respectively, were the resources that helped them the most in learning English. Additionally, eighteen (18) students believed that formal classroom instruction was paramount in their development of English language skills. Then again, more students (28) maintained that TV, films, music, and podcasts in English were most effective for them in their FL learning. The latter are authentic materials that provide distant immersion in the target language and culture. This exposure permits these ArabicEnglish bilingual students to gain substantial knowledge about their target language's vocabulary and lifestyle in contextualised situations involving native speakers. The result of exposure to authentic materials can be reflected in an enhanced awareness about cultural aspects and practices associated with English-speaking communities and a developed emotional expressiveness in the language.

Question Eleven: How often do you use English in the following activities?

Figure 3.9
Frequency of English Language Use in Various Activities


This question aimed to measure students' level of exposure to the target language and culture, which happens to be a key factor in raising their intercultural communicative competence. It also sought to garner insights into their language use and practice of their language skills beyond classroom settings. According to participants' responses, 46.77\% (29) of the students listen to music, radio, or podcasts in English all the time; while $32.25 \%$ (20) of them do so frequently, compared to $12.90 \%$ (08) who listen to authentic English materials from time to time. However, only $03.22 \%$ (08) and $04.83 \%$ (03) of them reported listening to English resources hardly ever or never at all, respectively. Moreover, exactly half of the participants (31) watch TV programmes, films, and shows in English all the time, and $38.70 \%$ (24) do it frequently. While only $08.06 \%$ (05), $01.61 \%$ ( 01 ), and $01.61 \%$ ( 01 ) sometimes, rarely, or never access the named materials, correspondingly. Apropos of using access to the internet to read English materials (e.g. news, forums, websites, etc.), $38.70 \%$ (24) of the respondents read in English all the time, $32.25 \%$ (20) of them read frequently, and only $08.06 \%$ (5) read sometimes. However, one student ( $01.61 \%$ ) indicated to read rarely, alongside another one who never reads English materials on the internet. As for drafting emails and texting with friends, 41.93\% (26)
use English frequently for these tasks, while $27.41 \%$ (17) of the respondents use it all the time, and $16.12 \%$ (10) of them write in English sometimes. Finally, 11.29\% (7) of them rarely write in English outside the classroom, and 3.22\% (2) of them never do at all. The proliferation of social media outlets we witness today has seen most of our communication routed through the internet; and based on these results, FL students seem to make good use of this spread to come into contact with the target culture and put their linguistic abilities to practice.

Question Twelve: Have you ever gone on a language stay (séjour linguistique) or a student exchange programme to an English-speaking country?

Figure 3.10
Language Stay in an English-Speaking Country


This question was intended to verify if there were students in the sample who have done a language stay in an English-speaking country and therefore benefited from a direct exposure to the language. In truth, we considered that none of the sample's students have ever been to an English-speaking country despite the results represented by Figure 3.10, because of what follow-up responses proved.

Follow-up Question: If yes, please indicate the name of the country, the reason, and the length of your stay (optional).

The only two students ( $03.20 \%$ ) who answered with "yes" either did not disclose a complete answer-one of these two left a blank field; or misinterpreted the question, since the other participant stated that his or her stay was in "Romania, to study for the second semester of Master One studies, 5 months". Romania is, of course, not an English-speaking country; hence, the two answers were invalidated. In conclusion, all participants (100\%) have not had a language learning experience in a native Englishspeaking country.

## Section Three: Language Use and Attitudes

Question Thirteen: To me, Arabic/Darija is:

Figure 3.11
Student Perceptions and Attitudes Regarding Arabic Language (L1)


This question geared towards students' perception of their own languages and attitudes towards, in this case, their L1 (MSA and Darija). The vast majority of the students, $82.25 \%$ (51), believe that their first language is a useful language, in contrast to only $04.83 \%$ (03) who do not think it is $u$ seful. As a side note, $12.90 \%$ (08) of the students are neutral to this matter. Moreover, $51.61 \%$ (32) of the respondents perceive Arabic as a colourful language; while only $06.45 \%$ (04) disagree, and $41.93 \%$ (26) of the students choose to neither agree nor disagree. A significant majority that reached
$72.58 \%$ (45) of the students, think that Arabic is a rich language, while $17.74 \%$ (11) were neutral, and $09.67 \%$ (06) think that it is not rich. Furthermore, $41.93 \%$ (26) of the students opine that Arabic is a poetic language, while $19.35 \%$ (12) showed neutral to the description. Unexpectedly, a significant proportion of the sample, $37.09 \%$ (23), does not see Arabic as a poetic language, despite the fact that middle and high school Arabic language curriculum which was designed to excessively cover literary texts did centralise on poems and eloquence. Regarding emotionality, $59.67 \%$ (37) of the sample agree that their L1 is an emotional language; whereas $14.51 \%$ (09) disagree, and $25.80 \%$ (16) neither agree nor disagree. Finally, $43.54 \%$ (27) of the respondents do not agree that Arabic is a cold language, while $16.12 \%$ (10) of them agree that it is cold. Then again, an important proportion, $40.32 \%$ (25), are neutral.

Question Fourteen: To me, English is:

## Figure 3.12

Student Perceptions and Attitudes Regarding English Language (L2)


All the respondents but one neutral, $98.38 \%$ (61) believe that English is a useful language. $70.96 \%$ (44) of the students think that English is a colourful language, 27.41\% (17) are neutral, and one student ( $01.61 \%$ ) believe that it is not useful. A vast majority of the respondents, $82.25 \%$ (51) agree that English is rich, while only $06.45 \%$ (04) of
them disagree. $11.29 \%(07)$ of the sample neither agree nor disagree. The students who agree that English is a poetic language make $75.80 \%$ (47) of the sample; while only $03.22 \%$ (02) disagree, and $22.58 \%$ (14) were neutral. Considering emotionality, $72.58 \%$ (45) of the sample's students think that English is an emotional language, while only $04.83 \%$ (03) think English is not emotional, $22.58 \%$ (14) were neutral about this item. Finally, only $11.29 \%$ (7) of the respondents think English is a cold language, while $53.22 \%$ (33) of the sample disagree with the idea, and the remaining $35.48 \%$ (22) show neutral to it.

There are important insights to extract from the comparison of student attitudes towards their L1 (Arabic/Darija) and L2 (English). Even though most participants seem to value both languages dearly, the number of students who perceive L2 English as a useful language is greater than that recorded for the Arabic language (their L1). Although the proportionality between the two figures, $98.38 \%$ (61) to $82.25 \%$ (51), does not entail by any means that students regard Arabic as 'useless' compared to English, the result suggests that students are aware of the status the English language holds as a "lingua franca of the world" (Nelson \& Aarts, 1999). Furthermore, the participants' perception of the English language hints that they find it helpful in their daily activities and in voicing their concerns and emotions. Similarly, English was perceived as a colourful language significantly more than was the case with Arabic, $70.96 \%$ (44) to $51.61 \%$ (32). The colourfulness of the language here refers to the figurative potential of a language in applying figures of speech (e.g. similes and metaphors) to paint more vibrant, vivid, and distinctive expressions beyond the level of ordinary, literal meanings. As students of English Language and Culture, participants have been acquainted with key English literary works from a variety of genres, which justifies why many of them perceive the language as colourful. Besides,
their exposure to English music (see Table 3.3) might have set a base for their choice as well.

Moreover, English was perceived as a rich language in $82.25 \%$ of the answers (51), which is slightly larger than what was recorded with Arabic, $72.58 \%$ (45). However, the proportion agreeing that English is poetic is significantly greater with regards to that of Arabic, $75.80 \%$ (47) to $41.93 \%$ (26), respectively. A striking finding is that English was believed by students to be emotional in more cases, $72.58 \%$ (45), against $59.67 \%$ (37) for Arabic. Concerning language coldness, participants largely seem to regard both languages as emotionally warm in the same way. With Arabic being thought by participants to be a cold language in $16.12 \%$ of the responses (10), and English in $11.29 \%$ (7), the aspect of language coldness received much less agreement from the students. In the same vein, students disagreed in $53.22 \%$ (33) of answers on English being a cold language, against $43.54 \%$ (27) for Arabic. Despite the vast range of vocabulary available in MSA (12.300.000) compared to English (600.000) according to SEBIL Center's statistics (n.d.), students still seem to recognise lexical diversity in the English language. They perceive their L2 as a language that is rich and emotional enough to allow them to voice out their emotions. Interestingly, this suggests that participants, in most cases, would not necessarily favour their mother tongue (Arabic) over their learnt language (English) to express themselves owing to lack of expressive terms in the latter language; quite the opposite, they would rather code-switch into English on certain occasions.

Question Fifteen: Which language(s) do you use for mental calculations?

Figure 3.13
Languages Used for Mental Calculations


The most significant finding from this question is that $35.28 \%$ (22) of the respondents use L1 for mental calculations all the time, while $25.80 \%$ (16) use it frequently. However, in regard to English, $20.96 \%$ (13) use it for mental calculations frequently, whereas only, $04.83 \%$ (3) claim to use it all the time. Finally, French, a language that was learnt at an early age and used by most Algerians in their codemixing serving day-to-day L1 conversations, is never used by $41.93 \%$ (26) of the sample for mental calculations, while it is used by only $09.67 \%$ (06) frequently, and by one exceptional case, $01.61 \%$ ( 01 ), all the time.

This question sought to examine whether students switch from their L1 during mental activities. Results show that there are some students who use English in some instances when performing mental computations. In this light, Pavlenko (2014) attests that a sizeable portion of bilinguals living in L2 contexts confirms that they still rely on their first language for regular mental calculations. Pavlenko refers to the variable as "L1 advantage" ( p .99 ) which can be justified by the naturalness associated with conducting mental operations in the first language, or simply by the latter's continued predominance
(Bakić \& Škifić, 2017). Relatedly, the "language of instruction" (p. 99) variable plays a part in imposing the use of either L1 or L2 as the language of mental computations (Pavlenko, 2014, p. 99). For instance, this sample's participants learnt arithmetic operations in primary school (roughly at 6 years of age) exclusively in Arabic (L1) long before middle school where they started learning the English language, in which they had never been instructed (at least formally) to calculate. Therefore, number retrieval in the minds of these students is more likely to be in their mother tongue, which relates to another variable proposed by Pavlenko (2014) for this case-"the language of encoding advantage" (p. 101). However, it should be noted that the numerical symbols which the students in this sample deal with are identical since all three languages which are shown on the graph (Figure 3.13) use Western Arabic numerals. Hence, there would not be any retrieval interference in this regard.

Question Sixteen: In which of the following languages do you feel more expressive?

## Figure 3.14

Students' Preferred Language of Expression Relative to Communication Modes


The vast majority of the students, $72.58 \%$ (45), acknowledged more expressiveness when texting in English (L2), while only $27.41 \%$ of the students (17) reported that they are more expressive when they text in Arabic/Darija. Results showed in speaking
were quite contrastive with writing (IM), with $70.96 \%$ (44) of the students feeling that they can express themselves better in their first language (Arabic), as opposed to 29.03\% (18) who feel more expressive when speaking their foreign language (English). The results appear evenly proportionate with more participants preferring L1 for face-to-face interaction and L2 for IM, as the 'quasi-symmetrical' pattern Figure 3.14 displays. The latter has lately become a progressively indispensable medium of communication especially amongst this sample's generation, so it would have come to no surprise had it been chosen over a more typical communication mode (speaking). However, most participants having preferred English to write out their thoughts and feelings is an interesting finding in connexion to this study. Being English language learners (ELLs), participants admit finding a more comfortable space in English when texting in contrast to speaking. Notwithstanding this peculiarity, a possibility for code-switching or code-mixing to be marked in either of the two communication modes is not to be ruled out. Namely, the case of slang, internet abbreviation, and convenient 'tag-switching' exclusive to English language online talk, e.g. "OMG, LOL, you know, etc". Furthermore, the study's bilingual participants seem to spend more time practising English online than in person (see Table 3.3). This tradition has helped most of them master expressing themselves in the English language more productively in the writing mode, beside mere personal preferences. Language proficiency-wise, these results could be due to students being more inclined to use their dominant language (Arabic) in the context of spoken conversation. The process of speaking requires more attitudinal directedness towards what is being expressed than the process of writing, a less interactive activity. Therefore, the writer finds it easier to hide impatience and excitement than the speaker (Brown, 1978, p. 272). That being said, speaking in L2 would double the pressure put on the
speaker from factors such as self-confidence and EFL anxiety that would hinder their expressiveness and induces their use of L1 where words flow easily and more naturally. Another reason prompting the use of the first language in speaking could lie in their emotional attachment to L1; for they would perceive it as more 'reliable' and easily accessible than their foreign language. As for the writing mode, an ELL has the luxury to think about what to say thoroughly, remove any incorrect input, or adjust imperfections to tone the (written) message; not to mention the reduced concern about the interlocutor's stance and potential judgments to what they would say.

Question Seventeen: To me, talking about emotional topics in English is:

Figure 3.15

## Emotionality in L2 (English Language)



The majority of the sample's students, $80.6 \%$ (50), finds it easier to talk about emotional topics in English, while only $19.4 \%$ (12) of them find it more difficult. To analyse such a remarkable result, it is appropriate to consider the social constructionist view of emotions that sees them as "discursively constructed phenomena" (p. 46) in the investigation of "languages of emotions" (Pavlenko, 2002). In the literature on emotions and bilingualism, the prevalent assumption on emotional attachment and language is that late bilinguals tend to be more emotionally attached to their L1 as it
carries stronger emotional experiences because it was acquired at an earlier age of onset in 'more personal' contexts such as home. In parallel to what was pointed out in Chapter Two, p. 54, through Bond and Lai’s study (1986), Javier and Marcos (1989) refer to how coordinate bilinguals switch to L 2 in response to stress-inducing material. In the same vein, "other studies demonstrate that greater anxiety is produced by the presentation of emotional materials (e. g., taboo words) in the native/first learned language of bilingual speakers who learned their second language beyond early childhood" Pavlenko (2002, p. 48). In consistence with these findings, fifty of the Arabic-English speakers in this study prefer talking about sensitive matters in L2 English because the latter curbs the emotional severity otherwise invoked in their first language.

Follow-up question: Could you explain your choice?
Participants were asked to explain why they find it either easier or more difficult to use English to express their emotions. Responses show that 7 out of a total of 12 students who find talking about emotional topics in English more difficult explained that it is either by reason of failing to find a corresponding word in the English language [ $\mathbf{1}$ to 3], or because English as a foreign language cannot express their deep feelings as efficiently as Arabic does [4 and 5]. Examples from their transcripts include [emphasis added], [1] "Can't find the appropriate words that describe my emotions deeply".
[2] "Because I don't find the right words to express my opinion".
[3] "Sometimes it is hard to find the right words to express my feelings".
[4] "I feel that when I use English to express my feeling the message is not received".
[5] "For me Arabic is more expressive when talking about emotional topics".

Alternatively, 33 students out of a total of 40 participants who justified their choice provided multifarious reasons as to why it is easier for them to speak about emotional topics in L2.

For instance, nine (09) of them talked about a 'lack of expressive emotional words' in L1 (Arabic/Darija), compared to their L2 (English) repertoire with which they find more fluidity when expressing their true emotions, we state:
[6] ". . . u [sic] can find the appropriate word so easily".
[7] ". . . the availability of words that express emotions . . .".
[8] "I find myself having a lot of expressions and words . . .".
[9] ". . . I easily find the words that describe my situation".
[10] "Darija does not have enough vocabulary for feelings".
[11] "You can find words easily and convey it clearly".
Bilinguals in this study are sequential bilinguals who first acquired Algerian Darija then MSA during infancy, though most of them have been learning English as a foreign language since late preadolescence (middle-school age) up until current age.

Figure 3.16
Preadolescence Period (9-12)

| development periods |  |  |  |  |  |  | = Definitions differ in faded inteval I = Change in time scale |  |  |  |  |  |  |  |  | Preadolescence |  |  |  | Ado |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Childhood |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infancy |  |  |  |  |  |  | Todderinood |  |  |  |  |  | Primary school age |  |  |  |  |  | Secondary |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Play age |  |  |  |  |  |  |  |  |  | Puberty (girs |  |  |  |
| 123 | 4 | 5 | 6 | 78 | 9 | 1011 | 12.23 | Preschooler |  |  |  |  |  |  |  |  | Preteen |  |  |  |  |  |
| 0 |  |  |  |  |  |  | 1 |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 1 |  | 13 | 14 |

Note. Adapted from "Approximate outline of development periods in postnatal human development until what generally is regarded as adulthood," by M. Häggström, 2009
(https://en.wikipedia.org/wiki/Preadolescence\#/media/File:Child_development_stages.s vg). Wikimedia Commons by Wikipedia.

Further, their exposure to English language and culture is largely exclusive to classroom instruction and audio-visual materials (films, TV shows, and music), as shown in Table 3.3. Besides, they have never been immersed within an Englishspeaking community to further develop their proficiency and widen their vocabulary. Given these details on the sample background, in conjunction with existing literature on first and second language acquisition, bilinguals in this study are supposed to be more fluent in their dominant L1 (Arabic). Consequently, the students' claims about an alleged "lack of vocabulary" in their L1 [8 and 10] and an "easier access" to words and expression in their $\mathrm{L} 2[\mathbf{6}, \mathbf{7}, \mathbf{9}$, and 11] are factually incorrect. The truth of the matter could be that their word and expression choices are motivated by the feelings that emotional words provoke in the two languages. By way of illustration, the potential anxiety provoked by strong emotional materials in Algerian Darija rather than in English could be the factor that diverts their access to (and use of) emotional words from Arabic to English. This is one possible explanation for what could make these participants think as though there are more words in English to describe and convey their different emotions. In other words, these students' misconception that English emotional words and expressions are more easily accessed stems from their intent to limit or prevent anxiety and similar negative emotions attached to their first language. Hence, it may be fair to argue that emotional anxiety evoked by their native language might be barring their retrieval of the plethora of L1 emotion words they grasp yet cannot disclose. Other students seem to subscribe to this assumption as it exemplified below [emphasis added]:
[12] "It's the language [that] makes me feel comfortable to express my feelings, thoughts and emotions".
[13] "Because it lessens the intensity . . .".
[14] "Because I can express myself freely".
[15] "Because sometimes certain words do not have the same effect. . . . If someone tells you 'I love you' in the English language it does not [feel the same] as in your native language. . . . [English] does not cause me embarrassment or uncomfortable situations". [16] "Because I can express myself easily without having a problem of being shy..."
[17] "I tend to think that languages offer some sort of protection for us. Speaking in emotional matters using Darija would be way more embarrassing for us. Therefore, we tend to use English as a shield, it helps us be more secure if that makes sense".

Some of the responses above seem to reflect the respondents' awareness of the 'distancing function of L2' as they admit switching to the English language for the purpose of reducing the emotional impact of the first language and avoiding the "embarrassment" associated with it. Particularly, a participant [15] demonstrated cognizance of the emotional weight effect that some expressions bring in certain contexts, while another went as far as to describe the English language as a "shield" to protect oneself with against the 'insecurity' and sensitivity aroused by L1 [17].

Moreover, some students explained that the choice of English in expressing emotions is due to their perception of the emotional expression phenomenon as a 'simple and easy' cultural practice in the English-speaking cultures in contrary to their native Arab (Algerian) culture. Namely [emphasis added]:
[18] ". . . bcz [sic] it feels weird in Arabic or Darija maybe bcz [sic] Arabs tend to [suppress] their feelings and not to express them".
[19] "I think because English is [an] emotional language".
[20] "We know that as typical Algerians we tend to not express our emotions publicly. However, English is like the alternative way of saying such things due to the fact that we used to see it on movies, songs and so forth".
[21] "Sometimes things you feel and the words/ways to express them may sound cliché if you say them in Arabic/Darija. However, in English it sounds logical and smooth and might even have a better reaction from the hearer. I think this goes back to the fact that Darija is a bit cold being an informal language".

One of the participants alluded to the excluding function of code-switching serving to eliminate certain participants from the ongoing conversation through the use of a language they would not understand (English). Notwithstanding the generalisation the student commits [22] in saying that those who speak English are "open-minded", this respondent would seek to restrict the audience of their speech exclusively to those who speak English. Perhaps, he or she believes that projecting emotional concerns in another language establishes a neutral ground for their emotions to thrive without 'raisedeyebrow' judgments from mainstream monolingual speakers unacquainted with the challenging cultural profundity inherent in the message.
[22] "Talking (or writing) about emotional topics in English is easier for me, because it's a language not everybody can understand and those who understand it are 'openminded'".

Question Eighteen: If you were to talk to yourself (inner speech), what language do you typically use when you:

Figure 3.17
Language Choice in Different Inner Speech Situations


This question aimed to examine language choice in internal speech by the participants throughout a range of different contexts; more precisely, to check whether these learners code their thoughts in FL every now and then. "The role of inner speech in L2 learning has received only minimal attention from L2 researchers as an empirical problem to be pursued in a straightforward manner" (de Guerrero, 2005, p. 60). However, Cohen (1998) addresses L2 learners’ linguistic preferences when it comes to thinking, which is relevant to this question in hand. He postulates that the choice is dependent on the learner's command of the given speech scope of the activity. For example, a better mastery of that particular 'speech realm' in the second language would result in using the latter in reflecting on the issue. Accordingly, learning certain materials and terminologies in L2 prompts thinking about them in an easier and a more
natural manner when using the same language. At the same time, more convenience is felt by non-native speakers when using L1 to think about matters dominated by their first language. This thinking situation is labelled as diglossic due to the ability of the bilingual to use more than one language to think depending on the requirements of the context (as cited in de Guerrero, 2005, p. 62).

Although percentages were not quite divergent in internalised speech contexts of daydreaming, arguing with someone, and overthinking, more students talk to themselves in Arabic than students who do in English. Proportions of students daydreaming in Arabic/Darija and English are 54.83\% (34) and 40.32\% (25), respectively. As for imaginary arguments, $53.22 \%$ (33) chose L1, while $45.16 \%$ (28) picked English as the language they would use. However, overthinking recorded a relatively bigger margin with $58.06 \%$ (36) who would overthink in Arabic/Darija against $33.87 \%$ (21) of them choosing English.

Daydreaming is "to spend time thinking pleasant thoughts about something you would prefer to be doing or something you would like to achieve in the future [emphasis added]" (Cambridge Dictionary, 2020), whereas overthinking is to "think about (something) too much or for too long" (Oxford Dictionary, 2020). Hence, if we considered the nature of such thinking situations (being more recurrent and frequent than the rest on a typical day), alongside the sample's linguistic background, these students may be more dominated by L1 during their inner speech. This is a normal insight considering that contexts in question pertain to more natural aspects of human cognitive development, e.g. to think about one's future plans. Therefore, they are more inclined to think in their 'easily accessible' L1 when engaging in such thoughts. Nevertheless, the considerable portion claiming to use the target language is not to be disregarded. Probably, English language is used by them to drift apart from current 'unpleasant'
situations encoded by their first language's environment and create more agreeable experiences through their imagination in L2.

Arguing is "to disagree [especially] strongly and sometimes angrily in talking or discussing something [emphasis added]" (Cambridge Dictionary, 2020). More students admitted using L1 for this thinking context. Thinking about arguing with someone would trigger intense emotions of anger, and for many bilinguals, sometimes their second language may not be expressive enough in such a situation. Therefore, these students would naturally think of using a stronger language (Arabic) to confront their interlocutor.

Moreover, $61.29 \%$ (38) of the students reflect on taboo topics in English whereas $33.87 \%$ (21) of them selected Arabic or Darija. Pavlenko (2002) claims that taboo words provoke greater anxiety in the first language of the sequential bilinguals as compared to their second language, especially so when the second language was learnt after childhood like in the case of our sample. As a result, most of the learners reflect on taboo topics in the English language to reduce their emotional impact.

Regarding imaginary romantic talk and neutral imaginary conversations with someone, the proportions of students using English is larger compared to those preferring Arabic or Darija. Recorded percentages were $53.22 \%$ (33) to $41.93 \%$ (26) in imaginary conversation, and $51.61 \%$ (32) to $37.09 \%$ (23) in imaginary romantic talk. As reported by Pavlenko (2002), bilinguals opt for L2 in anxiety-provoking emotional topics (p.48). In addition, bilinguals choose L2 in cases where it can offer them the possibility to experience and carry out different emotions (p. 49). In view of this, students possibly imagine themselves saying 'what should have been said' in hindsight to their previous encounters, and they do so in a language that distances them from the first language's emotional particularities to eliminate anxiety and 'perform' better. Another reason would be related to learners intrapersonally practising their second language. "Inner speech is
derived from external speech and cannot happen in the absence of exposure to and participation in the particular discursive practices of a social group" (de Guerrero, 2005, p. 192). Unlike residents in L2 communities, EFL learners fill in for the lack of such conditions by depending on classroom approaches alongside their own desire to recreate a linguistic environment with circumstances allowing second language usage. Doing so would produce a proper use of the second language in thinking without translating from their L1 (de Guerrero, 2005, pp. 192-193). Hence, students may voluntarily use their target language to think about certain scenarios or even to think through some matters, as seen in $51.61 \%$ of the participants (32) who would use English to reflect about something they heard.

The table below provides detailed results about the number and percentage of students' language choices in particular emotion contexts.

Table 3.4
Language Choice in Inner Speech Scenarios

| Contexts | Arabic/Darija |  | English |  | Not applicable |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage | N | Percentage |
| Daydream | 34 | $54.83 \%$ | 25 | $40.32 \%$ | 03 | $04.83 \%$ |
| Reflect on a taboo <br> topic | 21 | $33.87 \%$ | 38 | $61.29 \%$ | 03 | $04.83 \%$ |
| Have an imaginary <br> conversation with <br> someone | 26 | $41.93 \%$ | 33 | $53.22 \%$ | 03 | $04.83 \%$ |
| Have an imaginary <br> romantic talk | 23 | $37.09 \%$ | 32 | $51.61 \%$ | 07 | $11.29 \%$ |
| Have an imaginary <br> argument/fight with <br> someone | 33 | $53.22 \%$ | 28 | $45.16 \%$ | 01 | $01.61 \%$ |
| Reflect on <br> something you <br> heard | 27 | $43.54 \%$ | 32 | $51.61 \%$ | 03 | $04.83 \%$ |
| Overthink |  |  |  |  |  |  |

Question Nineteen: Do you switch between Arabic/Darija and English when you speak with people who understand both languages?

Figure 3.18
Code-Switching amongst Students


All students but one, $98.4 \%$ (61), confirmed switching between their first language and English when they speak with Arabic-English bilinguals. This result shows that learners moderate their language preferences according to situations. Follow-up answers (19.2) to this question revealed reasons behind their switching which were emotionally motivated in most cases.

Follow-up Question: If yes, how often do you need to switch between Arabic/Darija and English when talking about certain matters?

Figure 3.19
Code-Switching Frequency in Neutral, Personal, and Emotional Matters by ELLs


The graph in Figure 3.19 demonstrates likelihood of switching between Arabic/Darija and English in different contexts. When speaking about neutral matters, the majority of the students, $51.61 \%$ (32), switches languages only sometimes, while 9 of them rarely do (14.51\%). In non-sensitive circumstances that do not require the use of target language, CS is only needed when it serves to overcome a shortage of vocabulary, to talk about a specific topic, or to quote the original source. However, in more emotionally sensitive contexts such as talking about personal and emotional matters, students switch codes between their L1 and English more frequently. For instance, in talking about personal matters, 40 counts were recorded by the respondents for sometimes and all the times combined ( $32.25 \%$ each), plus 14 counts (22.58\%) for frequently. Furthermore, emotional matters recorded the most counts (28) for participants who switch languages all the time at $45.16 \%$. Still, $22.58 \%$ (14) of the students switch between the two languages for the same reason sometimes, while $12.90 \%$ (08) do it frequently.

Students showed that they switch more frequently when talking about either personal or emotional anxiety-provoking matters. Further details about the counts and percentages of students' rate of code-switching are provided in the following table.

Table 3.5
Code-Switching Frequency in Neutral, Personal and Emotional Matters by ELLs

|  | Neutral matters |  | Personal matters |  | Emotional matters |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage | N | Percentage |
| Never | 00 | $00.00 \%$ | 03 | $04.83 \%$ | 02 | $03.22 \%$ |
| Rarely | 09 | $14.51 \%$ | 04 | $06.45 \%$ | 08 | $12.90 \%$ |
| Sometimes | 32 | $51.61 \%$ | 20 | $32.25 \%$ | 14 | $22.58 \%$ |
| Frequently | 11 | $17.74 \%$ | 14 | $22.58 \%$ | 08 | $12.90 \%$ |
| All the time | 09 | $14.51 \%$ | 20 | $32.25 \%$ | 28 | $45.16 \%$ |
| Not applicable | 01 | $01.61 \%$ | 01 | $01.61 \%$ | 02 | $03.22 \%$ |

Question Twenty: Which of the following languages expresses what you want to say better when you:

Table 3.6
Language Choice in the Expression of Particular Emotions

|  | English |  | Not applicable |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | N | Percentage | N | Percentage | N | Percentage |
| Express happiness | 30 | $48.38 \%$ | 29 | $46.77 \%$ | 03 | $04.83 \%$ |
| Express anger | 35 | $56.45 \%$ | 25 | $40.32 \%$ | 03 | $04.83 \%$ |
| Express sadness | 22 | $35.48 \%$ | 33 | $53.22 \%$ | 07 | $11.29 \%$ |
| Express discontent | 29 | $46.77 \%$ | 25 | $40.32 \%$ | 08 | $12.90 \%$ |
| Talk about sexuality | 09 | $14.51 \%$ | 42 | $67.74 \%$ | 11 | $17.74 \%$ |
| Discuss social taboo | 18 | $29.03 \%$ | 33 | $53.22 \%$ | 06 | $09.67 \%$ |
| topics |  |  |  |  |  |  |
| Have a romantic talk | 22 | $35.48 \%$ | 26 | $41.93 \%$ | 14 | $22.58 \%$ |
| Praise someone | 29 | $46.77 \%$ | 31 | $50.00 \%$ | 02 | $03.22 \%$ |
| Swear/curse | 27 | $43.54 \%$ | 27 | $43.54 \%$ | 08 | $12.90 \%$ |
| Express your deepest | 28 | $45.16 \%$ | 31 | $50.00 \%$ | 03 | $04.83 \%$ |
| feelings |  |  |  |  |  |  |
| Argue with someone | 33 | $53.22 \%$ | 23 | $37.09 \%$ | 06 | $09.67 \%$ |
| Text angrily | 38 | $61.29 \%$ | 17 | $27.41 \%$ | 07 | $11.29 \%$ |
| Text romantically | 16 | $25.80 \%$ | 36 | $58.06 \%$ | 10 | $16.12 \%$ |
| Tell an inappropriate | 27 | $43.54 \%$ | 24 | $38.70 \%$ | 11 | $17.74 \%$ |
| joke |  |  |  |  |  |  |

In contexts where participants would express happiness, express deepest feelings, praise someone, swear, and tell inappropriate jokes, the proportions of the students choosing either of Arabic or English were fairly close. For example, $48.38 \%$ (30) of the students would express happiness in Arabic or Darija while $46.77 \%$ (29) would express it in English. This result implies that participants, overall, show no preference for one
language over the other when they are happy. So, we conclude that the language chosen to express such emotion remains a matter of individual routines or momentary reactions. Therefore, participants' choices are to be taken case by case according to their volition, context requirements, or both. Some, overwhelmed by the thrill of the moment, would speak up their minds in L1 spontaneously, while others would use their L2 out of habit or a deliberate choice for the speech event. For the same reason, expressing deepest feelings, too, did not result in a considerable disparity in results. Half of the participants (31) would use English while $45.16 \%$ (28) of them would use Arabic/Darija. The proportions are again close enough.

For swearing, the same number of participants who would curse in Arabic was recorded for those who would do it in English with 27 counts each (43.54\%). In fact, language choice in the context of swearing is largely attributable to the aspect of anxiety as a personality trait and an emotional state. Some personality types show more anxiety to such anxiety-provoking materials (e.g. obscene expressions). Therefore, it is probable that students who opted for cursing (and expressing deep feelings) in Arabic or Darija have a positive attachment to their L1, according to what has been already mentioned in previous analyses related to emotional attachment to language. Hence, they do not need to distance themselves from the emotional weight of swears (and deep feelings) in their native language. Another possibility would be related to the illocutionary effect needed in the context of swearing by these participants. They, possibly, perceive foreign language swears as 'not intense enough' to serve the intended meaning during the heat of anger moments. On the other hand, students who would rather curse in L2, English, belong with the personality type seeking to reduce the anxiety imbued in blasphemous expressions. On the flip side, however, $43.54 \%$ (27) of the sample would tell
inappropriate jokes in Arabic compared to $38.70 \%$ (24) who would do it in English. The phenomenon of "humour is relative, as it is subject to linguistic, socio-cultural, generational, gender and individual differences" (Kerras \& Serhani, 2019, p. 97). Further, the ability to tell a (humorous) joke in a second language requires from the speaker to have adequate proficiency in the target language, and for the recipient to be acquainted with the cultural attributes and references integral of the joke for a successful delivery. For this reason, second language humour is harder to achieve because more considerations come into play. Despite the unorthodox nature of "inappropriate jokes", more ELLs in this sample would still find it convenient to use their native language to joke around about such matters. The rest of the students would use L2 for reasons that could be anxiety-related, as discussed above.

Praising someone was used as a distractor as it is not an intensive emotion that would require favouring the use of a specific language. Hence the close results of 29 participants choosing to praise the interlocutor in their L1, against 31 going for L2.

To different extents (see Table 3.6), the students who would use Arabic or Darija are more than the students who would use English in contexts of expressing anger, expressing discontent, arguing with someone, and texting angrily. The three contexts are irritation-triggering situations, and the participants' choice to use their native language (L1) is consistent with responses to Question Six (Figure 3.17) on inner speech where they confirmed using Arabic when internalising the speech of anger. Comparing the two contexts of expressing anger and texting angrily, $56.45 \%$ (35) of the sample would use L1 against $40.32 \%$ (25) who would English; while $61.29 \%$ (38) would use Arabic or Darija in contrast to only $27.41 \%$ (17) who would go for the English language.

Finally, in situations of talking about sexuality, discussing social topics, having a romantic talk, and texting romantically, and expressing sadness, more students would
rather use English. Continuously, these contexts contain anxiety-provoking materials (sexuality, taboo words, and romance) that motivate bilinguals to use L2 in order to circumvent or diminish anxiety and express themselves more comfortably, in view of the fact that it is usually "the language of lesser emotional hold on the individual" (Pavlenko, 2002, p. 47). What is more, the first two contexts constitute some of the most frownedupon topics in a 'somewhat conservative' Algerian society. Henceforth, discussing either of them in L1 would bring upon the speaker a censorious glare from the listeners. To give an instance, the proportion of participants choosing English to talk about sexuality is very significant as it tallied $67.74 \%$ of the whole sample, as compared to merely $14.51 \%$ of them going for Arabic (a ratio of 4.6 to 1 ). Further information about language choice in other contexts is detailed in Table 3.6.

Question Twenty-One: In which of these two languages are you more likely to say, "words cannot express how I feel"?

Figure 3.20
The Languages in which Students would "run out of words" when Expressing

## Emotions



Thirty-two participants $(51.60 \%)$ indicated that they are more likely to fail to express themselves in English language rather than Arabic, whereas $48.40 \%$ of them
(30) maintained that Arabic is the language in which they would run out of words to express how they feel. While self-reported claims about language proficiency are to be taken with a pinch of salt in absence of tangible qualitative data, this result shows that there are enough fluent students who perceive English as a language that can represent their emotions equally as efficiently as their L1. Further, this result is indicative of some students' self-confidence to express their emotions in TL. Still, more participants feel that their first language remains the language of emotion in which they are less likely to fall short of expressions.

Question Twenty-Two: In which of the following languages would you reveal more about yourself?

Figure 3.21

## Language Choice and Self-Revealing



Most of the students, $64.50 \%$ (40), said that that they reveal more about themselves using the English language, while $35.50 \%$ (22) of them reveal more about themselves in Arabic/Darija. Self-revealing is defined by Collins Dictionary as "displaying, exhibiting, or disclosing one's most private feelings, thoughts, etc." (2020). More broadly, self-expression is defined as "expressing one's thoughts and feelings, and these expressions can be accomplished through words, choices, or actions" (Kim \& Ko, 2007,
pp. 325-328). This concept conforms to the individualistic cultural frame to which an English-speaking community like the United States of America subscribe. Kim and Ko (2007) stress the importance of this notion in Western civilisations owing to the prioritised status of the individual. This comes in contrast to other cultures "in which feelings and thoughts are not considered to be the core of a person" (p. 328), namely in the Arab world, where adhering to collectivist traditions that revere religion, community, and authority would be a norm. In line with this, participants' exposure to English language and culture normalised the practice of self-expression in the target language to them. This has led many of them to admit revealing things about themselves they otherwise (in their L1) would not utter. Besides, this fact may be related to the foreign language effect denoting an attenuating emotional acuteness in bilingual speakers in FL contexts. This effect is connected to previous discussions on how L2 functions "as an emotional buffer that absorbs the stark emotional impact of affective states, making bilinguals feel less uneasy when dealing with highly emotionally charged language" (Ivaz, Griffin, \& Duñabeitia, 2019, p. 76). Hence, the English language was chosen by the majority of ELLs in this sample because it may ease off the tension of talking about their emotions.

Question Twenty-Three: In which language does the phrase "I love you" have a stronger emotional weight for you?

Figure 3.22

The Stronger Emotional Weight of "I love you" in the Students' Languages


The vast majority of the students $79.00 \%$ (49) finds that the equivalent of the emotional phrase "I love you" in Arabic stronger than in English, 21\% (13). Dewaele's study (2008) was based entirely on asking bilinguals to weigh the emotional effect " $I$ love you" phrase has on them, and similarly to the results we have here, more participants answered in favour of L1. Dewaele sees that the emotion of love sets a higher level of challenge for the foreign language speaker because of the gap between L1 and L2 in the communication and recognition of such emotion script because these two processes would be filtered "through narrow and imperfect linguistic translations" (2008, p. 1754). Furthermore, the ability to grasp this phrase semantically with the entirety of its illocution force in different contexts, in addition to the linguistic aptitude to react or use it properly, do not ensure total acquisition. The latter is only reached when the expression can make the L2 speaker "shiver or cry" (p. 1772). It is only at that stage when it gains its unique "emotional weight" (p. 1772) that matches or even outweighs that of the first language. For example, one of the participants in Dewaele's experiment certifies that "I love you"
in her L2 (English) "doesn't have the same emotional weight. Deep things are better expressed in L1. They seem to have more meaning" (2008) despite her advanced level of proficiency in the language.

Nevertheless, the phrase may still trigger more emotionality for some bilinguals in their second language. As it is the case for the $21 \%$ of the bilingual students in this study. This particularity was confirmed by a quadrilingual from Dewaele's experiment who, to her, the expression is strongest in her L4 because of the romantic films she watched in that language (Sindhi language).

Question Twenty-Four: Do swear and taboo words in these languages have the same emotional weight for you?

Figure 3.23
Emotional Weight of Taboo Words in the Students' Languages


This question was used to confirm previous studies' claims about bilinguals' perception of swear and taboo words in their two languages. As expected, the majority of the students believes that taboo words are stronger in the first language. Half of the students (31) regard blasphemous and taboo words as very strong in Arabic, while only 12 of them rate these expressions so in English. Meanwhile, 25 participants (40.32\%) assign little force to English curse words in contrast to merely 4 counts
(6.45\%) recorded for L1. Only a small portion of students regards curse and taboo words as not strong in either of the languages, 7 (11.29\%) and 3 (4.84\%) for English and Arabic, respectively. As may be seen, more students still perceive English curse words less strong than Arabic ones. Further details are in Table 3.7 below:

## Table 3.7

Counts and Percentages of Curse and Taboo Words'Strength in L1 and L2

|  | Arabic/Darija |  | English |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Not strong | 03 | $04.83 \%$ | 07 | $11.29 \%$ |
| Little strong | 04 | $06.45 \%$ | 25 | $40.32 \%$ |
| Fairly strong | 20 | $32.25 \%$ | 15 | $24.19 \%$ |
| Very strong | 31 | $50.00 \%$ | 12 | $19.35 \%$ |
| Not applicable | 04 | $06.45 \%$ | 03 | $04.83 \%$ |

Question Twenty-Five: Do you feel like a 'different person' sometimes when you use your different languages?

## Figure 3.24

Students 'Feeling Like a Different Person' When Switching Languages


Forty-six (74.2\%) participants claimed that sometimes they feel like a different person when they use the other language. Whereas only $16(25.8 \%)$ of them feel the same when using their different languages.

In truth, there are plenty affirmations by bilinguals who report feeling different in their different languages. One example that leaps to mind is Eva Hoffman's autobiography Lost in Translation (1989, as cited in Dewaele, 2015), where she speaks of how her socialisation within anglophone Canada had turned her 'English' and 'colder than ever' by distancing her from her Polish-native emotional persona. Being Mexican American, Jewish-by-origins author of On Borrowed Words: A Memoir of Language (2001) consonantly adds, "changing languages is like imposing another role on oneself, like being someone else temporarily. My English-language persona is the one that superimposes itself on all previous others" (Stavans, 2001, p. 251, as cited in Dewaele, 2015).

Similarly, yet more empirically evidenced, the data from Wilson's questionnaire and OCEAN test revealed that L2 provided numerous introverts with a liberating sensation that allowed them speaking and behaving in manners unconformable to their habitudes when operating in L1. Further, most participants attributed positive adjectives of confidence, intelligence, certitude, security, competence, and self-assurance to how they feel when using the second language. These results led Wilson to conclude that "foreign language can give shy people a mask to hide behind even at fairly modest levels of proficiency" (Wilson, 2013, p. 8, as cited in Dewaele, 2015).

McWhorter (2014) unsubstantially relates this attitude to a lack of proficiency in L2: "The reason they are 'different' in the second language is that they don't speak it natively!" (p. 163, as cited in Dewaele, 2015, p 92). However, Dewaele's study (2015) on more than a thousand participants negated this groundless assumption after the
statistically analysed results displayed that "age, education levels and foreign language anxiety [emphasis added] in the L2 and L3 turned out to be the only independent variables to be significantly positively linked to feelings of difference" (p. 104).

Follow-up Question: Could you explain why or how?
The students who viewed that they do not feel like a different person in their languages flatly posited that they are bilinguals who are able to use different languages for the same ideas. That is, they do not feel that language shifting has any effect on their personality, noted examples of participants who vindicated their view include: [23] "I feel I'm the same person but capable of using different languages".
[24] "Same ideas with different languages. How can possibly change a person!!! [sic]".
Meanwhile, the majority of participants who willingly reframed their answers identified an array of reasons for feelings of difference in FL. For instance, some of them maintained that they express themselves more freely in English language, leading to revealing more about themselves without emotional constraints imposed by L1 (see Figure 3.21). Proceeding with the same major portion feeling the difference, some of these students observe that their use of English language seems to influence their personality by infusing tangled perceptions of open-mindedness and self-confidence in them and, at the same time, cutting down feelings of shyness and anxiousness. Ultimately, the rest of the participants pronounced that they tend to think differently when using English and that they even feel some sort of attachment to Anglosphere culture. Thus, students' explanations mostly revolve around self-expression and the effect of English as a foreign language. Transcript examples of participants selfreporting an influence of the English language on their thinking and personality are to follow [emphasis added]:
[25] "I tend to be more spontaneous when using English while I feel more tense/hot tempered when I use Darija".
[26] ". . . using it makes me feel more educated and confident".
[27] "I feel like I think differently about things when using English. An example would be discussing taboo topics; they do not seem taboo when thinking/speaking about them in English, unlike in Arabic".
[28] "Each language expresses a different side of you.. a different personality.. a different YOU".
[29] "I kind of become the person constructed by this or that language, at the level of thinking and expressing myself...".
[30] "Sometimes people tend to switch character when they switch languages because each language carries with it a different culture. Therefore, the human relates to the culture of each language...".
[31] "I genuinely believe that languages shape the way we thinking [sic] and the way we perceive things. It also can shape our personality, because each time I use a different language as if I put my shoes in a different context or situation".

Noteworthily, one of the participants thinks that it is obvious to change character when switching language:
[32] "Obviously our characters change whenever we switch from a lge [sic] to another, for me Eng gives me more strength, politeness and charisma".

Hazaymeh, (2004) and Alkhresheh (2015) refer to the social "function of codeswitching to English as a symbol of social prestige" in Arab cultures-Jordan, in their cases (as cited in Heeti \& Al Abdely, 2016, p. 16). Likewise, one of the participants [32] admitted living 'a different role' when speaking the English language:
[32] "N3ich dawr" [I play the role].

### 3.3.3. Correlation and Variance Analyses of Questionnaire Results

### 3.3.3.1. Identification and Description of the Variables

Variables considered in the questionnaire were narrowed down in quest of inspecting a correlation, or lack thereof, between emotional expressiveness in relation to (1) selfassessed English proficiency level, and to (2) exposure to the English language and culture. It is worthy of note that in respect to the first independent variable of proficiency, self-assessed English proficiency in the speaking skill was adopted as an 'umbrella factor' of proficiency due to twofold reasons. First, a productive skill was required to test the expression of emotions; and second, the self-assessment of both speaking and writing proficiency levels (as recorded in Figure 3.5) were roughly on par. As for the second independent variable of exposure to English language and culture, the measurement was elicited through the factor of watching television, films, and series in English based on the ground that authentic audio-visual materials represent an effective input for language and culture learning (Parupalli, 2019), as was confirmed by participants themselves (see Figure 3.8). On the other side, the dependent variable of emotional expressiveness was represented by attributes from two (2) factors:

- Expressiveness through speaking (data from Question Four, Section Three).
- Self-revealing (data from Question Eleven, Section Three).


### 3.3.3.2. Correlation and Variance Test Results

The results were analysed through the means of descriptive statistics (means and standard deviation), bivariate correlation (Spearman's rank-order correlation), and analysis of variance (Kruskal-Wallis H Test). These values were computed using SPSS software. To investigate the relationship between (1) the level of proficiency and emotional expressiveness, and (2) exposure to culture and emotional expressiveness,

Spearman's correlation was carried out on a number of selected variables. The study's ordinal data are derived from either five-point or six-point Likert scales. The strength of association between ordinal variables is preferably analysed using non-parametric methods such as Spearman's rank-order correlation. In a similar vein, Kruskal-Wallis Test (Kruskal \& Wallis, 1952) is more preferable to test the significance of variance in emotional expressiveness between the groups classified by proficiency levels and exposure to the target language and culture. Although ANOVA is the conventionally used test for analyses of variance, the study's conditions urge the use of a non-parametric Kruskal-Wallis test. The study groups, as they were randomly selected in proportion to the variables of "level of proficiency" and "exposure to culture", generated group sizes that are so significantly unbalanced that some groups are limited to one or two students. As a result, the sample failed the normality assumption.

### 3.3.3.2.1. Correlation Test Results.

The following table displays the calculated means (the average of data points) and standard deviations (measure of dispersion from mean) of the selected variables for the correlation test.

## Table 3.8

Mean Scores of the Selected Variables

| Test Variables | N | Min | Max | M | SD |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Language proficiency (speaking) | 62 | 1.00 | 5.00 | 3.2581 | 0.93975 |
| Exposure to language through | 62 | 1.00 | 5.00 | 4.3387 | 0.82866 |
| TV, shows, and films | 62 | 1.00 | 2.00 | 1.3065 | 0.46478 |
| Expressiveness in speaking | 62 | 1.00 | 2.00 | 1.6452 | 0.48237 |
| Self-revealing |  |  |  |  |  |

Note. $\mathrm{M}=$ Mean, $\mathrm{N}=$ Number of participants, and $\mathrm{SD}=$ Standard deviation from the mean.

The observed correlation between speaking proficiency and emotional expressiveness using Spearman's rank-order correlation results showed that the former is positively correlated with: (1) Expressiveness in speaking ( $r=0.332$ ), which was statistically significant because $\rho=0.008$ ( $\rho<0.01$ ). However, the level of self-perceived proficiency this time was, albeit positively, marginally correlated with: (2) Self-revealing (r = 0.186), since $\rho=0.147(\rho>0.05)$. Accordingly, there is a positive correlation between participants' self-assessed speaking proficiency in (L2) English language and emotional expressiveness (as per speaking expressiveness and self-revealing).

Apropos of exposure to English language and culture, Spearman's correlation denotes a positive association with (1) expressiveness in speaking ( $r=0.250$ ), which was statistically significant: $\rho=0.050$. Meanwhile, a satisfactory positive correlation ( $\rho=$ 0.000 ) was with (2) self-revealing ( $r=0.460$ ). For full statistical analyses results, see Appendix C.

### 3.3.3.2.2. Variance Test Results.

A Kruskal-Wallis H test was conducted to compare the participants’ emotional expressiveness represented by the two factors of (1) expressiveness in speaking and (2) self-revealing, in terms of their (a) self-assessed proficiency level and in (b) exposure to the target language and culture. The results revealed that there was not a significant difference of (1) expressiveness in speaking in terms of self-perceived proficiency level, $\chi 2(3)=6.945, \rho=0.074(\rho>0.05)$. Further, there was no significance of variance of (2) self-revealing $\chi 2(3)=4.114, \rho=0.249(\rho>0.05)$ was recorded.

On a different note, considering exposure to English language and culture, the results pointed no significance of variance of (1) expressiveness in speaking $(\chi 2(2)=3.075, \rho=$ 0.215 ). Noting that variance is significant at $\leq 0.05$, a significant variation of (2) self-
revealing in terms of exposure to target language culture was recorded $(\chi 2(2)=10.538$, $\rho=0.005$ ). For full variance test results and tables, see Appendix C.

### 3.3.4. Summary and Discussion of Findings from the Questionnaire

The questionnaire findings provide initial evidence that Algerian learners of English switch between their native Arabic and their FL English for emotional expression in an attempt to adapt to requirements of context particularities. The questionnaire covered a wide range of items touching on multifarious attributes and attitudes of students' bilingualism and emotionality. Therefore, this summary only highlights the gist of the findings.

First off, the English language is found to be 'the language of emotions' to many participants. Most of them regard it as colourful, emotional, and useful. Taking the students' overall attitudes towards their L1 and L2 into consideration, the proportionality between the two languages' significance to students does not imply that L1 Arabic is of little value to them compared to L2 English, though. Nevertheless, if this finding has to mean anything, it means that English constitutes an important part of the students' lives (see Figure 3.12). Further, a compelling discovery is that students would use both languages in code-switching for emotion expression. More interestingly, students seem not to favour the use of their mother tongue (Arabic/Darija) all the time. For many of them, they would rather switch to their learnt language (English) in certain contexts (e.g., texting); and for some, English can even be the language of mental calculations occasionally.

Secondly, the hereunder results on students' preferences regarding talking about emotional and personal topics are consistent with the aforetasted findings by scholars. Going along the magic ratio of 80/20, the vast majority of students observes that talking
about emotional topics in English is relatively easier. Students' reframed claims (see Section Three, Follow-up Question to Question Seventeen) are in line with other studies reporting that L 2 is generally the language to use with stress-inducing material owing to the fact that L 1 is the language of a much stronger emotional attachment. Most participants feel more fluidity and show little consideration to constraints when employing the English language for their emotional discourse.

Thirdly, in consistence with previous studies in the field of emotion and bilingualism, findings of the current study suggest a link between the intensity of emotion and the choice of a given language to express that emotion by bilinguals. For instance, in angertriggering situations, it was found that students tend to use their native language (L1) more frequently, even in analogous inner speech contexts. By the same token, these results further support previous evidence on L2 being the chosen language for anxietyprovoking materials. Particularly, more students opted for English when asked about situations of talking about sexuality, discussing social taboo topics, having a romantic talk, or texting romantically. On the grounds of this, bilingual students in this study use L2 to suppress or reduce anxiety and to express themselves more securely within the formerly stated contexts. For example, almost all participants of this study perform codeswitching, be it for talking about personal or emotional matters. Relatedly, results agree with findings of Bond and Lai (1986) in that bilinguals tend to turn to L2 (English in our study's context) to confess about themselves, in an effort to curb the L1 mode of expression's anxiety. More on the issue of emotionality in the two language modes, bilinguals in this study distinguish the emotional weight of some expressions relatively to the used language. For instance, swear and taboo words are thought to be more intense in L1 Arabic and softer in L2 English. In the same vein, the results of participants' perception of emotion-laden expression, "I love you", are in agreement with Dewaele's
findings suggesting that the expression bears more emotional intensity in bilinguals' first language (2008).

Finally, findings conform to earlier studies concluding that bilinguals feel different when they switch back and forth between their languages (e.g., Katarzyna OżańskaPonikwia, 2012b; Dewaele \& Nakano, 2013; Dewaele, 2015). One outcome of this feeling of difference in L 2 is echoed in the practice of self-revealing, a performance that is routed in individualistic, English-speaking cultures. Confirming previous findings underscoring the effect of foreign language (Bond \& Lai, 1986; Ivaz, Griffin, \& Duñabeitia, 2019), results suggest a nexus between the use of target language and the replication of some of its cultural habits by ELLs: A significant majority of the students claims that they reveal more about themselves when speaking English (TL). Other than that, many participants perceive changes in their behaviour when using the English language.

On a separate note, Spearman's correlation test results show a positive association between the selected two factors of emotional expressiveness (i.e., expressiveness in speaking and self-revealing) with the variable self-perceived language proficiency, on one hand; and with the variable of exposure to the target language and culture, on the other. Proficiency level speaking and exposure to the target language and culture are indeed positively associated with emotional expressiveness, but it is worthwhile to point out that correlation does not imply causation.

Instead, the findings from correlation tests imply that exposure to the target language culture and language proficiency calibre have a relative bearing on emotional expressiveness. More explicitly, a certain capacity of spoken language command, coupled with an understanding of the cultural dimensions specific to TL, may smooth the path for ELLs’ linguistic and emotional expression. Nevertheless, to regulate language
use and choice in respective contexts of speech, a mix of other elements and factors may intertwine during the process of emotion expression. As the case may be, students' responses to the questionnaire linger on an influence of the kind of expressed emotion per se, the intensity of the evoked emotion, emotional attachment to native language, or the nature of materials often being a source of anxiety and social controversy.

Furthermore, a KWH test, also known as one-way non-parametric ANOVA, was conducted to redirect attention to the analysis of variance between the student groups with respect to (1) self-perceived language proficiency, and (2) exposure to the target language and culture. The results reveal a significant variance of self-revealing in terms of exposure to the target language and culture ( $\rho=0.005$ ). For instance, the correlation between the self-assessed proficiency level and self-revealing is positive yet marginal ( r $=0.186$ and $\rho=0.147$ ); however, the association between exposure to target language and culture and self-revealing is significant and very satisfactory ( $\mathrm{r}=0.460$ and $\rho=$ 0.000 ). Thereby, exposure to the target language has a relatively greater influence on self-expression as an emotional practice compared to language proficiency.

### 3.4. Student Test

### 3.4.1. Description of the Student Test

The second part of this study is qualitative: It aims at examining students' language choices when reacting to emotion-triggering input. Data collection tool used for this main purpose was a test providing participants with six provocative, hypothetical situations, each trying to prompt their expression of (1) discontent, (2) compliment-response, (3) anger, (4) excitement, (5) disagreement, and (6) love in the language of their choice. See Appendix B for more details on the situations chosen for this test.

The selected imaginary contexts involved an interlocutor who is supposedly an Algerian Arabic-English bilingual too. There was an emphasis on spontaneity of answers,
regardless of linguistic or formal considerations; hence the casual, pop-culture-esque name of the test: "Express Yourselfie!". To note, the intention to glean an output that is as natural as possible was realised forasmuch as the students' comments wavered in length, tone, language choice, and expressiveness. Besides, quite a few of their responses required censorship due to the academical framework of this study.

### 3.4.2. Analysis of the Student Test

The study's sample consisted of Arabic-English bilinguals whose strongest languages were reported to be Arabic and English by $74 \%$ of the sample, or Arabic, English, and French by $22 \%$. Thus, Arabic/Darija and English were anticipated to predominate their reactions to the situations.

In reliance on the literature surrounding bilingualism and language, the participants would chiefly interact in one of the languages they speak depending on the context. In that case, one language would be activated, while the other operates on a relatively negligible scale. In other words, the participants would be in what Grosjean (1997) labels monolingual language mode. However, in contexts that permit the usage of Arabic and English, these participants would engage in the bilingual language mode where both Arabic and English are simultaneously activated. In this mode, one language is still more active, while the second is 'running behind the scenes'-intermittently available for codeswitching or borrowing.

Despite the underlined exigency on impromptu responses from participants, it was expected in practical terms that the context of investigation (being part of a Master's dissertation), plus the conditions of the test (distributed online) would exert influence on their productions. Yielding superficial overstatements in instants of pretentiousness at times, and overzealous considerations of language and formality at others. Besides, the
effect of the stimulus on output is not meagre. For instance, in situations where questions were worded in English, the latter would be 'more activated' as that would participants read, think, and answer in the English language. Further, in situations with stimuli featuring code-switching, respondents would be encouraged to code-switch in their responses. Hence, it would be more activated. Given the circumstances, the test, on the whole, may be quite illustrative of the participants' online talk behaviour, if not of their real-life speaking habits.

In light of responses from the finalised questionnaire, findings documented that a large majority of the sample code-switches between Arabic/Darija and English when expressing emotional and personal matters. In addition, the results of the questionnaire suggest variability in language choice in the expression of different types of emotions, as displayed in Table 3.6.

## Situation One

Question: If you were to comment on a classmate's post denouncing the \#MeToo movement of women claiming to have been sexually assaulted by men previously, what would you write?

The situation consists of a simulated Facebook post that attacks women's claims of being subjected to sexual offences. Such a situation was expected to trigger discontent in the participants and see them leaving comments that reflect anger. As envisaged, the majority of collected responses expressed fierce disgruntlement against it.

Table 3.9
Language Choice in the Expression of Discontent

| Language chosen | N | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 05 | $08.06 \%$ |
| English | 20 | $32.25 \%$ |
| CS Arabic/Darija-English | 03 | $04.83 \%$ |
| CS English-Arabic/Darija | 16 | $25.80 \%$ |
| N/A | 18 | $29.03 \%$ |
| Total | 62 | $100 \%$ |

The table indicates that most responses, $48 \%$ (23), were in English, and 34\% (16) used English as a base language then code-switched into Arabic/Darija.

The direction of code-switching into Arabic/Darija or into English is evidenced to be governed by affective functions that the languages offer. To give an instance from students' comments, both Arabic and English were used by participants to exhibit a sarcastic affect. Haiman (1998) describes sarcasm as a non-overt aggressive speech act unlike the blatant curses and direct insults (p. 20). Accordingly, sarcasm does not reflect an intense emotion as it is used to downregulate an aggressive reaction. Examples of sarcastic responses in both languages include:
[34] "Any accident related to women are [sic] fake or incorrect because men never do/did/will do bad".
[35] "Ohhh really, so all the actrices [sic] is holywood [sic] met one day, probably at Myrel [sic] Streep's house and decides [sic] to fake scenarios about being harassed. you r [sic] too stupid".
[36]" "لا واله لوول" [Lā wallāh! Lūl]

Translation: Oh, really! LOL.

However, students' responses in this situation showed a tendency towards borrowing from Arabic/Darija for proverbs, idiomatic expressions, and even sayings of Imam Ali [39], prophet Muhammad [40], and others to communicate more affective meaning. For instance, more than one of the participants used the same following proverb:
[37] "ما يحس بالجمرة غير لي كو انو" [Mā yḥes b ğamrah g̀̀̄r lı̄ kwātū]
Translation: You can't understand someone until you've walked a mile in their shoes.
While other examples include,
[38] "Women need to be gun owners, for the case when she [gets] abused or raped
TAJBED her gun $w$ ta3tih l7ass" [ $W$ ta ṭ̂̄h alhas]
Translation: She would pull out her gun and shoot him down.
[39] [3s sukūt 'alā al aḥmaq ğawabuhu]
Translation: Silence is the best reply to a fool.
[40] "قل خيرا أو اصمت" [Qul ḩayran āw uṣmut]


Code-switching into Arabic/Darija for a stronger affective meaning was also recorded in the use of religious expressions, for instance:
[41] ". . . Plus Islam karam lmaraa . . ." [Plus Islam karrama al mar'a] Translation: Islam honoured women.
[42] ". . . Nchlh rabi ikhalas fih 17a9 . . ." (Inšallāh rabbı̄ yhallaṣ fih al haqa)
Translation: May Allah punish you.
To argue against the opinion communicated in the simulated situation, some participants tried to turn the collocutor's awareness to those women's concerns and burdens by inciting affective empathy. Greater Good Magazine (2020) defines emotional or affective empathy as "the sensations and feelings we get in response to others' emotions; this can include mirroring what that person is feeling, or just feeling stressed when we detect another's fear or anxiety". Language choice-wise, we note many comments using English idiom "to be in someone' shoes", or its equivalent expression in Darija. Both languages were used to create the aforenoted affective state in the interlocutor, for instance:
[43] ". . . koun jiti fi blassthom . . ." [kūn ğīt̄̄ fí blaṣatham].
Translation: If you were in their shoes.
[44] "Always try putting yourself in other people's shoes mba3ed gouli samtouha" [mba'd gūl̄̄ ṣamtūhā].

Translation: Only then you can say 'this is too much'.
[45] ". . . You can never judge them since you were not placed in their shoes".
On another note, the analysis of the students' responses revealed that English is the language preferred by the students to express unconcealed aggressive speech acts such as direct insults, swearing, and rude comments. This finding is in line with claims by previous studies mentioned a handful of times throughout this research, and which all fall within the idea maintaining that bilinguals perceive swear and taboo words to be less strong in L2. Similarly, bilinguals in this study turned to L2 English in order to direct
blasphemous turns of phrase towards the collocutor in this situation (and other situations, too). By way of illustration (N.B. offensive words censored):
[45] "You better shut the [F-word] up and mind your own business!!"
[46] ". . . at least these women do have the [vulgar for courage] to express what they have been throughout there while all u re [sic] doing is making rude comments on them behind the screens".
[47] "What the [F-word]! Are u even aware what ru [sic] saying! [Obscene interjection]". [48] "It's not our fault that you are an [ ${ }^{* * * * * \| \text { " (The participant him/herself censored }}$ most of the word).
[49] "We women voice out when It REALLY went to [sic] far. Just another [obscene interjection]!!"

## Situation Two

Question: Your closest friend: has just told you that s/he is lucky to know someone like you. What would you say back to him/her?

The situation aims at investigating emotional appreciation to a compliment, i.e., compliment-response. Compliments and praising create different reactions amongst people that range between pleasant and less pleasant feelings. For some cultures, compliments are so typical of their daily encounters that they are often used as forms of greetings. Whereas for other communities, a compliment is used reservedly at appropriate instants of discourse. Certain personality types are more likely to use compliments and to tolerate receiving them regardless of one's native culture, though.

Table 3.10
Language Choice in the Expression of Compliment-Response

| Language choice | Number | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 06 | $09.67 \%$ |
| English | 28 | $45.16 \%$ |
| CS Arabic/Darija-English | 11 | $17.74 \%$ |
| CS English-Arabic/Darija | 14 | $22.58 \%$ |
| N/A | 03 | $04.83 \%$ |
| Total | 62 | $100 \%$ |

Students' reactions to this situation recorded differing degrees of receptivity stemming from different personality traits and mirroring different degrees of pleasantness intensity. According to Winch (2013), "receptivity to compliments is a reflection of our self-esteem [emphasis added] and deep feelings of self-worth. Specifically, compliments can make people with low self-esteem feel uncomfortable because they contradict their own selfviews". On account of this, the noted reactions with varying hues of (un-) pleasantness expressed may stem from participants' fluctuant personalities which are mirrored in their discourse (language and word choice).

The level of pleasantness intensity is reflected in language choice for emotion vocabulary and emotion devices. One category of emotion words is what is known as expressions of endearment. A word of endearment is a dulcet word "expressing affection" (Merriam-Webster, 2020). Statistical analysis from participants noted that words of endearment recorded in English were 18 ( $72 \%$ of total words) versus seven (7) words (28\%) in Arabic/Darija. Illustrations of endearment include popular English expression in the likes of:
[50] "Love, sweetheart, bae, babe, baby, dear, darling, sweetie, or my life", we note the presence of highly popular internet slang "bae" as a term of endearment by participants. Arabic/Darija expressions and terms include:
[51] "hbiba [hbība], hobi [hubbū], rouhi [rūḥī], kebdii ziiin [kabdī zīn].

Translations: Sweetheart, my love, my soul, my dearest beautiful.

The second category of emotion words mirroring the level of pleasantness is the expressions of affection and love. The responses of this situation recorded six (6) expressions in English against two (2) expressions in Arabic/Darija. The exception was a French expression. Examples (emphasis added)
[52] "Thank you baby, love you to the moon and back".
[53] "Thank you sooo [sic] much I love you".
[54] ". . . me too. I luv u [sic]".
[55] ". . . thank u sweetheart lov u [sic]".
[56] ". . . wlh nhbk w hmd li 3andi nti love u" [wallah nḥabbak wa ḥamdūllah lī 'and̄̄ $a n t \bar{l}]$.

Translation: I swear to God that I love you, and praise be to Allah for having you in my life.
[57] ". . . Ana li lucky to have a friend like you in my life! Love you so much" ['anā l̄̄ lucky].

Translation: I am the lucky one.
[58] ". . . Tu sais que je t'aime tu es ma meilleure".
Translation: You know that I love you, you are my bestie].
[59] . . . . . " [yāa ag̀là wa aḥsan ṣadīqah].
Translation: O precious best friend.
The majority of endearment and affection expressions were in English (L2) and not in Arabic/Darija (L1). Those expressions are not frequently used in the Algerian culture in contrast to their 'easy' use in English-speaking communities. Therefore, the students'
responses showed a tendency towards the use of English in order to facilitate the expression of affection, love, and endearment expressions.

The third category of emotion devices used to enhance emotional reactions is epitomised by interjections. The latter are immediate remarks that are employed to reinforce feelings and emphasise the emotional reaction to the compliments. Interjections were used by students in both languages. However, out of the 25 interjections used, 21 ( $84 \%$ ) were noted in English and only four (16\%) were recorded in Darija/Arabic. To illustrate:
[60] "Oh", along alternative (mis)spellings of the same interjection: "oww, ooo, oooh, aww, ow, and ooohh" in English.
[61] "Yuиun, yooon": a Darija interjection that is equivalent to "Aww!" with alternative spellings.

Apart from expressions of gratitude and compliment-response, there were a few responses that expressed the emotions provoked by the compliments. These emotions fluctuated between being flattered and being shy. The direction of language choice and code-switching for compliment-acceptance and pleasantness is mostly into English and much less into Arabic/Darija. By way of illustration (emphasis added):
[62] ". . . same my girl I feel blassed [sic]"
[63] ". . . I am flattered . . ."
[64] "Oooh I'm flattered now... Thanks sweetie I really appreciate that. Those words made my day"
[65] ". . . I feel flattered"
[66] "Aww, you have just made my day..."
[67] "Its [sic] really amazing to here [sic] s.th like that from you..."
In Arabic/Darija:
[68] "Oh baby dem3a ra7 ti7li" [. . . dam 'ah rāh țīhlī̀].
Translation: I'm about to shed a tear.
[69] ". . . it feels awkward bs7 t7arket haja fia u know" [. . . baṣṣah tharkat fiyā hāăga]. Translation: But I feel touched.
[70] "Ooooooo kestini" [Oh! Qestīn̄].
Translation: Oh, that really touched my heart.
As for being shy, the direction of code-switching and language choice was into Arabic/Darija. The five (5) responses that expressed shyness after receiving such a compliment were all in Arabic/Darija:
[71] "7achemtini, hachamtini, t7achminich" [hašamtīn̄̄, hašamtīn̄̄, tḥašmīn̄̄š].

Translation: I'm tongue-tied. You're embarrassing me.

Finally, some responses included invocations of blessings in which cases the direction of code-switching was mostly into Arabic, we illustrate:
[72] ". . . Rabi ydowem m7ebtnaaa" [rabbi ydawwem mhabbatnā].
Translation: May God bless our friendship.
[73] ". . . Rabi ytawal 3achrtna" [rabbi ytawwal 'ašratna].
Translation: May God prosper our companionship.
However, we could note one prayer that was said in English, although the interference of Arabic is detectable in the way the utterance was formulated:
[74] ". . . God bless you for me . . .".

## Situation Three

Question: You are angry at your friend who has just texted you to cancel your longawaited plan after you have finally prepared yourself for it. What would you text them back?

The situation was designed to stimulate participants' anger through texting. We notice a consistency between their questionnaire answers and their test reactions regarding this point. Anger is one of the emotions that had received considerable attention in the literature on language and emotion. Spielberger defines anger as "an emotional state that varies in intensity from mild irritation to intense fury and rage" (The American Psychological Association [APA], 2005) in which case response to anger is naturally aggressive. Simply put, anger is a strong emotion that incites an intense response or calls for emotion regulation. Previous studies suggest that individuals regulate anger across two directions: upwards (upregulation), or downwards (downregulation). Language choice and code-switching between L1 and L2 are used as strategies of emotion regulation. However, the intensity felt under certain emotional contexts may pressure bilinguals to do away with their L2 and hang on more familiar, natural ways of expression

Table 3.11

Language Choice in the Expression of Anger

| Language choice | N | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 21 | $33.87 \%$ |
| English | 15 | $24.19 \%$ |
| CS Arabic/Darija-English | 08 | $12.90 \%$ |
| CS English-Arabic/Darija | 14 | $22.58 \%$ |
| N/A | 04 | $06.45 \%$ |
| Total | 62 | $100 \%$ |

Despite the influence of the context on language choice, yet the direction of language choice in this situation was towards Arabic/Darija. 21 (33.87) of the responses were in

Arabic/Darija. This finding is consistent with the findings displayed in Table 3.6 and Figure 3.17, in which case the students recorded the use of L1 in anger-triggering situations. It is worth noting, that including answers with mixed codes (Arabic/DarijaEnglish and English-Arabic/Darija), more tendency towards Arabic/Darija was highlighted, for instance:
[75] "Seriously sa7 men neytek! Tsama tmaskha ana walit" [ṣah man naytak! tassamma tmasha anā wallīt].

Translation: Really! So, I have become a joke now.
[76] "You should have told me before, matwaselhech lla5er w tgoul" [mā twaṣsalhāš lallahar wa $\operatorname{tg} \bar{u} l]$.

Translation: Don't leave it to last minute before you cancel the plan.
[77] "Seriously! Mknch mara jaya" [. . . Mā kānš marra ǧāya].
Translation: There is no next time.
[78] "Another time my [obscenity], diri meziya madorich jihti liyamat hadi" [. . . dī̀r̄ $m z \imath ̄ y a h ~ m a ̄ ~ d u ̄ r i ̄ s ~ g ̌ g i h t i ̄ ~ l i ̄ y a ̄ m a ̄ t ~ h a ̄ d i ̄] . ~$

Translation: Don't even dare come near me the coming days.
[79] "Wch mn another time apris [sic] edek chi kml li tfhmnah" [wāš man another time après 'ādāk šī kāmal lī tfāhamnāh].

Translation: What do you mean by 'another time' after everything we planned.
[80] "Semaa ana nweejd fruhii w excited beh tji f akhr d9i9a tsmtihalii ? 3lblk bia $k$ nplani hja nhb ndirha..." [semmā 'anā nwağğad fì rūḥ̄ wa excited bāh tğ̄̆ fī ahar dqūqah tṣamṭīhāl̄̄, 'lābālak bīyà kī naplānī ḥāğa nḥab ndīrhā].

Translation: So, I prepared myself and got excited just so that you come at last minute to spoil it all? You know me, I keep up with my plans.

Verbal aggressive responses to anger normally would feature offensive, blasphemous language. Unlike the previous situations, the offensive language here is attested in both languages, English and Arabic/Darija. However, code-switching and language choice in swear words are directed into English, and never into Arabic/Darija even in angry aggressive responses. Examples to follow (emphasis added, swear words censored).

Offensive language in Arabic/Darija is illustrated in the examples below:
[81] "[Offensive Darija interjection for 'go away']"
Translation: Buzz off!
[82] "[Offensive Darija interjection for 'go away'] [روحي"
Translation: Get lost!
[83] "Ask me to go out with you again Nahilek yemak"
Translation: I would have your guts for garters.
[84] "I can’t believe you $a$ [offensive Darija word for pooh head] ni wajda"
However, swear and offensive words reported in English are as follows:
[85] "Go to hell".
[86] "Are u from your [gosh darn] niya !!...".
Translation: Seriously?
[87] "[F-word censored with asterisks by the respondent] you".
[88] "For [F-word] sakes dude...".
[89] "Lm o ok".
[90] ". . . touuu brk u ${ }^{* * * * " ~[c e n s o r e d ~ b y ~ t h e ~ r e s p o n d e n t] . ~}$
[91] "Fine, [obscenity]! I'll [throw] my [F-word] shoe at u".
[92] "Another time my [obscenity], diri meziya madorich jihti liyamat hadi..."

## Situation Four:

Question: You have just come back from the best trip you have ever had. Your friend asks about how you feel about it saying "So! Kifech fatet? ’. What would you say?

Table 3.12
Language Choice in the Expression of Excitement

| Language choice | Number | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 19 | $30.64 \%$ |
| English | 12 | $19.35 \%$ |
| CS Arabic/Darija-English | 20 | $32.25 \%$ |
| CS English-Arabic/Darija | 11 | $17.74 \%$ |
| Total | 62 | $100 \%$ |

This situation was intended to provoke joy. The direction of language choice and code-switching was towards Arabic/Darija. The majority of the students, $62.89 \%$ (39), initiated their responses in Arabic/Darija, in which 32.25\% (20) borrowed words from English, while $30.64 \%$ (19) were all in Arabic/Darija. Moreover, many of EnglishArabic/Darija responses tended to draw more on Arabic, such as:
[92] "awwwwsoooooome [sic] meilleur ta7wissa dertha fi hyatii" [meilleur tahwīsah darthā fi hayāt].

Translation: That was the trip of a lifetime!
[93] "Freakin good actually!!! Ra7at 3lik haha :)" [rahat 'līk hāhā].
Translation: You missed out on it! ha-ha.
[94] "Amaziiiiing, n3ewduha mara khlff pllz [sic]" [ $n$ 'āwdūhā marra hlā $f$ please!]
Translation: Can we do it again, please?
[95] "Amazing, u know, it's actually the first time li mab9itch nendeb 3lihem ki karkrouni m3ahem bessif" [lī mā bqūtš nandab ‘l̄̄ham kī karkrūn̄̄ bassīf].

Translation: It was the first time that I didn't nag at them for taking me out with them.
[96] "It wasssssss amazziinnggg [sic] lvraaiii vacance mch nrml" [Vraiment vacances maš normal].

Translation: It was unreal!
The students were placed in a situation where they were required to describe the best trip they have ever had. To do so, they drew on a set of adjectives and expressions that would reflect the emotion's intensity. They used adjectives from Arabic/Darija and English. However, 55\% (44) of the adjectives used were in Arabic/Darija, while 45\% (36) of the adjective uses were in English. Regarding Arabic/Darija, the adjective used the most was "raw 'a" (amazing), followed by "tag 'ar" (amazing, informal); in addition to adjectives such as: "g̀āya", "mlīha", "thabbel", etc. Whereas in English, "amazing" was the adjective that was used the most, followed by "great" and "awesome"; in addition to "epic", "wonderful", "perfect", etc. The students used twelve (12) adjectives in (36) responses issued in English, while they used thirteen (13) adjectives for forty-four (44) spots in Arabic/Darija responses.

Even with the intensity of the feeling in question, very few exclamations were used despite their strong illocutionary effect. Three (3) exclamations in Arabic/Darija were used: "Yoooon", "Ya yemaaa"" [O mother!'], and "gelbiii" [Oh my heart!], whereas in English, only two (2) exclamations were observed: "Wow!" and "OMG".

In addition, two responses employed offensive language to enhance the emotion's intensity. In a similar fashion to the previous situations, the direction of CS in the offensive language is 'English-wards':
[97] "Pretty [darn] life changing I'd say". In all fairness, this one appears to be sarcastic.
[98] "It was so [F-word] amazing I had a lot of fun".

## Situation Five

Question: Your friend tells you Covid-19 is just a hoax, "Corona hadi makanech menha". What would be your reply?

The situation expresses a controversial opinion about the 2020 pandemic caused by Coronavirus which has taken the world by storm. Some Covid-19 deniers believe that the crisis was a hoax as they several conspiracy theories. It was expected that most students would disagree with such a deluded opinion. Still, we could sense that quite a few of them were of the same mind as the interlocutor: Three ( $04.83 \%$ ) of the students agreed with the opinion expressed in the situation. The rest did not subscribe to the same view and expressed their disagreement in diverse ways.

## Table 3.13

## Language Choice in the Expression of Disagreement

| Language choice | Number | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 25 | $40.32 \%$ |
| English | 11 | $17.74 \%$ |
| CS Arabic/Darija-English | 12 | $19.35 \%$ |
| CS English-Arabic/Darija | 10 | $16.12 \%$ |
| N/A | 04 | $06.45 \%$ |
| Total | 62 | $100 \%$ |

Note. The three responses agreeing that Covid-19 crisis "is just a hoax", express their view in Arabic/Darija, Arabic/Darija and English CS, and English-Arabic/Darija CS. However, even the mixed code is directed more towards Arabic/Darija than English. Their counts were added up to non-valid responses since we are considering the expression of disagreement, as the table's title indicates.

Some of the responses include:
[99] "Eeeh wlh mafhemna welo 7ata ana banetli tmaskhira w mana3raf rabi yjib lkhir brk" [īh wallah māfhamt walū hattā anā banatlī tmashīra w mā na 'raf, rabbi yǧīb lì fìh alhīr].

Translation: I swear to God we don't have a clue. I, too, think that it's nothing but a silly game. I don't know, though.
[100] "Oui 3labali w lhmdlh li lguit 3abd kifi, i'm tired of trying to convince people beli it's a political game. 9ader ykoun lmard kayen mais lfilm lkbir hada is a game w drk yban 3lah ga3da tetel3ab" [w̄̄ 'labālı̄ w alhamdūllah lī lgīt 'abd kīfí, I'm tired of trying to convince people balli it's a political game. Qādar ykūn almarḍ kāyan mais alfilm alkbīr hādā is a game $w$ durk ybān 'lāh ga 'da tatal'ab].

Translation: Yes, I know. Thank God I found someone who thinks the same way about it. The disease may indeed exist, but all this fuss about it is staged. The script will come to light soon enough.
[101] "Yup hata ana khmemt bli tmskhira, bash who knows.." [yep hattā anā hammamt ballī tmashīra, basṣah who knows].

Translation: Yep, I also think it's just a joke; but hey, who knows?
Most of opposing responses $62.71 \%$ (37) were initiated in Arabic/Darija; amongst which $42.27 \%$ (25) did not switch language, while $20.33 \%$ (12) borrowed from English. The opposing reactions expressed in English represent 20.33\% (12), while English to Arabic/Darija CS represents $16.94 \%$ (10) of the total opposing responses.

The students show their opposing views through oft-stupefied reactions ranging between highly intense to moderately intense reactions, sarcastic and humorous responses, and insults and offensive language.

The view expressed in situation five left many participants bewildered. Replying to such controversial opinion required most of them to use Arabic/Darija for many purposes:
[102] "ناس لي راهي تموت منعرف بماه" [nās lī rāgī tmūt mā na 'raf bmāh?].
Translation: What about those people dying?
One of the participants mimicked a punchline from a popular Algerian meme:
. يسما راك حاب تهبلني ..هه تحوس يطرطقلي عرق و لا كيفاه؟"..." [103] thabbalnī... haha thawwas yatartagl̄̄̀ 'arg...walla kīfāh].

Translation: Do you want to drive me crazy?
Another participant was left with no words:
[104] [ . . . ." مالقيت مانقوللك و الشه [mā lgīt mā ngūllak wallah]
Translation: I swear to God I have nothing to say to you.
Other students invited the collocutor to look around so that they consider the seriousness of the issue:
[105] "Mnytk. Nas rahi tmot le monde ga3 hbes makach mnha . . ." [man naytak. Ennas rāhī tmūt le monde $g \bar{a}$ ’ hुbas mākānš manhā ...].

Translation: Seriously? People are dying, the world has stopped, and you say all of this 'didn't happen'?
[106] "Men niytkkk, jahl 9atlk a ce point..." [man naytak, ğahl qatlak à ce point . . .]. Translation: Are you serious? Your ignorance is killing you.
[107] "Mala li mato adok w dakhlo l'hôpital aussii mknch mnha" (mālā lī mātū 'ād̄ūk $w$ dahlū l'hôpital aussi mākānš manhā

Translation: So, all those people who died and those who were hospitalised 'do not exist' according to you.

However, two of the students expressed their surprise in English:
[108] "Are u serious?. . .".
[109] "So, all the people who died with the Viros [sic] is a joke!".
As for less intense responses, the students expressed their reactions through humour and sarcasm. In regard to humour, two responses were performed in English and two others in a mixed code, as follows:
[110] ". . . U shouldn't be my friend haha".
[111] "Lol".
[112] ". . . nti li hoax" [antī l̄̄ hoax].
Translation: You are the hoax!
[113] "Nhar ta7kmek dork tchouf how "hoax" it is" [nhār tahkmak durk tšūf how hoax it is].

Sarcasm, as already mentioned, is a non-overt aggressive speech act. The students employed a sarcastic affect as a strategy to regulate intense emotion. Regulation of emotion in this context was attested in both languages, Arabic/Darija and English, as well as in a mixed code of both. However, language choice and code-switching of most of the sarcastic responses (8) were directed into Arabic/Darija. Whereas two (2) sarcastic responses were in English, and four (4) responses mixed both Arabic/Darija and English. Language choice towards Arabic/Darija for sarcastic affect is motivated by the need to regulate emotion in order to maintain the social relationship.
[114] "Nas koul mdayretlek camera cache [sic] za3m!" [nas kūl mdayratlak caméra cachée $z a^{\prime} m$ ].

Translation: The entire world is pranking you?
[115] "NCHLH BRABI HA HA HA" [nšāllah brabbī HA HA HA].
Translation: God willing! [laughs].
[116] "Oui hata nti makanech menek" [oui hattā ntī mākānš mannak].
Translation: Yeah, you also don't exist.
[117] "Goli wlh??? Mkontch 3labali" [gūl̄̄ wallah??? Makuntaš 'labalī].
Translation: I kid you not! I never knew.
[118] "Li ysa3dek" [lī ysa dak].
Translation: As you like.
[119] "Okay if you say so".
[120] "Yes, and I'm gay".
[121] "So the whole world tfehmou bh ykdbou 3lik lkdba hedi?!!" [So, the whole world tfāhmū bāh yakad ${ }^{\text {bu }}{ }^{\text {' } l i ̄ k] . ~}$

Translation: You think that the entire world is conspiring to play a prank on you?
[122] ". . . Oui sa7 3andk 17a9 is just a universal Joke" [Oui sah 'andak alhaq is just a universal Joke].

Translation: Yeah, sure, you're right. It's just a universal joke.
[123] ". . . Mala the whole world is playing with u!! U hv jst [sic] get punk'd" (māā....) Translation: So, ["the whole world is playing with you"]. (Punk'd: a reference to an American hidden-camera-prank show).

Derogatory responses represent participants' intense aggressive reaction to the opinion expressed in the situation. This intensity was expressed in both the respondents' L1 and L2. Examples
[124] "R u [vulgar for insane]!".
[125] ". . . are u dumb!!!!".
[126] "U ignorant".
[127] ". . . . الجهل واش يدير " [al ǧahl wāš ydīr].
Translation: Ignorance never ceases to impress.
[128] ". . . Ya 1 metkhalef" [yā al mathallaf].
Translation: You retarded!
[129] "Yekhi cavi yekhi" [yahnhī kavī yahhī].
Translation: What a bumpkin!
Offensive responses in Arabic/Darija were double the amount of insolent comments in English. However, responses that include swear words were mostly in English, except one response in which a swear word was expressed in Arabic/Darija. The latter is the only swear word used in the students' responses through the six situations. This fact affirms the conclusions derived from the previous situations, and is consistent with the claim suggested in the literature on emotion and bilingualism: Anxiety-provoking materials such as taboo and swear words predict CS towards the foreign language in order to avoid or reduce anxiety. By the way of illustration:
[130] "ST\|U w elbssi 1 mask" [. . . w albsī al mask].
Translation: Shut up and put a mask on.
[131] "Chuf dir 1 bavette w ba3edni and shut the [f-word] up ma tjich tefti 3liya" [šūf dīr al (bavette) w ba 'adnı̄ . . . mā tğ̀̄̌̌ taft̄̄ ‘liyā]

Translation: Put a mask on, keep your distance, shut up, and don't lecture me.
Finally, findings from this situation support conclusions from previous situations that code-switching in prayers/invocation and in proverbs is directed towards Arabic/Darija, the first language of the participants in this study.
[132] "Rabi yjib lkhir brk" (Rabbī yğīb alhīr bark)
Translation: May God grant us with what is best for us.
[133] "B3id char" (b ǐd eššar)
Translation: God forbid.
[134] "Li khaf nja" (lī ḩāf nğā)

Translation: Better safe than sorry.

## Situation Six

Question: Which expression would you use to express your love to someone?
In this situation, the students were instructed to imagine a romantic context where they would express love. As confirmed by questionnaire findings, the literature on bilingualism and deep emotions (such as love) reaffirms that bilinguals' L1 and L2 represent the languages of emotional attachment and of emotional distance, respectively. Hence, drawing on the bulk of studies on emotion and bilingualism, we expected students to use both L1 (Arabic/Darija) and L2 (English) to varying extents. The table below serves to dissect participants' language choice in relation to love phrases.

Table 3.14

Language Choice in the Expression of Love

| Language choice | Number | Percentage |
| :--- | :---: | :---: |
| Arabic/Darija | 21 | $33.87 \%$ |
| English | 25 | $40.32 \%$ |
| CS Arabic/Darija-English | 04 | $06.45 \%$ |
| CS English-Arabic/Darija | 03 | $04.83 \%$ |
| N/A | 09 | $14.51 \%$ |
| Total | 62 | $100 \%$ |

Love is an intense deep emotion that triggers mixed feelings whose expression would sound 'more honest' and robust in L1 considering its status as the language of emotional attachment for multilinguals (Pavlenko, 2002). As predicted, both languages were chosen by participants with a slight margin of difference: $47.16 \%$ (25) of the students used English to express their love while $41.50 \%$ (22) of them used Arabic/Darija.

The regular expression "Nhabek" [nhabbak], the equivalent of the English "I love you", was the most used phrase by participants to express love in L1 (Darija). In addition, the use of modifiers to intensify the meaning is noted in quite a few responses: e.g., "NhbQ grv" [nhabbak grave] (French-borrowed modifier), and humorous expression "nbghik ya jedk" [nabğīk ya ğaddak] which may be largely exclusive to Darija discourse. Further, we notice the use of different phrases such as "nmout 3lik" [nmūt 'likk], which translates to "I would die for you".

In English expressions, the ordinary phrase "I love you" was the most used. Again, we note the use of some adverbial modifiers for similar purposes as in L1, such as in "I truly love you" and "I love you so much". Moreover, students used several inflectional forms of the same expression, like in "I'm deeply in love with you", "love you more than anything", and "I love you to the moon and back". Moreover, it was in the English language that students expressed love emotions abundantly. For example, "you are my soulmate, I live [sic] you...", "I love you so much and I think I will be for long time", "well I know that it will be a surprise for you but I truly love you","you are one of the best people I know", "thank you for being there for me when I need you the most", and "I'm so lucky to have found you". Such poetical eloquence and expressive richness were not observed in their L1 responses; and this insight yields extra significance to their perceptions of English language as being more emotional, richer, and more poetic than their L1 Arabic/Darija, as per questionnaire output. In the same vein, the discernible difference in their expressivity of love in the two language modes seems to attest for more fluidity and better expressiveness in L2 English. Likewise, this illumination is on par with questionnaire findings based on their claims of more expressiveness in the target language. Their L2-aimed direction of language choice for the expression of such a deep
emotion is levelled with the fact that anxiety-inducing materials are not as strong when projected in the foreign language.

### 3.4.3. Comparative Analyses of Test Findings

### 3.4.3.1. Language Choice and Response Intensity

The herein analysis provides a detailed account of the participants' preferred language mode in proportion to the intensity of their responses to the six test situations.

## Situation One: Expression of Discontent

Table 3.15

Language Choice and Intensity in the Expression of Discontent

|  | Intense |  | Less Intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 01 | $01.6 \%$ | 04 | $06.5 \%$ |
| English | 10 | $16.1 \%$ | 10 | $16.1 \%$ |
| CS Arabic/Darija-English | 02 | $03.2 \%$ | 01 | $01.6 \%$ |
| CS English-Arabic/Darija | 07 | $11.3 \%$ | 09 | $14.5 \%$ |
| $N / A=18(29.0 \%)$ |  |  |  |  |
| Total |  | 62 | $100 \%$ |  |

The table above shows no significant difference in language choices between highly intense and less intense responses when arguing against the Facebook post denouncing a feminist movement. Both languages, together with a mixed code, attested to be used for intense and less intense emotion of arguing.

## Situation Two: Compliment-Response

Table 3.16

Language Choice and Intensity in the Expression of Compliment-Response

|  | Intense |  | Less Intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 05 | $08.1 \%$ | 01 | $01.6 \%$ |
| English | 21 | $33.9 \%$ | 07 | $11.3 \%$ |
| CS Arabic/Darija-English | 11 | $17.7 \%$ | 00 | $00.0 \%$ |
| CS English-Arabic/Darija | 12 | $11.3 \%$ | 02 | $03.2 \%$ |
| $N / A=03$ (04.8\%) |  |  |  |  |
| Total | 62 | $100 \%$ |  |  |

The students favoured L2 English to express intense compliment responses. Followed by responses alternating between Arabic and English. Whereas Arabic/Darija was the choice of a few students for the expression of intense compliment responding.

## Situation Three: Expression of Anger

Table 3.17
Language Choice and Intensity in the Expression of Anger

|  | Intense |  | Less Intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 06 | $09.7 \%$ | 15 | $24.2 \%$ |
| English | 07 | $11.3 \%$ | 08 | $12.9 \%$ |
| CS Arabic/Darija-English | 04 | $06.5 \%$ | 04 | $06.5 \%$ |
| CS English-Arabic/Darija | 06 | $09.7 \%$ | 08 | $12.9 \%$ |
| N/A $=04$ (06.5\%) |  |  |  | $100 \%$ |
| Total |  | 62 |  |  |

Regarding the aggressive emotion of anger, Arabic/Darija and English were almost equally opted for during the expression of intense angry responses. Whereas most of the responses in Arabic/Darija were less intense, the English ones ranged equally between high and low intensity.

## Situation Four: Expression of Excitement

Table 3.18

Language Choice and Intensity in the Expression of Excitement

|  | Intense |  | Less Intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 12 | $19.4 \%$ | 07 | $11.3 \%$ |
| English | 08 | $12.9 \%$ | 04 | $06.5 \%$ |
| CS Arabic/Darija-English | 19 | $30.6 \%$ | 01 | $01.6 \%$ |
| CS English-Arabic/Darija | 11 | $17.7 \%$ | 00 | $00.0 \%$ |
| Total | $100 \%$ |  |  |  |

Arabic/Darija was chosen more than English to project more intense feelings in the expression of excitement.

## Situation Five: Expression of Disagreement

## Table 3.19

## Language Choice and Intensity in the Expression of Disagreement

|  | Intense |  | Less intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 07 | $11.3 \%$ | 19 | $30.6 \%$ |
| English | 05 | $08.1 \%$ | 06 | $09.7 \%$ |
| CS Arabic/Darija-English | 03 | $04.8 \%$ | 10 | $16.1 \%$ |
| CS English-Arabic/Darija | 05 | $08.1 \%$ | 06 | $09.7 \%$ |
| $N / A=01(01.6 \%)$ |  |  |  |  |
| Total | 62 | $100 \%$ |  |  |

When expressing disagreement, proportions of responses that are initiated in English to express more intense and less intense emotions are close enough. However, responses initiated in Arabic/Darija are relatively more used in expressing less intense emotions.

## Situation Six: Expression of Love

Table 3.20
Language Choice and Intensity in the Expression of Love

|  | Intense |  | Less Intense |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Arabic/Darija | 07 | $11.3 \%$ | 14 | $22.6 \%$ |
| English | 11 | $17.7 \%$ | 14 | $22.6 \%$ |
| CS Arabic/Darija-English | 02 | $03.2 \%$ | 02 | $03.2 \%$ |
| CS English-Arabic/Darija | 03 | $04.8 \%$ | 00 | $00.0 \%$ |
| $N / A=09(14.5 \%)$ |  |  |  |  |
| Total | 62 | $100 \%$ |  |  |

Arabic/Darija, English, and a mixture of both are reported in the expression of love. However, the proportion of English intense responses was slightly larger than the proportion of intense responses expressed in Algerian/Darija.

### 3.4.2.1. Overall Analysis of the Six Situations

In the following analysis, the aim is to compare language choice in the different situations in proportion to emotion intensity and nature of emotion (positive or negative), considering the totality of responses of the 62 participants in the six situations.

Table 3.21

Language Choice in all Situations

|  | N | Percentage |
| :--- | :---: | :---: |
| Use of Arabic | 98 | $26.34 \%$ |
| Use of English | 111 | $29.83 \%$ |
| Arabic-English CS | 59 | $15.86 \%$ |
| English-Arabic CS | 69 | $18.54 \%$ |
| N/A $=35(9.40 \%)$ |  |  |
| Total | 372 | $100 \%$ |

Table 3.21 compares language choice of participants in the six situations. The largest proportion of responses was in English: $29.83 \%$ (111), followed by $26.34 \%$ (98) of the
responses in Arabic. Whereas the proportions of code-switching directions were very close with roughly 15\% into English, and $18 \%$ into Arabic.

Table 3.22
Language Choice in Positive and Negative Emotions

|  | Positive Emotions |  | Negative Emotions |  |
| :--- | :---: | :---: | :---: | :---: |
|  | N | Percentage | N | Percentage |
| Use of Arabic/Darija | 46 | $12.36 \%$ | 52 | $13.97 \%$ |
| Use of English | 65 | $17.47 \%$ | 46 | $12.36 \%$ |
| CS Arabic English | 35 | $09.40 \%$ | 24 | $06.45 \%$ |
| CS English Arabic | 28 | $07.52 \%$ | 41 | $11.02 \%$ |
| N/A | 12 | $03.22 \%$ | 25 | $06.72 \%$ |
| Total | 372 | $100 \%$ | 372 | $100 \%$ |

Note. Language choice is compared in terms of positive and negative emotions. Situations One (discontent), Three (anger), and Five (disagreement) provoked negative emotions; while situations Two (compliment-response), Four (excitement), and Six (love) triggered positive emotions.

Comparison results show that English was used more than Arabic in positive emotions, yet Arabic/Darija was the language used more to express negative emotions. Concerning code-switching, the students borrowed from English to express positive emotions in $09.40 \%$ of the responses (35) more than to express negative responses [06.45\% (24)]. However, for English-Arabic CS, participants borrowed from Arabic in negative emotions more than they do in positive emotions: $11.02 \%$ of responses (41) against $07.52 \%$ (28).

Table 3.23

Language Choice in Terms of Intensity in the Expression of Emotion

|  | Intense |  | Less intense |  |
| :--- | :---: | :---: | :---: | :---: |
| Responses | Number | Percentage | Number | Percentage |
| Arabic/Darija | 38 | $10.21 \%$ | 60 | $16.12 \%$ |
| English | 62 | $16.16 \%$ | 49 | $13.17 \%$ |
| CS Arabic/Darija-English | 41 | $11.02 \%$ | 18 | $04.83 \%$ |
| CS English-Arabic/Darija | 44 | $11.82 \%$ | 25 | $06.72 \%$ |
| N/A | 35 |  |  |  |
| Total | 372 | $09.40 \%$ |  |  |

When comparing language choice in terms of intensity of emotions, the results show that students used Arabic/Darija to express less intense emotions more than for intense emotions. Contrastively, English was used more for the expression of intense emotions than for the expression of less intense emotions. As for code-switching, respondents switched more into the other language (be it Arabic or English) for expression of intense emotion.

Table 3.24

Language Choice in Positive and Negative Emotions in terms of Intensity in Expressiveness

|  | Positive responses |  | Negative responses |  |
| :--- | :---: | :---: | :---: | :---: |
| Responses | N | Percentage | N | Percentage |
| Intense Arabic/Darija | 24 | $06.45 \%$ | 14 | $03.76 \%$ |
| Less intense Arabic/Darija | 22 | $05.91 \%$ | 38 | $10.21 \%$ |
| Intense English | 40 | $10.75 \%$ | 22 | $05.91 \%$ |
| Less intense English | 25 | $06.72 \%$ | 24 | $06.45 \%$ |
| Intense CS Arabic/Darija-English | 32 | $08.60 \%$ | 09 | $02.41 \%$ |
| Less intense CS Arabic/Darija-English | 03 | $00.80 \%$ | 15 | $04.03 \%$ |
| Intense CS English-Arabic/Darija | 26 | $06.98 \%$ | 18 | $04.83 \%$ |
| Less intense CS English-Arabic/Darija | 02 | $00.53 \%$ | 23 | $06.18 \%$ |
| N/A |  | 35 |  | $09.40 \%$ |
| Total |  | 372 |  | $100 \%$ |

The frequency of using Arabic/Darija to express intense and less intense positive emotions is quite similar ( $06.45 \%$ (24) vs. $05.91 \%$ (22) of the responses, respectively). However, the frequency of choosing English for the expression of intense positive emotion is significantly higher than using it to express less intense positive emotions ( $10.75 \%$ (40) vs. $06.72 \%$ (25) of the responses, respectively). Meanwhile, for the expression of negative emotions, the use English is reportedly close for both high and low-levels intensity ( $05.91 \%$ (22) vs. $06.45 \%$ (24) of the responses, respectively). Regarding the use of Arabic/Darija in negative emotions, it is reported that its use for less intense emotions is larger than its use in more intense emotions (10.21\% (38) vs. $03.76 \%$ (14) of the responses, respectively). As for Arabic/Darija-English code-switching, it is attested that $08.60 \%$ (32) of the responses that switched into English in positive emotion were intense while only $00.80 \%$ (03) of the responses were not intense. Whereas in negative emotions, the responses that borrowed from English for less intense emotion are more than those borrowed from English for more intense emotion ( $04.03 \%$ (15) vs. $02.41 \%$ (09) of the responses, respectively).

### 3.4.4. Summary and Discussions of Findings from the Test

The qualitative analysis of the data indicated some patterns on language choice and code-switching. Overall, the qualitative analysis of the data obtained from the Student Test revealed that both Arabic/Darija, the dominant language, and English, the less dominant language, are used by participants to display emotions depending on the nature of emotional materials and the intensity of the emotion. The results found that the use of English as a foreign language is associated more with positive emotions, while Arabic/Darija is more associated with negative emotions. Further, with respect to language choice in terms of intensity of emotions, the results indicate that students use L1 Arabic/Darija to express less intense emotions more than to express intense emotions.

However, L2 English is used more for the expression of intense emotions than for the expression of less intense emotions. Moreover, responses that are initiated in English express either more intense or less intense emotions in equal frequency. However, responses initiated in Arabic/Darija are more used in expressing less intense emotions. Specifically, the frequency of using Arabic/Darija in the expression of both intense and less intense positive emotions is quite similar. However, the frequency of choosing English for the expression of intense positive emotions is significantly higher than using it to express less intense positive emotions.

As concerns code-switching, the alternation between Arabic/Darija and English is governed by the affective functions that the languages L1 and L2 offer. CS into Arabic for quoting purposes was noted on several occasions. The students tend to draw on Arabic/Darija for proverbs, idiomatic expressions, and religious expressions and prayers in order to produce a more affective meaning.

The analysis of the students' responses reveals that English is the language favoured by students to express unconcealed aggressive speech acts such as direct insults, blasphemy expressions, and offensive comments. Further, swear and taboo words are used in English almost exclusively. This insight is consistent with their expressed views in the questionnaire where a significant majority of students perceives swear words to be from fairly to little strong, or not strong at all in English. As compared to L1 Arabic in which insults are perceived to be stronger (see Figure 3.23). These findings are in harmony with previous studies on anxiety-provoking emotional materials such as taboo words, in which scholars explained that bilinguals opt for L2 to avoid or reduce anxiety, or to divert guilt felt after using such expressions in a more emotional L1 mode.

As per emotion regulation, the use of humorous and sarcastic reactions as a strategy was attested in both languages equally. Particularly, both Arabic and English were used to display humorous and sarcastic affects.

Concerning the expression of love and endearment, a tendency towards using L2 English was evident. Such verbal practices are not customary within the Algerian culture unlike in English-speaking societies, the fact that explains the choice of foreign language (English).

## Conclusion

Considering the findings from the research tools employed in this study, bilinguals' L1 and L2 alternate in the expression of emotions. Language choice and direction of code-switching in emotional expressiveness are noted to depend on the nature and the intensity of the emotional materials, the context, in addition to the bilingual's personality and preferences. Further, the use of L2 for linguistic emotionality and expressiveness is seen to be proportionate with the students' language proficiency level and exposure to the target language and culture. Finally, factors that would impact the use of L2 in emotional expressiveness, such as age, gender, length of instruction, etc. could not be tested due to a sample that is not very variant in relation to the previously mentioned factors.

## GENERAL CONCLUSION

The intertwinement of language and cognition has long continued to attract researchers' interest in investigating the connexion between language, thought, culture, and cognition. However, the incorporation of SLA within cross-linguistic research is relatively still underexplored, and this is more so the case in contexts where the Arabic language is spoken. More recently, there arose a mounting interest in the inquiry of second language influence on emotionality and expressiveness in bilingual speakers. In the furtherance of the latter, researchers investigated how bilinguals, as possessors of different languages each with an associated conceptual system and proper sociocultural frames, could perceive, experience, and express emotions.

The present study took aim at investigating the influence of bilinguals' first and second language on their language choices in the expression of emotion. Strictly speaking, the influence of English as a foreign language on Algerian ELLs' emotionality and expressiveness. Given the context of the research, the study considered only two languages that are spoken by participants: Arabic/Darija, both considered as L1, and English, their target language, considered as their L2. It investigated their expressiveness and emotionality in L1 and L2 in addition to how they perceive the languages they speak and the manners in which they would employ their rich linguistic repertoires in different speech situations. Towards that end, this research conducted a statistical analysis obtained from quantitative data and qualitative analysis of students' discursive productions. This research employed two data collection tools: A questionnaire and a test. The findings inferred by means these tools were consistent with backdrop literature and previous research on emotions and bilingualism.

## 1. Conclusions and Implications

The herein findings from the online-distributed questionnaire and test substantiate that Algerian learners of English tend to use their dominant language (L1 Arabic/Darija) and their less dominant language (L2 English) to express emotions depending on the contextual particularities. A good case in point is that some emotional practices that are related to the target language's culture are found to be adopted by bilinguals when operating in their L2 mode. In the Algerian context of the study, emotional materials inducing stress and anxiety do not only entail swear and taboo words but also romantic talk, love expressions, affect, deep feelings, etc. Thence, students show a tendency towards L2 use when dealing with such materials to curb potential anxiety and stress inherent in L1 being the language of stronger emotional attachment. However, in contexts of overwhelming emotional involvement, such as anger-stimulating situations, these students may find better rendering for their emotions in their L1. This is probably due to a more impromptu access and retrieval of words needed for such situations. By virtue of these facts, it is confirmed that Algerian learners of English prefer to express themselves in one language rather than the other in certain contexts.

Although L1 is generally regarded as being more emotional in previous studies, this study on Algerian ELLs aided exploring this issue of emotionality in a second language from a different angle. Overall, higher levels of emotionality and a more fluid expressiveness were recorded in L2 rather than L1, especially in their output concerning materials that are considered 'taboos' in their culture such as the expression of love. Therefore, English as 'a distanced' L2 proved to yield more expressivity and emotionality to their discourse. This finding may be explained on the ground that English is associated to 'more open’ Western culture, unlike their L1 Arabic/Darija where talking
about certain emotional matters would not be as easy due to already tackled reasons throughout this work. Hence, it is fair to say that L2 may bring about more emotionality in the bilingual's discourse under certain circumstances where emotional expression in L1 is restricted. At the same time, other studies reporting more emotionality in L1 may have focused on participants whose both languages enabled equal opportunities for emotional expression without the socio-cultural reservedness attached to either of the languages, unlike the case with this study at hand.

On a different note, the findings obtained through this study provide empirical support for a link between language choice and code-switching, on one hand, and with types of emotions, on the other hand. This relationship is a result of the triangulation of emotionality practices, linguistic-conceptual systems, and sociocultural frameworks. Arabic and English are two typologically different languages. Consequently, the perception and expression of emotions differ between these two languages. This fact would affect appropriate emotional expression in cross-cultural contexts. Put differently, issues in cross-cultural communication may arise when speech participants' conceptual system and cultural aspects governing the emotion concepts are different enough to impact the communication. Accordingly, it is recommended that EFL language course syllabi cover aspects of emotionality and expressiveness within the perspective of intercultural communicative competence.

## 2. Limitations of The Study

As an inexorable consequence of the Covid-19 pandemic, the study had to be conducted online instead of gathering data through face-to-face conversations and interviews. Wherefore, only written corpus could be collected. While it must be noted that the collection of written data is easier than obtaining difficult-to-observe spoken
language data, face-to-face conversations still would have provided more reliable, spontaneous, and natural productions vis-à-vis participants' emotions and expressivity.

To make matters worse, most students did not cooperate to fill out the form. Thereupon, only 62 postgraduates out of the whole theoretical population (220) form our sample. This limited sample did not allow running more statistical analyses to account for more reliable data that is representative of the population under the scope of the study.

Finally, participants' reactions are determined by the input. The latter has a considerable effect on their responses, as explained in 3.4.1. Description of the Student Test. Therefore, it is hard to extract natural spoken-language utterances from participants in such circumstances.

## 3. Suggestions for Future Research

To our knowledge, this is one of the first studies to empirically investigate a possible correlation between language choice, code-switching, and emotional expressiveness in Algerian learners of English. Therefore, future studies would be indispensable to further elucidate the major issue of Algerian bilingual speakers' linguistic preferences and attitudes. The socio-linguistic situation in a multifaceted community like the Algerian one provides a fertile ground for explorations on language use since many Algerians of newer generations are speakers of at least three different languages: Arabic (MSA and Darija), French, and English; in addition to relatively exotic languages like Spanish, Italian, and Korean learnt by some individuals and ELLs.

Furthermore, it would be necessary for future research to draw on the many factors that had to be given lower prominence in this research. For example, the factor of emotion intensity, functions of code-switching, the role of personality types, motives for CS, etc. Steering research wheel towards these variables would open doors on alternative
viewpoints to the matter and secure deeper insights on Algerian ELLs' emotionality and expressiveness.

It is also suggested that future studies would consider more inclusive samples to enable testing the influence of factors such as gender, age, LoI, immersion in the target language and culture on language choice and code-switching in emotional experiences.

The non-significance of association and variance between some variables (see page 97) can stem from the limited sample size of the study which resulted in unbalanced groups (some were even reduced to one to two students). Hence, future studies are required to incorporate a larger sample size and more balanced groups to better test variance significance through ANOVA and KWH t-test.

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## APPENDICES

## Appendix A

## Student Questionnaire

Thank you for clicking! Here is a cookie -

Dear students,

You are kindly requested to complete this questionnaire. Your response is of vital importance for the validity and reliability of the research; therefore, please fill in all the required $\left({ }^{*}\right)$ fields with attention and interest.

This is an anonymous online survey. Your identity is protected by default as no personal identifiers will be collected.

There are no right or wrong answers. Only click/tap on the proper answer or provide one when needed.

Thank you.
Mr El Wafi Badji
Department of Letters and English Language
University of 8 mai 1945, Guelma

## Section 1: Background Information

1. Gender:

| Male |  |
| :--- | :--- |
| Female |  |

2. How old are you?
3. For how many years have you been learning English?
4. Was your choice to study English Language and Culture intrinsically motivated? Intrinsic motivation "originates within the individual who learns for the joy, satisfaction and sense of accomplishment" (Yokochi, 2003). Such learners usually have favourable feelings about and interest in the target language and culture.

| Yes |  |
| :---: | :--- |
| No |  |

5. What was your graduation score range?

| $08.00-10.00$ |  |
| :--- | :--- |
| $10.00-12.00$ |  |
| $12.00-14.00$ |  |
| $14.00-16.00$ |  |

## Section 2: Language Background

6. Your strongest languages are...

The languages in which you believe you are proficient the most (you can express yourself
more comfortably when using them).

| Arabic/Darija only |  |
| :--- | :--- |
| Arabic/Darija and French |  |
| Arabic/Darija and English |  |
| Arabic/Darija, French, and English |  |

7. Rate your English proficiency level in the four skills according to the following grid (IELTS).

| Limited user | Your basic competence is limited to familiar situations. You <br> frequently show problems in understanding and expression. |
| :--- | :--- |
| Modest user | You have partial command of the language, and cope with overall <br> meaning in most situations, though with many mistakes. You handle <br> basic communication. |
| Competent/good user | You have an effective command of the language, with occasional <br> inaccuracies, inappropriate use and misunderstandings in some <br> situations. Generally, you can use and understand complex language <br> well. |
| Very good user | You have a fully operational command of the language. You may <br> misunderstand some things in unfamiliar situations. You handle <br> complex detailed argumentation well. |
| Expert user | You have a full command of the language. Your use of English is <br> appropriate, accurate, and fluent, and you show complete <br> understanding. |


|  | Limited | Modest | Competent/good | Very good | Expert |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Listening |  |  |  |  |  |
| Speaking |  |  |  |  |  |
| Reading |  |  |  |  |  |
| Writing |  |  |  |  |  |

8. On a typical day, how often do you use English actively inside the classroom?

| Never |  |
| :--- | :--- |
| Rarely |  |
| Sometimes |  |
| Frequently |  |
| All the time |  |

9. On a typical day, how often do you use English outside the classroom?

Either when texting friends, speaking to people, posting on social media, reading, listening, etc.

| Never |  |
| :--- | :--- |
| Rarely |  |
| Sometimes |  |
| Frequently |  |
| All the time |  |

10. What do you believe has contributed the most to your language learning?

You can only choose 4. Order them from 1 to 4 accordingly.

|  | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Formal classroom instruction. |  |  |  |  |
| Real-life interaction with non-native speakers. |  |  |  |  |
| Real-life interaction with native speakers. |  |  |  |  |
| Texting with non-native speakers. |  |  |  |  |
| Texting with native speakers. |  |  |  |  |
| TV, films, music, podcasts, or video games. |  |  |  |  |
| Reading English books. |  |  |  |  |
| Listening to English audio books. |  |  |  |  |

11. How often do you use English in the following activities?

|  | Never | Rarely | Sometimes | Frequently | All the <br> time |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Listening to <br> music/radio/podcasts. |  |  |  |  |  |
| Watching TV or <br> films/shows. |  |  |  |  |  |
| Reading on the internet <br> (news, forums, websites, <br> blogs, etc.) |  |  |  |  |  |
| Drafting emails or <br> chatting with friends. |  |  |  |  |  |

12. Have you ever gone on a language stay (séjour linguistique) or a student exchange programme to an English-speaking country?

| Yes |  |
| :--- | :--- |
| No |  |

12.2. If yes, please indicate the name of the country(-ies), the reason, and the length of your stay:

## Section 3: Language Use and Attitudes

13. To me Arabic/Darija is:

|  | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- |
| Useful |  |  |  |
| Colourful |  |  |  |
| Rich |  |  |  |
| Poetic |  |  |  |
| Emotional |  |  |  |
| Cold |  |  |  |

14. To me English is:

|  | Agree | Neutral | Disagree |
| :--- | :---: | :---: | :---: |
| Useful |  |  |  |
| Colourful |  |  |  |
| Rich |  |  |  |
| Poetic |  |  |  |
| Emotional |  |  |  |
| Cold |  |  |  |

15. Which language(s) do you use for mental calculations?

If you select "All the time" for one language, you will have to select "Never" for the remaining two languages.

|  | Never | Rarely | Sometimes | Frequently | All the time | Not applicable |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Arabic/Darija |  |  |  |  |  |  |
| English |  |  |  |  |  |  |
| French |  |  |  |  |  |  |

16. In which of the following languages do you feel MORE EXPRESSIVE?

|  | Arabic/Darija | English |
| :--- | :---: | :---: |
| When texting 苜 |  |  |
| When speaking Cd |  |  |

17. To me, talking about emotional topics in English is...

| Easier |  |
| :--- | :--- |
| More difficult |  |

17.2. Could you explain your choice? (optional)
18. If you were to talk to yourself (inner speech), what language do you typically use when you...

|  | Arabic/Darija | English | Not applicable |
| :--- | :--- | :--- | :--- |
| Daydream |  |  |  |
| Reflect on a taboo topic |  |  |  |
| Have an imaginary conversation <br> with someone |  |  |  |
| Have an imaginary romantic talk |  |  |  |
| Have an imaginary argument/fight <br> with someone |  |  |  |
| Reflect on something you heard |  |  |  |
| Overthink |  |  |  |

19. Do you switch between Arabic/Darija and English when you speak with people who understand both languages?

| Yes |  |
| :--- | :--- |
| No |  |

19.2. If yes, how often do you need to switch between Arabic/Darija and English when talking about certain matters?

Select "Not applicable" if you answered the previous question with "No"

|  | Never | Rarely | Sometimes | Frequently | All the time | Not applicable |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| When speaking <br> about neutral <br> matters |  |  |  |  |  |  |
| When speaking <br> about personal <br> matters |  |  |  |  |  |  |
| When speaking <br> about emotional <br> matters |  |  |  |  |  |  |

20. Which of the following languages expresses what you want to say better when you:

|  | Arabic/Darija | English | Not applicable |
| :--- | :--- | :--- | :--- |
| Express happiness |  |  |  |
| Express anger |  |  |  |
| Express sadness |  |  |  |
| Express discontent |  |  |  |
| Talk about sexuality |  |  |  |
| Discuss social taboo topics |  |  |  |
| Have a romantic talk |  |  |  |
| Praise someone |  |  |  |
| Swear/curse |  |  |  |
| Express your deepest feelings |  |  |  |
| Argue with someone |  |  |  |
| Text angrily |  |  |  |
| Text romantically |  |  |  |
| Tell an inappropriate joke |  |  |  |

21. In which of these two languages are you more likely to say, "words cannot express how I feel'?

| Arabic/Darija |  |
| :--- | :--- |
| English |  |

22. In which of the following languages would you reveal more about yourself?

| Arabic/Darija |  |
| :--- | :--- |
| English |  |

23. In which language does the phrase "I love you" have a stronger emotional weight for you?

| Arabic/Darija |  |
| :--- | :--- |
| English |  |

24. Do swear and taboo words in these languages have the same emotional weight for you?

|  | Not strong | Little strong | Fairly strong | Very strong | Not <br> applicable |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Arabic/Darija |  |  |  |  |  |
| English |  |  |  |  |  |

25. Do you feel like a 'different person' sometimes when you use your different languages?

| Yes |  |
| :--- | :--- |
| No |  |

25.2.Could you explain why/how? (optional)
$\qquad$
$\qquad$
Leave below any comment you have (optional).
$\qquad$
$\qquad$

## Appendix B

## The Test

## EXPRESS YOURSELFIE!

Please read carefully:

- In the following situations, assume that the interlocutor speaks both Arabic and English just like you.
- Express yourself freely in the language of your choice: Standard Arabic, Algerian Arabic (Darija), English, or English-Arabic code-mixing are allowed.
- It is recommended to write down the first response that comes to your mind (naturally and spontaneously) in each situation.
- There are no right or wrong answers, and all kinds of responses are tolerated.


## Situation 01:

If you were to comment on a classmate's post denouncing the \#MeToo movement of women claiming to have been previously sexually assaulted by men, what would you write?

| Facebook User <br> Yesterday at 4:45am $\cdot$ |  |
| :---: | :---: |
|  |  |
| These delusional women have gone too far... Those were individual accidents BARK en plus they could be fake scenarios... Sammtouha!! |  |
| -. 당ㅇㅇ | 21 Comments |
| 0 [ike | $\Rightarrow$ Share |
| View more 16 Comments |  |

## Situation 02:

Your closest friend has just told you that s/he is lucky to know someone like you. What would you say back to him/her?
$\qquad$
$\qquad$

## Situation 03:

You are angry at your friend who has just texted you to cancel your long-awaited plan after you have finally finished preparing yourself for it. What would you text them back?

$\qquad$
$\qquad$

## Situation 04:

You have just come back from the best trip you have ever had. Your friend asks about how you feel about it and says, "So! Kifech fatet?"; what would you say?

## Situation 05:

Your friend tells you Covid-19 is just a hoax, "Corona hadi makanech menha"; what would be your reply?

## Situation 06:

Which expression would you use to express your love to someone?

Thank you for your time. Here is another cookie.

## Appendix C

## Correlation and Variation Analyses (SPSS Results)

## Table C1

Correlation Analysis Between Level of Proficiency in Speaking and Expressiveness in
Speaking

|  |  |  | Language Proficiency in Speaking | Expressive ness in Speaking |
| :---: | :---: | :---: | :---: | :---: |
| Spearman's rho | Language Proficiency in Speaking | Correlation Coefficient | 1.000 | .332** |
|  |  | Sig. (2-tailed) |  | . 008 |
|  |  | N | 62 | 62 |
|  | Expressiveness in Speaking | Correlation Coefficient | . 332 ** | 1.000 |
|  |  | Sig. (2-tailed) | . 008 |  |
|  |  | N | 62 | 62 |

**. Correlation is significant at the 0.01 level (2-tailed).

## Table C2

Correlation Analysis Between Level of Proficiency in Speaking and Self-Revealing

|  |  |  | Language <br> Proficiency in <br> Speaking | Self- <br> revealing |
| :--- | :--- | :--- | :--- | ---: |
| Spearman's rho | Language <br> Proficiency in <br> Speaking | Correlation Coefficient | 1.000 | .186 |
|  | Sig. (2-tailed) | N | .147 |  |
|  | Self-revealing | Correlation Coefficient | .186 | 1.000 |
|  | Sig. (2-tailed) | .147 | . |  |
|  | N | 62 | 62 |  |

## Table C3

Correlation Analysis Between Exposure to Culture and Expressiveness in Speaking

|  |  |  | Exposure <br> to culture | Expressiveness in speaking |
| :---: | :---: | :---: | :---: | :---: |
| Spearman's rho | Exposure to culture | Correlation Coefficient | 1.000 | .250* |
|  |  | Sig. (2-tailed) |  | . 050 |
|  |  | N | 62 | 62 |
|  | Expressiveness in speaking | Correlation Coefficient | 250* | 1.000 |
|  |  | Sig. (2-tailed) | . 050 |  |
|  |  | N | 62 | 62 |

*. Correlation is significant at the 0.05 level (2-tailed).

## Table C4

## Correlation Analysis Between Exposure to Culture and Self-Revealing

|  |  | Exposure <br> to culture | Self- <br> revealing |  |
| :--- | :--- | :--- | ---: | ---: |
| Spearman's rho | Exposure to <br> culture | Correlation Coefficient | 1.000 | $.460^{* *}$ |
|  |  | Sig. (2-tailed) | .000 |  |
|  | N | $.460^{* *}$ | 1.000 |  |
|  | Correlation Coefficient | .000 | .$\dot{62}$ |  |
|  | Sig. (2-tailed) | 62 | 62 |  |
|  | N |  |  |  |

**. Correlation is significant at the 0.01 level (2-tailed).

## Table C5

Analysis of Significance of Variance of Expressiveness in Speaking in terms of LoP in Speaking

## Ranks

|  | Language proficiency in speaking | N | Mean Rank |
| :--- | :--- | :---: | :---: |
| Expressiveness in | Modest user | 12 | 24.04 |
|  | Competent user | 15 | 30.04 |
|  | Very good user | 18 | 33.36 |
|  | Expert user | 06 | 41.83 |
|  | Total | 61 |  |

## Test Statistics ${ }^{\text {a,b }}$

|  | Expressiveness in speaking |
| :--- | ---: |
| Kruskal-Wallis H | 6.945 |
| df | 3 |
| Asymp. Sig. | .074 |

a. Kruskal Wallis Test
b. Grouping variable: language proficiency in speaking

Table C6
Analysis of Significance of Variance of Self-Revealing in terms of LoP in Speaking

## Ranks

|  | Language proficiency in speaking | N | Mean Rank |
| :--- | :--- | :--- | :---: |
| Self-revealing | Modest user | 12 | 29.29 |
|  | Competent user | 15 | 27.26 |
|  | Very good user | 18 | 25.22 |
|  | Expert user | 06 | 23.92 |
|  | Total | 61 |  |

## Test Statistics ${ }^{\text {a,b }}$

|  | Self-revealing |
| :--- | ---: |
| Kruskal-Wallis H | 4.114 |
| df | 3 |
| Asymp. Sig. | .249 |

a. Kruskal Wallis Test
b. Grouping variable: language proficiency in speaking

## Table C7

Analysis of Significance of Variation of Expressiveness in Speaking in terms of Exposure to the Language Culture

## Ranks

|  | Exposure to the Target Culture | N | Mean Rank |
| :--- | :--- | :---: | :---: |
| Expressiveness in | Sometimes | 05 | 27.00 |
| spequently | 24 | 27.25 |  |
|  | All the time | 31 | 33.58 |
|  | Total | 60 |  |

## Test Statistics ${ }^{\text {a,b }}$

|  | Expressiveness in speaking |
| :--- | ---: |
| Kruskal-Wallis H | 3.075 |
| df | 2 |
| Asymp. Sig. | .215 |

a. Kruskal Wallis Test
b. Grouping variable: language proficiency in speaking

## Table C8

Analysis of Significance of Variation of Self-Revealing in terms of Exposure to the Language Culture

## Ranks

|  | Exposure to the target culture | N | Mean Rank |
| :--- | :--- | :---: | :---: |
| CS when speaking | Sometimes | 05 | 16.50 |
| about personal | Frequently | 24 | 26.75 |
| matters | All the time | 31 | 35.66 |
|  | Total | 60 |  |

## Test Statistics ${ }^{\text {a,b }}$

|  | Self-revealing |
| :--- | ---: |
| Kruskal-Wallis H | 10.538 |
| df | 2 |
| Asymp. Sig. | .005 |

a. Kruskal Wallis Test
b. Grouping variable: language proficiency in speaking

## مُـــنَّص

تُبرز التطورات الأخيرة في مجاليُ اللغة والإدراك علاقةً وطيدةً بين التعبير عن المشاعر واللغة المستعلة في ذلك فيما يتعلق بمنظومتها الهفاهيمية وكذا خصوصياتها الإجتماعية و الثقافية. نتيجة لهذا، يتأترُ مزدوِجُو اللغة الجزائريُون الدتحدثون باللغة العربية و اللغة الإنجليزية عند تعلمهم لهذه الأخيرة بأبعادها الإجتماعية و الثقفية المتعلقة بالتعبير عن المشاعر. من هذا المُنطلق، نفترض أن تعلم اللغة الإنجليزية كلُغة أجنبية يؤثر على التُعبير العاطفي عند مزدوجي اللغة. ومنه ، يهذف هذا البحث إلى دراسة ظاهرة التعبير العاطفي عند متعلمي اللغة الإنجليزية الجزائرِيّن إضافةً إلى شتَّى العو امل المختلفة التي تؤثر عليها. ولهذه الغاية، تم توزيع استبيان لغرض الحصول على معلومات حول عدة عو امل من بينها مدى إتقان اللغة الإنجليزية (تقييٌٌ ذاتيٌّ) و عامل التعرض لثقافة هذه اللغة. كما نَّرَ إجراء تحليل كَبِّيِّ لمعاينة الإرتباط بين هذه العو امل و طرق التُبير عن المشاعر للى المشاركين في الإستبيان و التجربة المر افقة له أين تم تسجيل علاقةٍ إيجابيةٍ بين الطر فين. إستكملت الار اسة بتحليل نوعيّ لخطابات تعبيرية وعاطفية تم الحصول عليها خلال التجربة. تنثير ننائج التحليل النوعي إلى وجود علاقة معقدة بين اللغة المختارة عند النتبير عن المشاعر من طرف مزدوجي اللغة و العو امل سالفة الذكر المؤثرة على ذلك. خَلَصت هذه الدر اسة إلى أنَّ كِلا اللغتين ، المُهيمنة (اللغة الأم، أي كل من اللغة العربية أو الدَّارجة) والأقل هيمنة (اللغة الثانية، أي اللغة الإنجليزية) تستخدمان للتعبير عن مشاعر هم تناسباً مع السياق و مَعَ الشعورِ المعبرٍ عنـُ. الكلمات الدحورية: اللغة؛ الإدر اك؛ مزدوِجُ اللغة؛ النتبير العاطفي.

## RÉSUMÉ

Les développements récents dans les domaines de langue et cognition mettent en avant l'interdépendance de l'expression d'émotions et de la langue par rapport à ses schémas conceptuels et son champs socioculturel. Par conséquent, les algériens bilingues arabeanglais, dans leur processus d'apprentissage de l'anglais, sont exposés à des aspects socioculturels relatifs, liés à l'expression d'émotions. Dans cette perspective, nous postulons que l'apprentissage de l'anglais comme une langue étrangère influence l'expression émotionnelle. Cette étude vise à enquêter sur l'expressivité émotionnelle dans les performances des apprenants algériens de l'anglais, ainsi que les facteurs de variation qui l'influencent. À cet effet, un questionnaire a été distribué afin d'obtenir des informations sur les variables concernant les niveaux des compétences des étudiants étant autoévalués, ainsi sur l'exposition à l'autre culture, entre autres. Ensuite, une analyse a été effectuée pour déterminer la corrélation entre les variables susmentionnées et l'expression des émotions, dont la corrélation était positive. Principalement, une analyse qualitative des productions écrites expressives et émotionnelles au moyen d'un test. Les résultats issus de l'analyse qualitative suggèrent un rapport complexe entre les choix linguistiques des apprenants dans l'expression d'émotions et les facteurs de variation qui l'influencent. Cette étude a conclu que les deux langues, dominante et moins dominante, sont utilisées pour exprimer leurs émotions.

Mots clés : langue, cognition, expression d'émotions, bilingues.

