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# The impact of psychological aspects in language acquisition

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*A chi ha volato e continua a volare con me:  
alla mia famiglia, le mie ali;  
ai miei amici, il mio motore;  
ai miei docenti, le coordinate del mio volo.*

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## **Abstract**

This paper aims to look at the psychological aspects which can influence positively or negatively the learner during the linguistic acquisition. I have decided to focus on this thematic because of a personal interest in all those psychological and emotional factors which can affect the performance of the student during the acquisition of a language. In the first part of the dissertation there is a general overview on the theoretical bases of the psychological factors implied in the learning context. Firstly, the paper will focus on the learner, who is the main character of the thesis, within his or her emotions. In the first chapters the paper will deal on the neurological and psychological aspects of the brain of the learner, such as the processes and the functioning of acquisition and the memory, which is a fundamental factor when we are dealing with first the learning, and then the acquisition of a foreign language. The second chapter will deal on the literature connected to the topic and then on some important factors which can affect acquisition. The main literature will focus on the theories of Krashen, within his affective filter, and then on specific features such as: the impact of pleasure, will and necessity in acquisition, the impact of anxiety, the impact of motivation and the role of the teacher as a coach ( and support) in class. In the second part of the paper it will be given space to a survey (questionnaire), which aimed at students and their experience in language learning. The aim of this paper is to compare the theories which can be found in the first part of the dissertation with the results which can be read from the questionnaires. The final part of the dissertation will be dedicated to the analysis of the questionnaires, focusing deeply on the questions and comparing the outcomes to the expected results. The paper will end with some final considerations on the main topic and some suggestions for the creation of a better class environment so as to allow students a good atmosphere which can boost their acquisitional capability.

## INTRODUCTION:

If we asked a group of students how many people among them have experienced situation of anxiety during written or oral tests, the majority of them would probably raise their hand. And what would they answer if we asked the same people what impact usually have emotions (positive or negative) on their mental performance? These questions, which we will analyse in the second part of this dissertation in a more detailed way, are the main interrogations, which have triggered the interest in carrying out this research. The personal interest towards this topic was originated thanks to some university courses, which dealt with the psychological aspects and their impact on linguistic education and acquisition. Thanks to these courses I became more aware of the importance of emotions in a student's life and of the fact that these same emotions play a fundamental role in the functioning of the human brain and that they influence our behaviours and performances. All in all, this paper has the main aim of researching the impact of emotions on the specific case of the performance of a student during testing situations in school.

This paper is structured into two main sections: one theoretical and the other practical.

The first one is dedicated to a theoretical overview, because it is fundamental to set the context of the research. The first chapter will deal with the real protagonist of the research, who is the student; in fact, the learner represents the *context* in which emotions happen and where acquisition takes place. The chapter will seek to analyse some main characteristics of the brain, which can be described as the *internal device* of the learner, which controls emotions in acquisition. This theoretical section will firstly focus on some neurolinguistic and psychological aspects, such as the concepts of *bimodality* and *directionality*; these two factors will help us to have an overview on the functioning of the brain during acquisition. The first chapter will end with a section dedicated to a short description of the structure and of the functioning of the memory and its role in acquisition.

If the first chapter seeks to provide the reader with a general description of the functioning of the brain during acquisition, focusing on some specific points, the second chapter, will focus on the core issues of this research. In this chapter we will deal with the psychological dimension, and with the role of emotions during acquisition. It will be provided some literature about these topics, in particular about the role played by negative emotions such as fear or anxiety during testing situations, and their possibility of hindering acquisition. There will be a following focus, this time on positive emotions, such as pleasure in learning or such as those triggered or boosted by motivation. The chapter will end with some paragraphs dedicated to the role of the teacher

and of the group during the lessons, and their possibility in influencing the emotions and consequently the behaviour and the performances of the single student.

The whole third chapter will deal on the survey involved in this research, and it will set the context for a better reading of the questionnaire, which will be found in the second section of this paper. In this chapter there will be a description of the survey, focusing on its initial aims and on those questions, which have triggered the interest in carrying out this research. In addition, the main sections of the questionnaire will be illustrated, and subsequently the questions, which give form to each section, will be delineated. Furthermore, it will be illustrated the context of the research, the instruments and the methodology used to carry out the survey. In the end of the chapter the reader will find a section dedicated to some information about the sample involved in the research.

Chapter four will illustrate in every detail the questionnaire within its section and single questions.

Chapter five will introduce the practical section of this research paper, and in this part, there will be the analysis of the data collected thanks to the questionnaires. This chapter will show the results on the emotional component of the informative sample, and it will illustrate how much emotions can affect the performance of a learner in a testing situation. The practical part seeks to give some important answers to the main questions of the research, and on the base of these answers to elaborate some possible suggestions for the creation of a better learning context, which could favour more positive emotions, which means more possibilities for a better acquisition. Finally, there will be given space for a conclusion.

## **PART ONE. THEORETICAL SECTION**

### **1. The protagonist of linguistic acquisition: the learner**

The title of this first chapter labels the learner as the protagonist for two main reasons: firstly, if we look at the title of this research paper, our attention is caught by two main key words: psychological aspects and acquisition. As regards the first term, the psychological aspects such as good or bad emotions, happen inside a person, in our case represented by the learner, and they can have an influence in the behaviours and on the performances of this same subject. As regards the second term, acquisition, the learner is the subject at whom acquisition aims, and he or she becomes in this way the active part, the real protagonist of the didactic action.

Secondly, the learner is labelled as the protagonist, because without the contribution of every single student, who has spent some minutes of his or her time to fill in the questionnaire, this research paper probably wouldn't have been written. Every single student, who decided to look inside his or her emotions to answer the questions, is to be considered a protagonist of this research.

In this first chapter we will introduce the learner focusing on some neurolinguistic mechanisms that happen in the brain during the process of acquisition. The main purpose of this chapter is to give an overview on the functioning of the brain, since it represents the place where acquisition and all the psychological processes take place. In the following lines we will set the context for this research paper.

#### **1.1 The wholeness of the learner. History of different approaches to the language teaching didactic**

In the very first part of this research paper it may be worth reporting some literature on the history of the different didactic approaches and their impact in the consideration of the learner in the didactic action. We will see in the following lines the main approaches in history, which still be present even nowadays. The following part of this research is based on the notions suggested in the *Itals* site.

The first approach to be taken into consideration is the so-called *formalistic approach*; this method started to be used since the 18<sup>th</sup> century, when Latin was no more considered as a *living-language* for



communication, but rather a *dead-language* used to fill up books with translations. Consequently, the focus on the language was no more on its meaning, but on its *form*, which means on its grammar and rules. This kind of method used to teach and learn a foreign language is called *grammar-translation method*, since the foreign language (FL) is presented as a whole of rules and words, which have to be learned and rehearsed passively by the learner. In this approach the student follows a deductive approach and has a great passivity because he or she does not use his or her mind to reason on the language, to understand its mechanisms, to discover its exceptions and as a consequence, the cognitive and affective dimensions of learners are not contemplated in the didactic action. On the other side “teachers are regarded as an authority, [and consequently] it is a teacher-centered model”(Liu, Shi, 2007) .In this approach the most penalized skills of the students who adopt this method are oral and communicative skills (speaking and listening), since learners are focused just on the form and not on the meaning, which is the communicative side of a language, whereas “reading and writing are the major focus” (Liu, Shi, 2007). Finally, this method offers also some “advantages”, like the easiness of teaching a language with a grammar-translation approach, since the role of the teacher is just to acknowledge the students on the rules of the language. Even today this method still be used in the school system, perhaps because it requires less effort to teachers in making students learn the FL.

The second approach which will be here discussed is the *direct method*, which developed at the turn of the 19<sup>th</sup> century; this approach was spread thanks to the so-called Berlitz schools in the USA and soon reached also Europe. According to this method the learning of a language was based on direct exposure to the language itself, simulating the acquisition of the mother language. The approach was strongly inductive, the learner was the protagonist of the discovery of the linguistic mechanisms and the teacher a native speaker. Contrary to the previous method, this approach has its focus on the meaning of a language, strengthening the oral aspects, such as the communication. As regards the form (the grammar) of the FL, it has to be discovered by the learner, when he or she comes into direct contact to new language structures.

The following method is called *structuralist method* where cognitive and psychological factors involved in acquisition such as pleasure of learning, performance anxiety, motivation or neurological aspects had a low consideration or were not considered at all. This view of the learner was shared by the *structuralist approaches*, which considered learners as passive subjects, since they had to fill up their heads with knowledge, following in this way a *deductive* process of learning. In the structuralist approach, based on the theories of Bloomfield and Skinner, the learner acquired a foreign language through long series of grammar exercises and the forced memorization of lexical items. This method allowed the creation of mental habits (behaviourism) and the automatization of the language, through

the mechanism of stimulus-response-rehearsal. Nevertheless, the psychological factors implied in acquisition were not taken into consideration and the learner was not the real protagonist of the didactic scene, which, on the contrary, was fully controlled by the teacher.

The *audio-oral method* developed in the 20<sup>th</sup> century and has “its psychological basis is behaviourism which interprets language learning in terms of stimulus and response, operant conditioning, and reinforcement with an emphasis on successful error-free learning” (Liu, Shi, 2007). This method was idealized by the USA Army through the Army Specialized Training Program (ASTP), whose final aim was language teaching (Chiapedi, 2009); the technologies present after the WW2 were at the basis of this approach, since the learners spent most of their times in audio-lingual laboratories, training oral and auditive skills. One of the disadvantages of this method is that its weaknesses were writing and reading abilities.

In the 60ies there was the development of another method which was labelled as *communicative method*. This approach is even nowadays at the base of foreign language teaching. Liu and Shi (2007) wrote that “this communicative teaching method aims to make communicative competence the goal of language teaching, and develops procedures for teaching the four skills that acknowledge the interdependence of language and communication. It encourages activities that involve real communication and carry out meaningful tasks”; the same authors stated that this method has its “focus on communicative proficiency rather than on mere mastering of structures”. This does not mean that the correctness of the language is neglected, but it is rather instrumental for the communicative competence. In fact, the real aim of this method is the communicative competence (as it has already been written) which is composed by: *linguistic competence* (which involves all the formal aspects connected to the language), *sociolinguistic competence* (which involves all the aspects of a language connected to the its regional or historical variations), *paralinguistic competence* (which involves all the elements of the prosody of a language, like accents or pausing) and *extralinguistic competence* (which involves non-verbal messages).

Communicative method can be divided into two branches: *situational method* and *functional notional approach*. The first method was developed in the 60ies and 70ies and the FL teaching is not just focused on the bare grammatical and lexical rules, but it is involved in a communicative situation, within realistic tasks. According to this approach, the student accesses the FL through real-life situations (e.g. asking for a coffee in a bar), which are replicated during the lessons; usually learners are provided with a real-life dialog, then with a grammatical/lexical section and finally with a part of linguistic production; this subdivision reminds us of the structure found in the majority of the FL school books. This approach presents also some downsides, as it is deductive method and learners are not the real protagonists of the lessons, on the contrary the focal part is reserved to the teacher.

The second approach connected to the communicative method is called functional notional approach and it was ideated in the 70ies by the Council of Europe who delineated the so-called *threshold levels*. This approach, in fact, leads the learner to the acquisition of linguistic *functions*, which correspond to linguistic levels (A1,A2,B1,B2,C1,C2) of a FL.

The last, but not the least, is the *humanistic-affective approach*; born in the USA in the 60ies, it is a method which puts in the centre of the didactic action the affective, cognitive and physical aspects of the learner, paying attention to avoid the creation of anxiety levels in class (see Krashen 2.2); consequently, according to this approach, the focus of the didactic action is in the *wholeness* of the learner, within his or her biological and psychological aspects.

## **1.2 The functioning of the brain. Some neurolinguistic and psychological aspects**

This chapter will focus on the core of acquisition, which is the brain of the learner, where in fact happen the mechanisms, which process the external inputs. In the following paragraphs the brain will be illustrated firstly as a *hardware*, which means from a neurolinguistic point of view, and secondly as a *software*, which means from a psycholinguistic approach. Considering the brain as a *hardware*, two fundamental concepts, *bimodality* and *directionality* will be analysed, strengthening on the importance they have during the didactic action; as regards the *software*, the chomskian theory of LAD will be described. Finally, it will be given space to explain the structure of the memory and the mechanisms, by which it is characterized.

### ***1.2.1 Bimodality and directionality***

In this section the mechanisms of *bimodality* and *directionality* will be analysed, since they are processes, which regulate the brain of the learner during linguistic acquisition. It is important to introduce these two neurolinguistic mechanisms, because they allow the reader to have a better knowledge on the functioning of the brain of the subject involved in the didactic action.

a) the neurological principle of lateralization suggests us that the human brain is divided into two hemispheres: the right hemisphere and the left hemisphere (figure 1). These two sections have different mansions, since the right hemisphere manages the global, analogical, simultaneous, emotional, instinctual aspects, whereas the left hemisphere is the place dedicated to analytic

perception, rationality, linguistic elaboration, and to all the logical aspects. The term *bimodality* refers to the fact that these two hemispheres work together during linguistic acquisition, even though they manage different mansions. The principle of *bimodality* was ignored by approaches such as the grammar-translation method or by the structuralists, where just the analytical and the logical aspects were considered during the didactic action, whereas the emotional and instinctual factors were not considered at all (Balboni, 2015);

b) after having seen that the two hemispheres cooperate during linguistic acquisition, now the principle of *directionality* suggests us that the two hemispheres follow a specific order of direction while they are working: *from the global to the analytical*, which means that acquisition involves first the right hemisphere, and then the left hemisphere. The principle of *directionality* demonstrates that some logical consequences have to be taken into a count during the didactic action: firstly, the teacher should focus on the emotional aspects of the learner, trying to stimulate motivation and curiosity towards the new topic. Secondly, the teacher should introduce the new topic giving just its context, without focusing on the details. Lastly, once the learner is familiar with the context of the new topic and he or she is motivated and curious towards the new didactic material, the teacher should guide the student in the elaboration of the text, allowing the discovery of the detail, for instance a grammatical rule. This leads us to the conclusion that the grammar (which is all the formal, rational and linguistic aspects of a language) should not be the starting point of the didactic action, but its destination (Balboni, 2015).

### ***1.2.2 The chomskian theory of LAD***

So far, this paper has considered the brain as a *hardware*, focusing on the concepts of *bimodality* and *directionality*. This chapter will approach the brain as a *software*, concentrating on the psychological processes, which take place during acquisition. Before learning about the functioning of the *software*, it is worth doing a brief but fundamental introduction to the topic; the acquisition of a language, both a *mother language* and a *second language*, is an *innate ability* that coexists in every human being. Cayea (2006) wrote that “humans [...] are born with the potential to learn any language they are consistently exposed to” highlighting in this way that the ability of language acquisition is strictly connected with the human DNA. His idea is based on Chomsky’s theories on the *innate ability* of language acquisition, which were formulated in the 1950s. In 1957 Chomsky showed that “children are born with the capacity to learn language and that this ability is specific to human beings. It is something that sets humans apart from other animals. This capacity, linked to a theorized portion of

the brain, has been identified as the “*language acquisition device (LAD)*” (Cayea, 2006). Chomsky in 1963 stated also that “after all, stupid people learn to talk, but even the brightest apes do not” to underline the concept that the capacity of producing language is an “innate characteristic of the human brain. Biologically speaking, this hypothesis of an inheritable capability to learn any language means that it must somehow be encoded in the DNA of our chromosomes” (Niels Jerne, Nobel Lecture, 1984). To give strength to the chomskian theory of the innate ability of language acquisition in human beings, it can also be stated that language acquisition does not happen only after birth, on the contrary “it is now known that acquiring language actually begins before birth and the process itself shapes and changes the very structure of the brain” (Cayea, 2006). Referring back to the key topic of this chapter, it can be stated that the *software* of the brain is the language acquisition device (LAD), theorized by Noam Chomsky. The LAD is a natural and innate mechanism, which allows the learning of a language. This process is composed of five phases, which follow a strict order:

- a) the first phase is the *observation of the communicative-linguistic input*, which happens, for instance, when a child reading a book on animals, observes that the plural forms of the nouns of the animals all present an -s;
- b) the second phase is the *creation of hypothesis* on the mechanisms of the language. This stage is evident in children when they “play” with the language and make experiments with it. In this stage they create their own grammar based on what they have previously observed and “children are not taught grammar, but construct it from the input provided to them” (Cayea, 2006). If they know that the plural rule for cat is cats, for dog is dogs and for cow is cows, consequently they apply the rule of adding an -s to a noun if they want to pluralize it. This rule may work in many cases, but in some others (for irregular forms) it may not. As a consequence, they will form the plural of sheep by saying or writing *sheeps*;
- c) in the following phase, which is the *testing of the hypothesis* it is fundamental the supporting role of the parents or of the teachers, who have to guide the little learner to the formulation of the word in its right form, or to cheer him or her if the “new word” is correct;
- d) the fourth stage is the *rehearsal* of the new linguistic item, by repeating it many times. This is evident in children who keep on repeating words, expressions, songs or rhymes; this fundamental stage of rehearsal allows them “to print” in their brain the new word or expression, which will be added to their mental lexicon ready to be put into a future sentence;
- e) the last stage of LAD is the *reflection on the language*, and on the mechanisms of it. In the pre-scholar period this phase is very rare, as children have not a good and developed *attention-span*, but it becomes gradually broader and broader as the little child grows up and goes to school.

As stated in Balboni (2015), these acquisitional and sequential stages of LAD, are valid not only for the acquisition of the mother language, but also for the acquisition of a second language. This is a key point statement, because the second language learner is not a *tabula rasa*, or a clean slate to fill, but an active subject with an innateness to language development, who is naturally provided with a Language Acquisition Device.

Referring to the words of Balboni (2018) the second language activities in school should be based and built on the concept of LAD, so as the acquisition of a foreign language could follow as much as possible the natural acquisitional process. In the first three phases of LAD (*observation of the communicative-linguistic input, creation of hypothesis and testing of the hypothesis*) the *gestaltic approach* should be used, and in this way the student can follow a natural order of acquisition based on the natural functioning of the brain, which implies a first phase of globality, then a phase of analysis of the input and then a final phase of synthesis.

### **1.3 The role of the memory in linguistic acquisition**

When learners are listening to the teacher and in the meanwhile they are taking notes, they are using their memory; when learners are preparing an exam, trying to store new information in their brain, they are using memory; finally, when students are writing an exam or performing in an oral test, they are retrieving information from their memory. Hence, memory is that cognitive process that allows a subject to encode, to store and to retrieve information and “in relation to language learning, memory is a very important feature of the human brain. Mnemonic processes are fundamental prerequisites for encoding, storing and retrieving new vocabulary and language structures, and in this process of language acquisition new semantic structures are created that are relevant both on a cultural and personal level” (Naldini, 2013).

#### ***1.3.1 The structure of the memory and the access and elaboration of the information***

The model developed by Atkinson and Schiffrin in 1968 (figure 3) represents the structure of the human memory as a series of boxes, where information is elaborated and finally (but not always) stabilized in the *long-term memory*. In the following lines we will see how the new information accesses the memory and how it is encoded.

The first memory to be involved in the process is called *sensory memory* and during this initial stage the input has access to the memory through the senses; Neil D. Flaming proposed, in the field of learning research, a model called VAK (visual, auditory and kinaesthetic), and stated that the majority of external information accesses through the visual, the auditory and the kinaesthetic channels (Naldini, 2013). This is an interesting point because it suggests us that during a didactic action, not only one sensory channel should be involved (for instance *reading*), on the contrary the teacher should promote a learning method based on multiple sensory channels (*reading* but also *listening*, or *combining sport with language learning*); in this way the involvement of many senses could lead to a higher possibility for the learner to grasp the external input. The downsides of the *sensory memory* are that it can store very small quantity of inputs, around the 25% of the information (Daloiso, 2009) and just for few milliseconds. In 1974 Baddeley and Hitch changed the model proposed by Atkinson and Shiffrin and integrated the so-called *working-memory* to the *short-term memory*. The researchers “used this term to describe the *short-term memory* system, which is involved in the temporary processing and storage of information. They suggested that *working memory* plays an important role in supporting a whole range of complex everyday cognitive activities including reasoning, language comprehension, long-term learning and mental arithmetic” (Gathercole, Baddeley, 2014). The *working memory*, being part of the *short-term memory*, has the disadvantage that it can process just seven elements for a maximum time of two seconds (Balboni, 2015). If we think of an ordinary talk with a friend, the words the subject utters access our memory through their sound (auditory channel), but if we do not pay so much attention to every listened word, the terms tend to fade after a while. The element which allows the displacement of the information from the *sensory memory* to the *short-term memory* is the so-called *selective attention*, (Naldini, 2013; Daloiso, 2009) otherwise the mnemonic trace would be forgotten.

This initial process is fundamental for learners, because it decides the destiny of the external input. The teacher has a significant role in creating the conditions, which could allow the development of levels of *attention* in learners; students usually pay attention to what they think is interesting, necessary or enjoyable and seldom they invest their level of attention on what they find boring or not relevant. As a consequence, the teacher should create a learning context, where the materials are as closer as possible to the interests and necessities of the students. Furthermore, during the lesson, the teacher should promote the use of as many sensorial channels as possible, enhancing in this way, the possibilities to encode the external inputs. The *short-term memory* has two fundamental characteristics: the stored information can be easily forgotten, as it can be seen in figure 3, and the new items are adapted upon the knowledge, that a subject already has (Balboni, 2015). This second limitation is relevant when we are dealing with language acquisition, because it can lead to the

mechanism of *linguistic interference*. As stated by Naldini (2013), *interference* happens when the linguistic structures of the mother tongue create interference with those of the target language; it is also possible that a foreign language, already known by the learner, influences the structures of the target language, and this happens above all when the two languages are very close (for instance, learners of English language as FL, tend to create interference, which means to mix up verbs or grammatical structures, with German as second FL).

If the information present in the *short-term memory* is periodically rehearsed and encoded by the learner, it accesses the *long-termed memory*; this last store represents the place where the encyclopaedia (which is our knowledge of the world), and the semantic memory (which is the memory which interprets and memorize a language) are collocated (Balboni, 2015). In fact, the *long-term memory* is subdivided into two main areas, which are *implicit memory* and *explicit memory* (Daloiso, 2009). Generally speaking the *implicit memory* is rigid and long-lasting, and part of the *implicit memory* are all those actions which are unconscious or automatized, like walking, riding a bicycle or driving a car, in other words all those actions which make part of our everyday routine, and to which we do not pay conscious attention, as we have done them million times; but exceptionally, in this kind of memory have the access also all those kind of inputs, which have been generated (just once) by highly strong emotions; in fact, a person will not easily forget about his or her first marriage, or about the shocking news of the Twin Towers terroristic attack. (Morgado Bernal, 2005). This last exception points out how much powerful can be emotions in the human memory system and how relevant can be their impact on the functioning of the brain. The second memory involved in the *long-term memory* is called *explicit-memory* and in this storage are contained all the inputs which have been consciously and rationally learned, through study, rehearsal and rielaboration (Daloiso, 2009). Even though new information is stored in the *long-term memory*, there is always the possibility that the mnemonic traces could be forgotten and lost. A method to stabilize them in the *long-term memory* is frequent rehearsals (as we have seen in the stage of fixation in LAD), which should not be an automatic and mechanical process (the repetition of the word “bread” ten times a day, without a general context); on the contrary the linguistic item should be rehearsed in a meaningful context (the use of the word “bread”, while a subject is enjoying a sandwich), allowing in this way the practical use of the bare word (Naldini, 2013) which leads to the consolidation of the input in the brain.

### ***1.3.2 The functioning of the memory***



Memory is not an abstract concept, on the contrary, the mnemonic trace physically changes the neurological structure of the human brain. According to Hebb (1961), the incoming inputs produce a neurological trace, which implies morphological and chemical modifications of the brain. He continued by saying that, the activity of rehearsal provokes a change of the structure of the synapsis, and this implies a modification of the brain structures, which leads to the stabilization of the item in the *long-term memory*. In addition, Naldini (2013) stated that it takes time to stabilize a mnemonic trace in the *long-term memory*, usually hours or even days. In this process of consolidation, the main actor is the learner, who has to spend time and mental energies to allow the stabilization of the information. Balboni (2014a) in fact, defines the act of acquisition or of memorization as a mechanism, which implies the active role of the learner, who develops autonomously a strategy to fulfil his or her project (of memorization). In other words, acquisition is a *personal project* led by the learner. The central role of the student in the process of memorization, is a fundamental point for our research paper, because it underlines the importance of considering the subject of acquisition as the real centre of the didactic action.

The persistence of the mnemonic trace in the memory seems to be ruled by some learning models, and Balboni (2015) has described three of them:

- a) the first model implies a deep connection between the time dedicated to focus on a linguistic item (*focus on form*) and the possibilities to stabilize it; for instance, if a class is asked to learn a dialog and to memorize as many new words as possible, the students who spend few minutes to focus on the task have fewer possibilities to memorize the new lexical items, as they probably allow the access of the new information in the store of the short-term memory; on the contrary, the pupils who spend more time focusing on the dialog, and in this way have a longer contact with the external information, have more possibilities to stabilize the trace, and finally remember the words;
- b) the lexical items have a meaning only if they are considered within a text and context. For instance, it is easier to memorize the words “chocolate and bread” if they are connected to a text dealing with food, and the same words are less likely to be acquired if they are presented in a list with random words. This is the reason why, asking students to memorize lists of random words, is counterproductive, whereas presenting the lexical items within a context (for instance in a class where the topic is food, the teacher introduces new words such as chocolate, bread, fish, meat...) is a better solution if the final aim is acquisition;
- c) the visual input together with the verbal input produce a higher level of memorization, than the single visual or verbal trace. This theory is confirmed by the model proposed by Barbara Baschiera (figure 4), where there is a representation of some abilities related to the didactic acquisition; as it

can be seen these abilities are arranged according to the impact they have on memorization. Figure 4 shows that the abilities which influence the most the level of memorization, are those which imply an active role of the student and a personal commitment in the personal learning project.

## **2. The psychological dimension in linguistic acquisition**

Since the eighties (as we have seen in chapter 1) the learner's psychological dimension has been gaining more and more importance in the field of learning. It has been started to be considered not only the neurolinguistic components, such as the structure and the functioning of the brain (see 1.2), but also the psychological aspects, which happen inside the learner during the didactic action. The emotional dimension, which is also called *affective intelligence* (Dolci, Celentin, 2000), puts once again the student in the centre of the learning experience, while the teacher has the role to coordinate and to direct lessons taking into consideration and respecting the different affective conditions of each student. Hence, to favour acquisition, not only the teacher should be aware of the neurolinguistic components, but also of the emotional aspects of the learners, which can occur during the didactic action. The neurological and the emotional aspects allow the consideration of the learner in his or her wholeness, nevertheless there is a considerable difference between the two components. On the one side, the neurological aspects can be considered as regular and commonly shared between the learning subjects; in fact, without considering some particular cases, the human brains work following the same neurological mechanisms and general principles, as for instance the concepts of *bimodality* and *directionality*, or the functioning of the memory.

On the other side, the psychological aspects are not shared between the learners, since not all the students feel the same emotion, of stress for instance, in a testing condition, or not everyone in a class feel relaxed while the teacher is talking during the lesson. The psychological dimension is peculiar and specific for every single student in a class environment. This chapter will consider the learner in his or her most deep *uniqueness*, underlining the importance of looking at the student as a single subject, taking into a count his or her neurological aspects, but also and above all the emotional aspects.

This chapter has a relevant importance, as the psychological factors have a determinant effect on the functioning of the brain, and consequently on the acquisition on a language.

### **2.1 Gardner and the theory of the multiple intelligences**

If we think about human intelligence, many of us will relate it to the brain, or better to the mind of a subject. But if we had to provide a definition of intelligence, which words would we use? Daloiso (2009) attempts to provide a general definition of the issue and he stated that: “Intelligence is an human skill, bound to experience and to the activation of cognitive and metacognitive processes triggered to enhance the faculty of learning and to increase the ability for the adaptation to the surrounding environment”. Provided this definition, if we had to describe the adjective *intelligent*, which definition would we use? Who is intelligent? Which are the characteristics of a clever learner? For years, the traditional school system has been claiming that intelligence is something genetically provided (intelligent parents will have intelligent children) and related to mathematical and linguistic skills (children who are good in mathematics or in linguistic subjects are more intelligent than their peers who are better in other disciplines like e.g. art) (Torresan, 2007); nevertheless Gardner uttered the following words “the monopoly of those who believe in a single general intelligence has come to an end” (Gardner, 1999) and consequently demolished this general belief and provided a model called Multiple Intelligence Theory; the theory was developed to “document the fact that human beings have very different kinds of intellectual strengths and these strengths are very important in how kids learn and how people represent things in their minds, and then how people use them in order to show what it is that they’ve understood” (Gardner, 1997 ). Hence, this theory strengthens the idea of uniqueness of the learner, since intelligence is not seen as something determined by just one or two skills, but it is a subjective peculiarity possessed by every human being. As regards school teaching and learning Gardner stated that “If we all had exactly the same kind of mind and there was only one kind of intelligence then we could teach everybody the same thing in the same way and assess them in the same way [...]. But once we realize that people have different kinds of minds, different kinds of strengths [...] then education which treats everybody in the same way is actually the most unfair education, because it picks out one kind of mind [...] and says, “if you think like that, great. If you don’t think like that there is no room in the train for you” (Gardner, 1997). In his model, Gardner identifies eight kinds of intelligences; these intelligences can occur in a learner in different combination and dominances (Balboni, 2015), which means that one can be good at logic processes but also in musical composition, and his or her peer can be good at learning or producing language. In other words, to answer the initial questions, every student is intelligent, and his or her intelligence manifests in multiple (and different for every single person) ways.

In the following lines the eight intelligences theorized by Gardner will be described:

a) *verbal intelligence*: It’s the ability to create with words, to play with them, to give form to the mental images that we have in our mind, to express emotions, feelings and to relate with other people. This ability is innate in writers, lawyers, orators (Balboni, 2015) and in other people who

do with words. As regards people who use this kind of intelligence, the most appreciated didactic techniques are debates and discussions in class, reading and translating literary texts (Balboni, 2015) but also the creation of articles or poems, where they concretize their mental images and ideas. From a neurological point of view the verbal intelligence takes place in the left hemisphere of the brain (Torresan, 2007);

- b) *logical intelligence*: this second intelligence refers to the ability of the elaboration of complex and analytical reasoning and tasks (like mathematical or logical). As regards FL acquisition, logical intelligence guides the subject throughout the grammatical and formal aspects of the language (Balboni, 2015), which means the so-called focus on form. Some curious facts about this kind of intelligence is that the pupil who uses a logical intelligence, tends not to tolerate imprecise things (and consequently is a perfectionist) and tends to be shy to start linguistic communication (Balboni, 2015). A second curiosity about logical intelligence users, is that they experience a rapid decline of this kind of intelligence at a certain point of their life; in fact, it seems that these subjects around their thirties/ forties have already experienced the maximum peak of their mental abilities (Torresan, 2007). Lastly logical-mathematical concepts are elaborated both by the left hemisphere and by the right hemisphere (Torresan, 2007);
- c) *spatial intelligence*: this intelligence is present in subjects who have a strong ability “to generate, retain, retrieve, and transform well-structured visual images” (Lohman 1993) and “it's the mental feat that architects and engineers perform when they design buildings. [...] It's what Michelangelo used when he visualized a future sculpture trapped inside a lump of stone” (Dewar, 2018). It is a long-lived intelligence and it takes place in the right hemisphere of the human brain (Torresan, 2007);
- d) *kinaesthetic intelligence* is the ability to control perfectly the movements of the body. It is present in dancers, performers or in people who play sport; let's think for instance to classical ballet dancers and their flawless movements in the space, or to Olympic athletes who seem to have the control of every muscles of their body. Furthermore, kinaesthetic intelligence is present also in people who have good manual skills, like for example craftsmen (e.g. the hairdresser, who skilfully uses a scissor to cut one's hair). This intelligence is based on the connection between nervous centres and muscles, eventually producing dynamic movements. In this case are involved both hemispheres of the brain: the left hemisphere manages the more imperceptible movements, while the right hemisphere controls the wider motions of the body (Gazzella);
- e) *musical intelligence*: it is present in those people who instinctively use music to learn; among all the intelligences it is the most precocious (Torresan, 2007) and it present in little children when they learn the first words in their L1, and usually they learn through short songs. Even if on the

one side Balboni (2015) states that there is a strong autonomy between music and language, on the other side it has been stated that “speech melodies are the natural intersection between music and language. [...] Speech melodies are directly connected to intonation” (Fonseca-Mora et al., 2011), and as a consequence “Music and rhythm have been defined as powerful aids to language learning, memory, and recall” (Fonseca-Mora et al., 2011). The musical intelligence is managed by the right hemisphere (Torresan, 2007) where neural activities, associated with listening to music, work deeper in the auditory cortex influencing the frontal, temporal, parietal and subcortical areas which are related to attention (Schellenberg et al., 2007), semantics and syntactic processing, memory and motor functions (Koelsch et al., 2004;), and, the limbic and paralimbic system, which is related to the processing of emotions (Koelsch et al., 2006). In other words, music intelligence is an intelligence which involves many abilities of our body;

- f) *interpersonal intelligence*: it is the ability to create relations based on the *empathy* to understand the other’s feelings, emotions and needs (Corallo, 2009); interpersonal intelligences are regulated also by the action of the so-called *mirror neurons*, which are basically placed in the cerebral region called *Broca area*, which together with *Wernicke area*, is situated in the left hemisphere of the brain and manages functions linked to language production (figure 2). As regards interpersonal intelligence, those neurons “allow human beings to be able to understand the intentions of their peers, which means to be able to put oneself in other’s place, to *read* one’s feelings, needs and thoughts, and these abilities are relevant in social interactions”; in this interpersonal process “*mirror neurons* simulate what we observe in other people, and this allow us to identify ourselves with the others”(Rizzolatti et al, 2001); when we are talking with a person who shows evident feelings or emotions, for instance if our interlocutor bursts into tears or bursts out laughing, what happens inside us is instinctive and at times, uncontrollable, since we tend to imitate him or her;
- g) *intrapersonal intelligence*: it is the ability to self-analysis, to know one’s strengths and weaknesses and consequently to be aware of one’s own limits (Balboni, 2015). It is worth stating that both inter- and intrapersonal intelligences are relevant for the self-realization of a person (Torresan, 2007);
- h) *naturalistic intelligence*: this last intelligence consists in the interest in nature, which means in plants, trees, animals, natural phenomena, natural life cycles; learners who have a predominance for this kind of intelligence, usually will be keen on natural sciences, focusing their interest in observing natural processes; if we think about the experiment which is usually carried out in primary school, which is growing a bean in a pot filled with cotton, it can be noticed that some children will be more fascinated by the experiment than other peers.

In addition, Gardner hypothesized the existence of another possible intelligence which is called *existential intelligence*, and which is based on a tendency to a deep reflection on philosophical issues (Corallo, 2009).

## 2.2 Krashen's Theory of SLAT

Dealing with the *humanistic-affective approach*, one of the main theories on the effect of emotions in language learning is called SLAT (*Second Language Acquisition Theory*) and it was formulated by Stephen D. Krashen. The Californian linguist supported the use of a *natural approach* in language acquisition, which is a method similar to the process of the acquisition of the mother language. According to Krashen the learner should be considered as the central protagonist of the didactic action and the teacher the director of acquisition. Being the main actor of linguistic acquisition, the student should follow an *inductive process*, which means that he or she should be an active *discoverer* of the language, always guided by the teacher, who should act by using a sort of maieutic approach. Krashen's theory of SLAT consists of five main hypotheses: *the acquisition-learning hypothesis*, *the monitor hypothesis*, *the comprehensible input hypothesis*, *the natural order hypothesis* and finally *the affective filter hypothesis*.

a) generally, when we talk about didactic situations, the words *learning* and *acquisition* are frequently used as synonyms. Nevertheless, according to Krashen's theory of SLAT, *acquisition and learning* are not synonyms, on the contrary they are two terms with totally different meanings. On the one side "language *learning* refers to the conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them" (Bahrani, 2011) and it occurs when the external inputs are elaborated by using rational and conscious processes, involving in this way just the left hemisphere of the brain. This causes a temporary permanence of the mnemonic trace in the *middle-term memory* (Dolci, Celentin, 2000) and the external inputs, which have been learned, sometimes could be hard to retrieve. *Learning* occurs when students are focused just on the *form* or on the *structure* of the language, without considering the pure *meaning* of the message. Consequently, *learning* does not lead to linguistic fluency or to an autonomous linguistic behaviour (Dolci, Celentin, 2000), but to a conscious and rational control of a language. On the other side *acquisition* is an unconscious process which leads to the creation of a permanent mnemonic trace in the brain; *acquisition* first involves the right hemisphere and then the left hemisphere, respecting in this way the natural order of acquisition (see 1.2.1). According to Krashen, a learner acquires the FL when unconscious mechanisms are triggered, following the

similar natural and instinctual processes, which allow the acquisition of the mother language. This is the reason why Krashen's theory of SLAT and Chomsky's theory of LAD are very close; in fact, both give importance to the natural and instinctual mechanisms of the brain in language acquisition.

Abukhattala (2012) argued on the didactic organisation of the language classes and he stated that "in most classrooms *learning* is emphasized more than *acquisition*. In traditional classrooms one of the first things teachers say "pay attention", and they have students analyse, and take notes on, the new structure item in the lesson. Later, students are given practice in providing correct answers either structurally or functionally, but always remaining conscious of what they want to say" and he concludes by saying: "however, in real life, when we interact with speakers of our own language, we rarely focus our attention on the form of the language the speaker use. We are concerned, rather, with what the speaker means or with the paralinguistic features of his speech (i.e., gestures, signs, etc.), which determine the quality of the message". This statement uttered by Abukhattala, points out how the traditional language teaching methods mostly focus on the *grammar* (focus on form) of a FL, which is on its structures and rules. During a traditional language class the students are introduced a grammatical rule for instance, and the teacher describes it in every detail; the learner is not the real protagonist of the didactic action, because he or she does not take part in the discovery of the rule itself, but just pays attention to the teacher's words. In most of the cases at the end of the lesson every word seems clear, but when the pupils arrive home, it may be hard for them to retrieve the information given few hours before in class, or they might not understand the logic behind their notes. These methods lead the students to learn but not to acquire a language, and even if they think to have stabilized an item in their memory, they end not to retrieve the information or to retrieve it partially.

On the other side, if learners are the real protagonists of the didactic action, and the teacher gives them the role to discover the language, using in this way not only one hemisphere, but both of them (firstly the right one and then the left one), and consequently allowing the natural order of acquisition of a language of LAD, these mechanisms, similar to the natural approach to a language, lead to a more possible *acquisition*;

- b) the second hypothesis theorized by Krashen in his SLAT, is represented by the function of the *monitor*. By using the words of Bahrani (2011) "the Monitor Hypothesis explains the relationship between *acquisition* and *learning*, and defines the influence of one [*learning*] on the other [*acquisition*]. This hypothesis holds that *formal learning* has only one function which is as a *monitor* for the learner's output". Thanks to this statement we can appreciate the value of *learning*, which on the one hand limits the natural acquisition of a FL, but on the other hand supports it as a

*monitor*, involving for instance, *self-correction* during linguistic production. The function of the *monitor* is evident, for instance, in FL students, when they are writing a text in the foreign language; while they are filling their blank paper with words, they tend not to pay attention to the correctness of the text, but rather on the meaning and logic of their production. Once they have finished the text, they take time to control (and in this way to *monitor*) what they have written, correcting the misspelled words, or grammar errors. In this second phase they use the left hemisphere of their brain, which is associated to the rational and conscious processes. All in all, it can be stated that *acquisition* and *learning* are terms with different meanings and functions, but they are both necessary for a correct linguistic acquisition and production;

- c) according to Krashen, learners acquire new linguistic elements (inputs) of a FL, when these new inputs are *comprehensible*, which means that the pupils focus on the *meaning* and not on the *form* (Dolci, Celentin, 2000). In this process of *comprehensible input hypothesis*, pupils should be guided by teachers, parents or language tutors (the people who are called LASS by Bruner) to *comprehend* the meaning of the language, favouring in this way, *acquisition*. Nevertheless, Krashen stated that “comprehensible input is necessary for language acquisition, but is not sufficient. The acquirer must be ‘open’ to the input, i.e. have a low *affective filter*. Also, the input needs to contain ‘*i+1*’, an aspect of language that the acquirer has not yet acquired but that he or she is ready to acquire” (Krashen, 1991). Hence, in the following points the *natural order of acquisition i+1* and the *affective filter* will be introduced and described;
- d) the hypothesis of natural order of acquisition states “that a language acquirer who is at *level i* must receive comprehensible input that is at *level i+1*, in this way following a *natural order of acquisition*. In other words, we acquire the language only when we understand language which contains structure that is 'a little beyond' our current level” (Bahrani, 2011), or which is predicable. That *i* can be seen as what a subject already knows, or is familiar with, while the *+1* can be labelled as the unknown; if the student knows *i*, he or she feels *safe* and ready to acquire a new input. The concept of *safety* is reported in the work of Johnson and Taylor (2006) in the following sentences: “When the learner feels safe, curiosity lives. When we are safe and the world around us is too new, we crave familiarity. In such situations, we are more easily overwhelmed, distressed, frustrated. Therefore, we want familiar, comforting, and safe things”. The authors anticipate the fact that if a situation is (or seems) *too new* to the learner, he or she is more likely to develop feelings of stress and anxiety towards the *too much beyond* novelty, and consequently it is highly possible a damaging in the process of acquisition (see the following point *e*). To allow acquisition, teachers should be aware of the level *i* of their students, in order to provide a new input (*+1*), which can be in this way, predictable and ready to be acquired. Johnson and Taylor (2006) stated that “a creative



and respectful educator can create *safety* by making the learning environment more familiar, structured, and predictable”, which means by respecting the natural order of acquisition  $i+1$ . Balboni (2015) strengthened this concept, by stating that the first necessary condition to allow acquisition, is that the new input has to be collocated immediately after the already acquired inputs ( $i$ ). Bruner defined the  $+1$ , which is the new input, as the *zone of proximal development*, in other words the distance between the already acquired competences of a subject, and the potential acquisition of new linguistic information. Finally, acquisition does not take place if learners are provided with new information which do not respect the natural order of acquisition ( $i+1$ ) or which are too much unfamiliar or unpredictable, and that follow a structure *too much beyond* their current linguistic level ( $i+2, i+3 \dots$ ). In other words, Krashen’s theory suggests that a FL, has to be learned step by step.

The new input ( $+1$ ) can access the long-term memory, and consequently can be considered acquired, only if the so-called *affective filter* is not activated in the learning subject. The following definition of *affective filter* provided by Bahrani (2011) can be considered exhaustive, as he states: “The Affective Filter Hypothesis embodies Krashen’s view that a number of affective factors play a facilitative [...] role in second language acquisition. These factors are: *motivation, self-confidence* and *anxiety*. Krashen claims that learners with *high motivation, self-confidence, a good self-image*, and *a low level of anxiety* are better equipped for success in second language acquisition. *Low motivation, low self-esteem*, and *debilitating anxiety* can combine to ‘raise’ the affective filter and form a ‘mental block’ that prevents comprehensible input from being used for acquisition” (Schütz, 2005). This statement, on the one side synthetizes and makes clear the Krashen’s hypothesis and on the other side underlines the real core point of this research paper, which aims at underlining the importance of emotions in language acquisition. As written by Bahrani, emotions play a determinant role in FL acquisition, since a positive mood can facilitate the access of the external input into the memory and concur to the stabilization of the mnemonic trace. This is the reason why creating a good atmosphere in class and avoiding states of anxiety and fear in learners is fundamental if acquisition is the final aim of the language lessons. Elements like “deadlines, exams and having to speak in class for example, will result in moderate activation of stress response systems, can also have an impact on key brain areas involved in learning and memory” (Johnson, Taylor, 2006) and this may reveal counterproductive both for the learners, who cannot store or retrieve information from their brain, and for the teachers, who cannot allow acquisition or a good process of information retrieval in their learners. So far, we have considered the *affective filter* as a barrier which, if activated, hinders acquisition allowing just *learning*; in the following lines we will deal with this term, by using a neurolinguistic point of view, in order to

understand more deeply what happens inside the brain and the body of a learner during the didactic action, as regards emotions and memory.

After having seen the five hypotheses which stand at the base of Krashen's theory of SLAT, this research paper will focus on the biological processes which regulate the last of the five points of SLAT, which is the *affective filter*.

### ***2.2.1 The role of amygdala and hippocampus in learning***

But what is the *affective filter* from a scientific point of view? Neuroscience helps us to understand this concept, by providing us an overlook on the chemical processes which connect emotions to human behaviour, or in our specific case, learners' performance during the didactic action.

Before describing the neurolinguistic functioning which stands behind the so-called *affective filter*, it is worth referring to a literary work, written by Marcel Proust, where the connection between emotions and memory is identified. The French writer Marcel Proust (1871–1922) wrote his novel *À la recherche du temps perdu* (translated in English as *In Search of Lost Time* or *Remembrance of Things Past*), which was published between 1913 and 1927. In his seven-volumes work, one of the main themes is memory and this key-topic is contained in one of the most popular episodes of the book, which is known for its *les madeleines*. In this episode, which will be provided in the following lines, the author refers to the *involuntary* (or unconscious) *memory* triggered by the senses, in this specific case taste and smell.

The madeleine episode reads:

‘[...] One day in winter, as I came home, my mother, seeing that I was cold, offered me some tea, a thing I did not ordinarily take. I declined at first, and then, for no particular reason, changed my mind. She sent out for one of those short, plump little cakes called petites madeleines, which look as though they had been moulded in the fluted scallop of a pilgrim's shell. And soon, mechanically, weary after a dull day with the prospect of a depressing morrow, I raised to my lips a spoonful of the tea in which I had soaked a morsel of the cake. No sooner had the warm liquid, and the crumbs with it, touched my palate, a shudder ran through my whole body, and I stopped, intent upon the extraordinary changes that were taking place. An exquisite pleasure had invaded my senses, but individual, detached, with no suggestion of its origin. And at once the vicissitudes of life had become indifferent to me, its disasters innocuous, its brevity illusory, this new sensation having had on me the effect which love has of filling me with a precious essence; or

rather this essence was not in me, it was myself. I had ceased now to feel mediocre, accidental, mortal [...]' (Scott Moncrieff, Hudson, 2017).

It is evident that the most important elements which are implied in this passage are: *senses*, *memory* and *emotions*. In this episode, Proust wrote how 'the sensorial input provoked by the madeleine cake's odor, flavor and texture immediately transported him into a vivid and rich past childhood episode' (Bartolomei et al., 2017). Hence, the biscuits and the tea can be seen as the external inputs or stimulus, which through the human senses (taste and smell) access the *involuntary memory* (Peverelli, 2018) evoking past emotions and consequently cause an unconscious behavioural reaction, which this time can be seen as the output of the process. *Involuntary memory* is described by Epstein (2004) as 'the very rare vivid memory that can only be triggered by a sensory cue' and which cannot be recall by will; Epstein (2004) uses the term *vivid* to describe the nature of the emotional memory activated by the senses, to strengthen the idea of how much powerful (and real) can be a past emotion when recalled by a present sensation. The French author refers to the very first sensation as an *exquisite pleasure* which invaded his senses and describes the mechanism of evocation of distant memories as something which led him for an instant to *immortality* (I had ceased [...] to feel [...] mortal); actually, the fact that he lived his past in his present led him to an extemporaneous condition, where his body was no more bound to time. In the episode of *les madeleines* it is evident the involvement of another important element in our research, which is the *associative memory*; *associative memory* is part of the *long-term memory* and it is defined as "the ability to learn and remember the relationship between unrelated items" (Suzuki, 2005). In fact, when the character of the Proustian novel evokes the past memories thanks to the taste of the biscuits, his *associative memory* is involved, as it has unconsciously associated that particular taste to a specific emotion, of pleasure in this case. All in all, Proust's episode of *les madeleines* is useful to this research paper firstly to introduce an explanation of the neurological processes which happen in our brain during the unconscious evocation of the past memories and secondly to understand the impact that present and past emotions can have on the learner's performances. After having given space to an introductory part which has showed how powerful are elements like past memories and emotions on the present behaviours of a subject, it is now the moment to understand how these mnemonic and emotional processes happen. The two organs involved in this process are the *amygdala* and the *hippocampus*. The first organ, the amygdala, "is the integrative center for emotions, emotional behavior, and motivation" (Wright) and also the centre of affectional memory, a sort of archive, in which emotions are stored (Naldini, 2013), together with the past events which have triggered them.

The second organ is the *hippocampus*, which has an active role in igniting mnemonic processes during learning (Cardona, 2001) and it is the site of *long-term memory* (Naldini, 2013); it "is hypothesized

to use information about the current perceptual situation and the current motor program to make a prediction about what the world is expected to be like approximately 100 ms in the future” (Epstein, 2004) and these last data give us the idea of how much quickly works our brain. The *amygdala* and the *hippocampus* cooperate together, as the *amygdala* processes the emotions triggered by the external input accessed through the *sensory memory* (in Proust the taste of the biscuits and the tea) and the *hippocampus* retrieves the past memories associated with a given emotion (the memory of the character’s childhood in Proust). The cooperation between the *amygdala* and the *hippocampus* not only is involved in the retrieval of past information but also in the creation of mnemonic traces in our brain. Going back to the central character of this research, the learner in the didactic acquisition, in a normal situation where there is no stress involved, and the atmosphere in class is enjoyable and relaxed, the involvement of positive emotions favour the selective process of *attention*, of encoding of the input and finally of memory retrieval (Naldini, 2013); from a chemical point of view, the body converts a substance called *adrenaline* into *noradrenaline*, which is a neurotransmitter which facilitates memorization (Balboni, 2015) and consequently concurs for a positive memory functioning (both for mnemonic trace retrieval and for mnemonic trace storage); in this first case, the student does not activate the *affective filter* and as a consequence, *acquisition* (or deep information retrieval) can take place. The reader should bear in mind that this last situation is possible only if the LAD conditions are present in the didactic action. This represents the ideal situation which allows an easy retrieval of information from the *long-term memory* (in the case of an oral test for instance), or the acquisition of new information. On the contrary, if the learning situation triggers negative emotions (such as fear, anxiety or stress) consequently the input is recognized by the *amygdala* as a possible threat for the subject (because that input is connected to a negative past experience), the body releases a substance, which hinders the production of *noradrenaline* and in this way memorization or information retrieval is blocked. This last case is relevant because it represents the activation of the *affective filter*, which is the conditioning of bad emotions on the learner performance; in fact, if during the didactic action there is stress or anxiety (because there is not a good atmosphere in class or because the subject feels rejected by the teacher), which are encoded by the brain as a possible threat, for one’s self-esteem or social image, the learner’s brain activates the so-called *affective filter* as a instinctual mechanism of *self-defence*. Referring back to the *associative memory*, if a subject during an oral test experiences stress or anxiety, the same subject will tend to replicate, in case a similar occasion occurs to him, the same negative feelings, which he had experienced in the past, blocking in this way the access to long-term memory. Consequently, his or her body will start to release stress hormones, which will inhibit the correct functioning of the memory system. This last case is evident when a well-prepared learner is called out for an oral performance, but immediately freezes and utters no

word. In this case the power of emotions is crystal clear, similarly to the power of evocation that we have previously seen in Proust. If the student, even if he knows every word of what he has to expose, is subjected to a strong situation of stress, his or her affective filter is immediately activated and he or she is not capable to retrieve that well studied information stored in the *long-term memory*. Stressful situations could happen occasionally in class, but it is relevant to bear in mind that the creation of them should be avoided for the sake of the learner's acquisition or memory retrieval. This is relevant because if learners combine testing situation with extreme stress levels or fear, they could pair the two items (test and anxiety) and create the final association. In the light of this Johnson and Taylor (2006), refer that:” The adult learner with a history of trauma or with a background of educational failure or humiliation is sensitized and moves along the arousal continuum [creation of anxiety] faster in the face of significantly less challenge of perceived threat”. This implicit mechanism could act like the Pavlov experiment, where “a neutral stimulus—a bell—was sounded and after a brief interval food powder—the unconditioned stimulus—was placed in the dog's mouth. After a few such pairings the dog would salivate to the sound of the bell. [...]. In fear conditioning [which is stressful situations in class], an organism hears a noise or sees a visual stimulus. A few seconds later it receives a mild shock. The reactions involve freezing, elevated blood pressure and heart rate” (Wright), which are frequent reactions in overstressed learners, above all while they are being tested. The *affective filter* is raised not only in situation of evident threat, and in the case of a learner threat means testing situations or speaking the FL in front of the class, but also when a learning situation is considered tough or stressful (Naldini, 2013) like for instance too much demanding didactic activities. These situations may lead to the development of feelings of *demotivation* and/ or conditions of *stress*, which are not positive for learners, and teachers.

But which are the situations which could trigger the *affective filter*? Balboni (2018) identifies four main possible conditions: presence of *anxiety* in class, which can be caused by multiple environmental factors; Didactic activities which can undermine the *self-image* of the learner; Conditions which could damage the *self-esteem* of the learner; Situations which may produce the sensation in the learner of *not being able to cope with* a given activity.

All these conditions have a similarity, which is their connection and/or interference with the three main factors that determine the strengths of one's affective filter: *motivation*, *self-confidence* and *anxiety*. Evidently, the first two concur in maintaining the filter low, whereas the last aspect favours the raising of it. In the light of this, the next paragraph will seek to explore the aspects of one of the worst possible present element in the didactic action, which is *anxiety*.

## 2.3 The impact of anxiety in acquisition

In the previous paragraphs we have seen how the psychological factors which trigger the *affective filter*, can damage the processes involved in the memory (information storage and retrieval); so far we have focused on the biological and cognitive mechanisms, which take part in the raising of the *affective filter*, whereas in the following paragraphs we will give space to the analysis of the psychological factors, which activate the *affective filter*, which are negative emotions. We will begin with one of the most present emotions in learning or school performing, which is *anxiety*. After having read various pieces of literature on *anxiety* and having experienced school life both from a foreign language student's and from a foreign language teacher's point of view, I dare to state that anxiety is a feeling which can be found in every human being and in many life situations, but which is impossible to separate from the concept of school life. In fact, school implies an active role of the student, who is often called to perform (when he or she has to write an exam, or to perform in an oral test) in front of the teacher or/and the classmates. In the specific case of language learning, anxiety can manifest when pupils are asked to produce foreign language, or for instance, to understand a dialogue. While for the other subjects like maths or geography, learners can use their mother language to perform, in the case of FL classes, things are different, since students have to speak or write in the FL. Consequently, for most of them, FL classes are non-comfort zones, and feelings of tensions, nervousness or even palpitations can manifest. As this research seeks to show, "every human being is a different universe" (Pavlova, 2009), and consequently also his or her feelings are strictly connected to his or her personality; hence, anxiety is an emotional condition common to everyone, but which manifests in various and personal ways, times and intensities.

### 2.3.1 What is anxiety

If we had to define anxiety, we could state that it is "a subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (Horwitz et al., 1986) but also, it is "an uncomfortable emotional state in which one perceives danger, feels powerless and experiences tension in preparation for an expected danger" (Pavlova, 2009); it is the factor of the *expected danger* that activates an implicit and instinctual mechanism of *self-defence*, which favours the raising of the *affective filter*. This feeling not only triggers specific cognitive mechanisms (see 2.2.1), but also it manifests through evident physical manifestations, such as difficulty in concentrating, tendency to forget things and information, sweating, palpitations, skin issues (blushing

or growing pale), difficulty in breathing, migraine or stomach-ache (Horwitz et al., 1986; Tessaro, 2015).

Some anxious students could experience also a distortion of sounds, inability to reproduce the sounds and intonation of the FL, “freezing up” when called out to perform, forgetting words or refusing to speak; usually students “report that they know a certain grammar point but forget it during a test or an oral exercise” (Young, 1991). Episodes like this could happen because the too much high level of anxiety triggers the affective filter and consequently, the access to the information stored in the long-term memory is not possible. These aftereffects of the alarm system, can be justified as instinctual mechanisms activated to face a possible danger or threat (source of anxiety); “For example, the increased heart pumping intended to supply additional oxygen to the muscles is felt as distressing palpitations. The increased activity of the lungs and widening of airways produces a feeling of breathlessness. The sharpening of vision has an aftermath in visual disturbances such as blurring. The diversion of resources away from digestion produces “butterflies” in the stomach. The redirection of body fluids such as saliva into the bloodstream produces a dry mouth sensation and the activation of the body’s cooling system produces sweaty palms and forehead. These alarm reactions would enhance our survival if we were confronted with a tiger in a jungle” (Wilson, Roland, 2002) but reveal not only useless, but also incapacitating when we have to perform in front of the class or the teacher. Traditionally, anxiety is grouped into three main categories: *trait anxiety*, *situational anxiety*, and *state anxiety*.

- a) *trait anxiety* is composed of “any personality characteristics, constitutional or learned, that mediate susceptibility to stress” (Wilson, Roland, 2002) in other words the subjects with a trait anxiety type, have a certain tendency to be anxious in their DNA;
- b) *situational anxiety* is “caused by environmental pressures such as public performance, audition or competition” (Wilson, Roland, 2002), that is a kind of anxiety which manifests in specific situations or occasions;
- c) lastly *state anxiety* “can be defined as a transitory emotional state consisting of feelings of apprehension, nervousness, and physiological sequelae such as an increased heart rate or respiration” (Spielberger, 1979).

It is worth saying that sometimes anxiety is considered together with another emotion, which is *fear*, but there is a substantial difference between the two concepts. Fink (2016) using Barlow’s concepts, states that while on the one side “anxiety is a future-oriented mood state associated with preparation for possible, upcoming negative events”, on the other side fear is “an alarm response to present or imminent danger (real or perceived)”. Students are anxious when they are waiting for something negative which will happen in an immediate future (e.g. a difficult test, an oral performance in front

of the class, especially for those who are shy); on the other hand, *fear* concerns the present of the subject and consequently human beings are afraid of something when that something is in front of them (e.g. subjects who walk in the mountains and suddenly find in front of themselves a bear, that bear represents fear); Tessaro (2015) adds that anxiety is connected to an internal and non-specific cause or conflict, while fear depends on an external cause which is specific (the bear in the previous example).

### 2.3.2 Sources of language anxiety in FL class

We have stated that anxiety is one of the emotions that triggers the activation of the affective filter, but which are the sources of anxiety related to the specific case of FL learning? Young (1991) identifies six potential causes of anxiety in the specific case of language learning environment which are: *personal and interpersonal anxieties, learner beliefs about language learning, instructor beliefs about language teaching, instructor-learner interactions, classroom procedures and language testing*.

a) the first source of anxiety comes from *personal and interpersonal* issues, which are the situations which involve, on the one side the personal area of the learner and on the other side, his or her relations with the peers and the teacher. In this first point the feelings of *self-esteem* and *competitiveness* with other people play a relevant role in the possible instauration of anxiety states; Bailey (in Young, 1991) states that “competitiveness can lead to anxiety, when language learners compare themselves to others or to an idealized self-image”. Firstly, the conditions of competitiveness with the peers, can be originated by a non-cooperative atmosphere during the FL lessons, and this could lead the learner to focus his or her attention on the competition (and consequently to develop feelings of tension and anxiety), rather than on the linguistic aim; on the contrary, if there is an atmosphere of cooperation and collaboration in class, the subject will concentrate more on the linguistic aim and less on the peers; the role of the teacher is to guarantee the instauration and maintenance of a good and relaxed atmosphere in class, promoting the instauration of the so called *club membership*, which is a strong feeling of membership of a group (in this case class), which is fundamental for acquisition; in fact, Krashen stated that the affective filter is down when a subject considers him- or herself a member of the group (Krashen in Young, 1991).

Secondly the concept of self-image involves a competition between the *actual self* and the *ideal self* (or *future self*); Dörnyei described the actual self as “the summary of the individual’s self-



knowledge related to how the person views him- or herself at present” (Dörnyei, 2009), which means how a person considers him- or herself and the knowledge he or she believes to possess at present. In the second case, the ideal-self, is the “representation of the attributes that one would ideally like to possess” (Dörnyei,2009) in the future, or the aims one wishes to reach. Hence, the future-self is made up by “hopes, wishes and fantasies” (Dörnyei,2009), because “the dream or image of a desired future is the core content of the ideal self” (Dörnyei,2009). Nevertheless, this dream or image of a desired future (which in our case can be e.g. reaching a linguistic aim) cannot be always reached, and consequently the strive between actual-self and future-self leads to a failure, which can be seen by the subject as a personal defeat or unsuccess. This phenomenon occurs when the future aim is not easily reachable or achievable by the subject. This statement brings us back to the concept of  $i+1$  (see 2.2), proposed by Krashen in his SLAT theory. If the new input, which would allow us to reach the desired aim is reachable or predictable (+1), the possibilities of success are high, and consequently, the subject’s self-esteem increases, and the competition between the two selves (actual-self and future-self) is brought to a state of homeostasis or balance. On the contrary, if the new input is not easily achievable (+1, +2, ...) the possible consequence is an unsuccess. This last one will affect negatively the self-esteem, while the competition between the two selves will generate an imbalance. All in all, we can conclude by saying that respecting the natural order of acquisition ( $i+1$ ) and protecting the self-esteem and the future-self image of the learner, can contribute to decreasing the possibility of states of stress or anxiety (specifically to communicative apprehension (see 2.3.4), social anxiety and anxiety specific to language learning) in class, and consequently, to favouring the process of linguistic acquisition;

- b) the second source of anxiety theorized by Young, involves *learner beliefs about language learning*, and involves the relation between learner and FL learning. Anxiety is possible when students (above all in the first levels of FL) think that their linguistic level is extremely poor in comparison to the actual FL; let’s think to the beginners and their first oral productions or short essays, which (naturally) are full of errors. Their first feeling is of frustration and they become anxious of not being able to reach the wished aim (future self). During the first steps into the FL, teachers should guarantee the protection of the students’ self-esteem (and future motivation), without stressing on the existence of linguistic errors, but rather paying attention on the creation of positive emotions of his or her learners. If learners are brought to believe that a language is too much difficult or future goals are too beyond their capabilities, they consequently lose their feelings of self-esteem, self-efficacy (which is the personal belief in the capabilities to perform

specific tasks) and motivation, and create a(n imagined) condition of impossibility of acquisition of the FL;

- c) *instructor beliefs about language teaching*. This third point is strictly related to the previous one, as “instructors who believe [that] their role is to correct students constantly [...], the teacher should be doing most of the talking and teaching, and [...] their role is more like a drill sergeant’s than a facilitator’s may be contributing to learner language anxiety” (Young, 1991). Teachers who trigger feelings of fear and anxiety (and I believe that everyone of us had at least one of these kind of teachers in his or her school life ) consequently block students in basically every linguistic skill, as learner develop fear in speaking (as they fear the teacher, who is ready to correct them in front of the others, damaging the self-esteem), fear in writing productions (as they fear to get a bad note), fear in listening to the same source of anxiety. How many people have hated a subject because they hated or couldn’t stand the teacher of that subject? Personally, I have, and I think that the damages caused by the triggered anxiety and fear (hindering acquisition), have been huge and still have consequences in my everyday life. Teachers should ask for respect from their students, but at the same time they should not be a source of anxiety, but rather they should aim at an important quality, which is *lovingness*, which should be intended not only as love, but as *armed love*, combining love and respect (Freire, 2018);
- d) *instructor-learner interactions*. In the previous point we have seen that anxiety can be originated also by the teachers and their tendency to constantly correcting the mistakes of their students during the FL class; however, this point seeks to throw light on the issue. In fact, the anxiety source “for the students is not necessary error correction, but the *manner* of error correction” (Young, 1991), which could be encoded as a threat (for the self-esteem) by the learner’s brain and consequently inhibits acquisition or blocking the long-term memory retrieval. For that reason, instructors should adopt “an attitude that mistakes are part of the language learning process and that mistakes will be made by everyone” (Young, 1991). James (2013) talking about errors stated that “error is likewise unique to humans, who are not only *sapiens* and *loquens*, but also *homo errans*. Not only is to err human, but there is none other than human error: animals and artifacts do not commit errors. And if to err and to speak are each uniquely human, then to err at speaking, or to commit language errors, must mark the very pinnacle of human uniqueness”.
- According to a research, “students feel more at ease [and have a low affective filter], when the instructor’s manner of correction [is] not harsh and when the instructor [does] not overreact to mistakes” (Young, 1991). Always Young (1991) proposes in his research a method of error correction which does not trigger anxiety in student; this technique consists on providing the correct input, the correct form, by modelling student’s responses, that is simply repeating the

correct version of the sentence uttered by the student. Referring to Amara (2015) during error correction in FL classes, “students’ affective factors should be taken into consideration and the correction should not be face-threatening”; if we have to compare the two following situations the difference in the manner used by the instructor is evident:

“1. Student: “*What means this word?*”

Teacher: “*No, listen, what does this word mean?*”

2. Student: “*What means this word?*”

Teacher: “*What does it mean? Well, it is difficult to explain, but it means...*”

It is obvious that teacher’s remodelling in 2 is more natural and sensible than the direct interruption in 1” (Amara, 2015). The sentences are similar, they differ for few words, but those few words can make the difference for the student and decide the destiny of his or her acquisition;

- e) *classroom procedures* are linked to what happens in class during the didactic action, the tasks that students have to carry out during the lesson or the manner they have to organize their work. Young (1991) suggests a large use of group work (small group, pair work), as it could alleviate anxiety or stress. The choice of using group work to play class games (e.g. activities in Kahoot, which can be used to revise a linguistic topic), to carry out researches or to do exercises, is a good strategy to avoid anxiety states. In fact, group work could be a good tool to enhance the social relations between the peers (hindering competitiveness, see point a), to preserve a state of tranquillity in the learner, who feels protected by the group, safeguarding his or her self-esteem and image (if one subject fails, the mistake is attributed to the group and not to the single); in addition “group work not only addresses the affective concerns of the students, it also increases the amount of student talk and comprehensible input” (Young, 1991). In fact, two or more brains think better than just one, and the students exchange their knowledge (acquired items) to concur to the same aim, which is finish the activity in a successful way. When the students talk among them, using or reasoning on the FL, it is always positive for acquisition, or a better understanding of a certain issue. In fact, if we look at figure 4, we can see that people usually remember the 70 % of what they discuss with others and the 95% of what they explain to other peers. This data is extremely important, as students thanks to group work not only can improve their knowledge (rehearsal of what they have acquired) but they can transform a non-comprehensible input (e.g. because the teacher has explained it in with too much difficult words) into a comprehensible input (e.g. because a learner explains the same input by using different words, which make it clearer) allowing in this way the possibility of acquisition;
- f) the last point but absolutely not the least in importance when we are dealing with school anxiety is *language testing*. Usually at school testing (and specifically language testing) means stress,

anxiety and fear; very few people face a written or oral performance indifferently or in a relaxed way. But how can teachers avoid anxiety during tests? Young (1991) suggests that “a pre-test exposure may help reduce student anxiety” as it “gives learners information about *performance expectations*”. To understand this statement, imagine that a subject has to write a test (without pre-test exposure), what is the first thing he or she will do once he or she has the test sheet on the desk? The student will flip the pages of the paper, to explore the questions, the space given and the asked topics. In most of the cases, in fact, students see for the first time their test papers during the test itself. On the contrary if there is a pre-test exposure, things may change; In fact, thanks to pre-testing, learners do know important aspects of the future test, such as of how many pages it consists, the nature of the questions (open questions, multiple choice...), the possible asked topics or the time given to complete the task. These elements make the test familiar to the student, and not an obscure mystery, which can cause anxiety. When testing situations are the cause of anxiety, the performance will automatically be poor, as the affective filter will be raised by emotional factors. If students are familiar with the tests (because they have written pre-tests in class) they will have less anxiety and higher possibilities of success. This process will trigger a chain reaction as unsuccess will lead to depression and frustration, which will lead to anxiety and new unsuccess; success will lead to a self-esteem boost and consequently to higher self-esteem and motivation, which will set the bases for new possible successes.

Young (1991) has put light on six potential sources of FL anxiety, probably the most frequent in a normal school situation, but we should bear in mind that there are plenty of possible elements which could trigger states of anxiety in students. For instance, we can put under the magnifying glass the devastating effects caused by the outbreak of Sars-Cov-2 on learning experience, discussed in an article by Araùjo (2020). In this contribution, the effects of Coronavirus, as (in this specific case) the closure of schools and the integration of remote schooling, have concurred in the creation of states of anxiety and uncertainty in digital learners. Even if schools keep on going, the single students who were part of a class group, are now limited to their singleness by the current situation. This circumstance, has increased the state of “*loneliness* of students, and this last effect seems to have a negative impact on education and therefore on psychological pain and suffering” (Araùjo, 2020). A student deprived of his or her school routine, is likely to experience also states of disorientation, uncertainty, worry and fear (Piazza, Acquilanti, 2020) and this could lead finally to anxiety. This example aims at making the reader aware that the causes of stress and anxiety are many and always possible.

### 2.3.3 *The correlation between stress and anxiety*

So far, we have focused on the possible causes which could lead to the instauration of anxiety states in language learners; with the following section, this research wants to investigate the affective cause in which anxiety is rooted, which is *stress*. Stress is defined as the “Health Epidemic of the 21<sup>st</sup> Century” by the World Health Organization (Fink, 2016) it lead to feelings such as anxiety and fear (Fink, 2016); if we stop and think about stress in our times, we can realize that it is a condition which affects the lives of millions of people on earth, who often suffer from stress intended as a real disease. Stress is defined as a “nonspecific response of the body to any demand [...] and a condition in which an individual is aroused and made anxious by an uncontrollable aversive challenge” (Fink, 2016) or threat, which can be connected to the everyday life, job, family, school but also by small and apparently irrelevant things. Johnson and Taylor (2006) wrote that stress is associated with “any challenge or condition that forces our regulating physiological ad neurophysiological systems to move outside their normal dynamic activity. In essence, stress occurs when homeostasis is disrupted”, in other words it manifests when our internal balance is broken by uncontrollable elements. Another characteristic of the definition of stress is that it “occurs when environmental demands exceed one’s perception of the ability to cope” (Fink, 2016), which bring us back to the concept of  $i+1$  proposed by Krashen (see 2.2), where the new input would not correspond to the  $+1$ , but to the  $+2,+3,+4$ . In the light of this statement, stress happen in class when students are asked to do more than they can effectively can do, causing a chain reaction which implies (in order) stress, anxiety and non-acquisition. A relevant specificity of stress is that it is uncontrollable, which means that a subject cannot control his or her life, and he or she is manipulated by this obscure condition. “In this process stressors are perceived and processed by the brain which triggers the release of glucocorticoids and catecholamines” (Fink, 2016); these are substances connected to the production of adrenaline and noradrenaline, which, as we have seen (see 2.2.1) are related to the activation of the affective filter. This biological response to stress leads to a situation called by Cannon (in Fink, 2016) *fight or flight*, which means that the subject can follow two ways of facing stress: he or she can challenge it, trying to control the emotions, or becoming a victim of stress, succumbing to the condition of affective uncontrollability (see Affective Filter). Johnson and Taylor (2006) referring to the *fight or flight* phenomenon that “in the initial stages of this reaction, there is a response called alarm reaction. As the individual begins to feel threatened [by stressors, e.g. being called out in class, being tested], the initial stages of complex, total-body response begin. The brain orchestrates, directs, and controls this response [instinctively]. If the individual feels more threatened [if stress keeps growing in intensity], the brain and body shift further along an arousal continuum in an attempt to ensure appropriate mental

and physical responses to the challenges of the threat. The further along he or she [the student] is on this continuum, the less capable he or she will be of learning or retrieving cognitive content. In essence, fear [or in this case also anxiety] destroys the capacity to learn” (Johnson, Taylor, 2006). This last key statement seems to confirm what we have seek to show so far, which is the connection between the learning subject capability of acquisition and he impact of his or her emotions. In fact, we have seen that the theory of the affective filter proposed by Krashen proves that emotions of stress, fear or anxiety block the process of acquisition. In addition, this final key statement proposed by Johnson and Taylor, allow us an important occasion to deepen our research. If we look at the *Yerkes Dodson Law Model* (figure 5), we can see the connection between stress (x) and performance (y), in our case school performance or foreign language production performance. The inverted U (rainbow shaped) curve represents the so-called *continuum*, which is the intensity of stress factor. From the model it can be noted that “very low levels of arousal [stress] are insufficiently motivating and give rise to lackluster performances, while excessive arousal interferes with performance because concentration is disrupted, memory blocks occur [see 2.2], and there is a loss of steadiness in hands and voice” (Wilson, Roland, 2002). However, anxiety can lead also to success, even if this could appear to the reader as an oxymoron. In fact, if we give a closer look to the model, we can see how a moderate (and I would add controlled) anxiety can lead to highly positive performances. This leads us to a conclusion, which is that stress and anxiety do exist in our lives and are non-separable elements of school life, but if they are controlled, not too much stimulated or prolonged, they can be positive elements in student’s performances.

#### ***2.3.4 Anxiety and performance in FL situations***

In the previous paragraphs we have seen the main sources of anxiety, especially in the FL class environment, and the possible physical effects that they could trigger. In the following section, this research will focus on one of the most frequent FL related anxiety, which is labelled as *performance anxiety*. Defining this concept, we can state that “*performance anxiety*, sometimes called *stage fright*, is an exaggerated, often incapacitating, fear of performing in public. As in any other kind of phobia, the symptoms are those produced by the activation of the body’s emergency system, the sympathetic branch of the autonomic nervous system, including all the well-known effects of increases of adrenaline in the bloodstream” (Wilson, Roland, 2002) (see 2.3.1). Performance anxiety occurs when the subject who e.g. has to speak in public, is immobilized by his or her own uncontrollable emotions, which take the control over his or her body. If we think about FL students, stage fright is frequent,

especially when they have to speak in front of the class by using the FL (usually they have blanks and do not remember what they have studied, or tremble, or blush and their focus is shifted from their knowledge to the way they are performing), or when they have to write a test (usually students worry about the time given, or are under pressure because of the teacher walking among the desks). If we look at figure 5, we realize the impact of anxiety on performance; too much anxiety means no long-term memory access (see 2.3.3). Horwitz (1986) divided language learning anxiety into three main components: *communication apprehension*, *test anxiety* and *fear of negative evaluation*.

a) as stated by Rafek (2014) the “speaking skill is one of the most essential skills in language learning, [and] anxiety in speaking is among the most significant factors in a second/ foreign language classroom”. This kind of anxiety in speaking is called *communication apprehension* and it is a “type of shyness characterized by fear of or anxiety about communicating [speaking] with people” (Horwitz et al., 1986); by using the words of McCrosky, Rafek (2014) stated that this kind of anxiety leads students to have little control of the communicative situation and consequently to have high possibilities to experience a bad performance in front of the audience. Communication apprehension can manifest in many ways, among them *oral communication anxiety*, *stage fright* and *receiver anxiety* (Horwitz et al., 1986). *Oral communication anxiety* happens when students experience “difficulty in speaking in dyads or groups” (Horwitz et al., 1986) for instance when they use the FL with their peers during group works; *stage fright* is the difficulty to speak in front of a public, and it could occur in oral tests, when the public is the class. In the case of FL learners this kind of speaking apprehension is doubled because on the one side they have to focus on the contents and on the other on the correct use of the foreign language; the element which triggers anxiety and tension in stage fright episodes is the audience, which in our case is represented by the class. Being afraid of being mocked about an incorrect word, or to worry about a possible poor performance and as a consequence a bad consideration by the teacher or by the peers are very frequent feelings in FL students. In this case the concept of *club membership* (see 2.3.3) proposed by Krashen is relevant, because the single learner considers him- or herself as a member of the group (class) and feels supported during the performance. A certain level of anxiety will be present in any case, but if learners feel supported, they have the tools to control their emotions and consequently control the effects of anxiety. If anxiety is under their control, they will perform successively (figure 5). The last communication anxiety type is called *receiver anxiety* and involves the tension in “listening to or learning a spoken message” (Horwitz et al., 1986). This anxiety manifests when learners experience an emotional tension which impedes them to focus on what they are listening to, not understanding the information; generally speaking, communicative apprehension can lead to negative side effects on learners as “the inability to communicate is

proved to create a feel of frustration and apprehension” (Şenel, 2012), which are not good for a successful language learning situation;

- b) *test anxiety* is “a psychological condition in which people experience extreme distress and anxiety in testing situations” (Cherry, 2020) and also “a type of performance anxiety stemming from a fear of failure” (Horwitz et al., 1986). Students experience this kind of performance anxiety when they have to face written or oral tests in FL (in this case also communication apprehension is involved) or anytime they are evaluated. However, it is worth saying that in testing situation there is always the presence of anxiety in participants, above all if they have to use an FL to communicate. According to a research carried out by Cassady and Johnson (2002) the affective component is not always harmful for the performance, but it results damaging “only when the individual is also experiencing high levels of *worry*” which happens when learners compare their self-performance to peers, consider the consequences of a possible failure, have a low level of self-confidence during the test, have an excessive worry over evaluation or have a low level of self-efficacy. In the light of this point it is necessary to point out that high levels of worry happen when the learning subject is not able to control his or her anxiety level and as a consequence his or her performance will result poor. Cassady and Johnson (2002) observed also that “high levels of emotionality were considered to be benign for exams when the individual maintains a high level of self-confidence regarding performance”, which means that if the learner has the control over his or her emotions, trusts his or her abilities and has a good level of self-efficacy and self-esteem, he or she will have a good control over his or her performance. Concluding, also for this specific case of anxiety it is worth to have a glance at figure 5, which shows how anxiety is not always to condemn, because if controlled, it allows great performances;
- c) *fear of negative evaluation*. This last component of language learning anxiety, occurs when there is an apprehension towards evaluations by others and consequently the avoidance of evaluative situations (Aydin, 2008). Anxious students in testing situations tend to be “acutely sensitive to the evaluations-real or imagined- of their peers” (Horwitz et al., 1986) and also of their teacher. This kind of learners when they are called out to perform an oral test, they usually worry about what their classmates believe about them, about their performance, about their possible language mistakes (connected to the grammar, lexicon, intonation, pronunciation) or about their aspect (an anxious subject in stressful situations tends to blush, tremble, stutter...) and consequently their high level of anxiety may impact negatively on their performance. In other words, all their mental energies are not focused on what they have learned and what they have to say, on the contrary the focus is on the others, on their (imagined) thoughts, on a possible negative evaluation on their performance. Most of the times, their anxiety provoking thoughts are based on imagined situations



or a distorted reality in which they collocate the (imagined) beliefs of their peers (or of the teacher). A frequent side effect of this kind of situation, where there is the association between tests and failure, is that anxious students tend to skip the classes to avoid the testing situations; in this way they do not have the opportunity to face and overcome their fears, while their anxiety takes the control of their choices and lives and eventually they become the victims of their own emotions. To avoid these kinds of damaging situations it may be effective to create a good atmosphere of general trust in class, between the peers and in the teacher-learner interactions; additionally, it may be positive not to create a test-anxiety association in learners, and make learners familiar with testing situations, enhancing the level of self-efficacy and self-esteem. Lastly, the occurrence of errors (in oral or written tests) should be presented to learners as something natural in foreign language learning and consequently, and not as an anxiety provoking element (see 2.3.2).

All in all, after having considered the main manifestations and sources of anxiety in language learning situations, we can conclude this paragraph by saying that language education and education in general should promote the creation of an atmosphere of *facilitating anxiety*, which “occurs when the difficulty level of the task triggers the proper amount of anxiety” (Zheng, 2001) which provides the right dose of adrenaline which allow the tested subject to be focused on the topic and to give his or her best during the performance. On the other hand, education should discourage the creation of a *debilitating anxiety*, since a too much high level of stress has negative effects on the cognitive processes of the learner and consequently on the performance.

## **2.4 The importance of motivation in FL acquisition**

In the previous paragraphs this research has sought to explain the impact of emotions in language acquisition. We have seen how a negative feeling, such as anxiety can provoke relevant damages to the processes which involve the memory system, above all to the long-term memory storage. In fact, an important issue which was put into focus, was the so-called affective filter proposed by Krashen, and its central role in the acquisitional process; we have seen that if the learner manifests anxiety, consequently the external input cannot reach the long term memory, and also the process of memory retrieval is compromised. Anxiety, however, has not always to be considered as an element to be banished in FL learning context; firstly, it is worth bearing in mind that it is impossible to eradicate anxiety (as all the other emotions) from human beings, as it is part of human nature; secondly, if anxiety is not debilitating, but it can be controlled and managed (*facilitating anxiety*), it can improve learner’s performances and can concur for his or her success (see figure 5). After having focused in

these topics linked to anxiety processes, this research paper will deal with another fundamental psychological factor in FL learning and teaching, which is *motivation*.

#### **2.4.1 Definition of motivation**

The last May 30, 2020 the SpaceX Falcon 9 rocket with the Dragon crew capsule were launched into orbit from US soil; this significant event was watched by millions of people worldwide, and it opened a new era for the space missions. But what lifted the spaceship from the ground and took it into the space? The answer is tons and tons of propellant, which ignited the powerful nine-engine Falcon rocket; in fact, without the fuel, the spaceship wouldn't have reached a millimetre off the ground.

In the light of this, what is the fuel which ignites the mental effort of a learner towards the acquisition of an FL? *Motivation*.

Motivation is “one of the main determinants of second / foreign language learning achievement” (Dörnyei, 1994) and it is described by Balboni (2015) as the energy which ignites the hardware and software, which as we have seen in chapter 1, are the neurolinguistic and psychological aspects of the human brain. According to Gardner's theory, “motivation can be referred to a kind of central mental engine or energy-centre that includes effort, want or will (cognition) and task-enjoyment (affect)” (NG, NG, 2015). Motivation is also seen as “referring to the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity” (Gardner, 1985); hence, the learning subject makes a great mental effort which is activated by motivation, so as to fulfil his or her linguistic desires or aims. In fact, the motivated learner is “one who applies effort in order to achieve a goal, is persistent and attentive to completing the undertaking, has short term and long range goals, enjoys the activity, receives positive reinforcement and is dissatisfied with failure, readily applies attributions to success or failure, and utilizes strategies to complete the goal at hand” (Garcia, 2007). Without motivation mental efforts and persistence in making mental efforts to reach an aim wouldn't be possible, as a spaceship wouldn't work without the fuel to ignite its engines. Always Gardner (1985) writing about motivation stated that it is “the combination of efforts plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language” (Gardner, 1985). In this definition there is another key term in language learning situations, which is *attitude*. The concepts of motivation and attitude are strictly connected, even though they have a different meaning. When we deal with attitude, we intend a “relatively enduring organization of beliefs around an object or a situation, predisposing one to respond in some preferential manner” (Oroujlou, Vahedi, 2011), while motivation, as we have seen,

is a reason for reaching an aim, or for doing something. The attitude of a learner is his or her (positive or negative) beliefs and feelings on the FL itself, on the FL teacher, on the materials used in class, and on other components where the idea of FL (language and culture) are structured. If a learner believes that a FL is too much difficult, or too much boring to learn, he or she will manifest a negative attitude towards the language and consequently his or her *mental state* (Latchanna, Dagneu, 2009) will not have the necessary motivation to activate and support the mental effort which will lead to acquisition. On the contrary if a learner has a good predisposition to the FL, consequently he or she will have the necessary motivation to start and to sustain the acquisitional effort. In general, the aim of FL teachers is to avoid, where possible, the instauration of negative attitude towards the FL, because this could compromise motivation, which, as we have seen, is a relevant factor in learning and acquisition. In fact, Oroujlou and Vahedi (2011) stated that “motivation and attitude provide primary impetus to initiate learning language 2 and later the driving force to sustain the long and often tedious [above all for the learning of the grammar] learning process. Lack of attention to these factors can lead to inefficiencies in learning L2”.

#### **2.4.2 Creating motivation in FL class**

In the light of the previous point, as suggested by Dörnyei (2007) throughout the FL classes teachers should:

- a) generate *initial motivation* in the so-called *pre-actional stage*; in this phase, before focusing on the linguistic input, instructors create motivation and positive attitude towards the language (important factors to allow acquisition), by increasing the learner’s expectancy of success and consequently enhancing the concepts of self-efficacy and self-confidence; by increasing the learner’s goal orientedness of the students , who have to be aware of the linguistic aims they have to reach; by making the teaching materials relevant for the learners, as acquisitional processes work if the materials are evaluated as interesting, enjoyable or significant; and by creating realistic learner’s belief about the language;
- b) *maintaining and protecting motivation* throughout the whole didactic action. In fact, motivation and interest are not always on top, and when tasks appear as difficult or boring students tend to lose the initial energy and concentration. To avoid this kind of situation, motivation should be actively nurtured by making learning stimulating and enjoyable; by presenting the tasks in a motivating way; by setting specific goals; by protecting the learner’s self-esteem and increasing

self-confidence; by creating learner's autonomy and by promoting self-motivating learning strategies;

- c) *encouraging retrospective self-evaluation*: in this post-actional motivation stage, "teachers can help learners to evaluate their past performance in a more "positive light", take more satisfaction in their successes and progress, and explain their past failures in a constructive way.

### **2.4.3 The motivational model of Titone and the tripolar model suggested by Balboni**

Balboni (2014a) writing about motivation stated that, acquisition of an FL not only involves a *mental effort*, but also a *physical effort*, because the student has to spend hours on books or on practicing the language he or she has to acquire. Motivation involves also another kind of effort which is a *social effort*, because when pupils have to face an oral performance in front of their peers, they have to face the judgement of the teacher and of the class. So, if L2 learning implies a huge effort for the wholeness of the subject, what does trigger the motivation, which is the engine which activate the effort for acquisition? There are two main models which describe L2 motivation, the first one was proposed by Renzo Titone and the second one by Balboni.

- a) according to Titone every learner who decides to acquire a new language has a project which involves him- or herself and the FL; for instance, there are students who decide to study English as an FL because their project is to move to London and find a job there, others study French as FL because their dream is to live in Paris or because they have a French girlfriend or boyfriend and consequently they love the sound of the language and they want to learn it. Every one of these learners have a good attitude towards the FL they want to acquire, and they want to find a way to accomplish their dream and to realize the image they have of their *future self* (see 2.3.2). In this initial moment their motivational energy starts the engines, and pulls them to find a way or a strategy to fulfil their projects; for instance, subjects who want to move to Paris decide to enroll in a French language course. After this initial moment, the strength of their motivation is going to be tested. In fact, when learners have to face the so-called *tactic moment*, which is the real contact with the course, the language, its grammar and lexicon, the class and the teacher, motivation could be sustained, if the first contact is positive and good results are obtained, or damaged, if the atmosphere of the course is negative, boring or threatening for the future-self of the subject, and the results are poor. In this last case motivation is absent, and there is the activation of the affective filter and consequently the non-acquisition or in the worst of the cases the renounce of the FL learning. Naturally, even if this last situation could happen, FL teachers should avoid it and keep

the motivation of their students ignited. The model proposed by Titone is valid also for the short-term projects, like for instance English as FL students who decides to make a mental effort to acquire the *future forms*; if they experience success, which means that the effort has been worth, their success ignites new motivation which is fundamental to sustain their next linguistic projects, which is their next linguistic step (e.g. the acquisition of *past forms*). As a consequence, this model, if activated in the right way, provides always new energy and motivation to the learner throughout the didactic action (see figure 6);

- b) the second model was proposed by Balboni (2014a) and focuses on the sources of motivation, the nature of the fuel which ignites the acquisitional engine. According to the author learners acquire a FL basically because of three factors: *enjoyment* in learning an FL, *need* to learn an FL and learning an FL because of a *duty* or an *obligation*. As it can be seen in the model (figure 7) these three aspects are placed at each corner of a triangle; however, even if it seems that the three factors have all the same importance in FL learning, in the summit of the triangle it is placed probably the most relevant source of motivation, which is enjoyment in learning.

We begin with the last element of the list which is *obligation*. In most of the cases, especially if we think to the school environment, foreign languages are learned because they are part of a curriculum and consequently students have to learn them, even if they do not like the subject, or they are not interested in it. This kind of motivation leads to learn a language but not to acquire it; Balboni (2015) states that the linguistic information learned in a condition of obligation are encoded by the medium-term memory and do not access the long-term memory storage. For instance, students who do not like French but have to study it, will study the language to pass the tests, but once they have finished the last year of school and they do not have to study the FL anymore, all their knowledge will be forgotten and lost. This is a biological mechanism of our memory system: if our brain does not need an item anymore (it is no more necessary to ensure survival), this item will be forgotten, edited. This concept is not only valid for foreign languages, but also for all the other subjects. All in all, we can conclude by saying that obligation is a source of motivation (a learner study an FL because he or she has to) but the external input will be stuck in the medium-term memory and consequently there will not be acquisition.

The second element which triggers motivation is the *need* to learn a language. This kind of motivation is linked to the rational and logical part of the brain (left hemisphere) but presents two limitations: the first one is that the student has to be aware that the FL represents a need for his or her project. For instance, a learner studies English as a FL because he or she has to pass an exam, which allows him or her to reach level A1 necessary for his or her job. The second limitation is linked to the first one, as once the need has been fulfilled (the learner passes the exam and gets the

level A1) and as a consequence the FL is no more necessary, the initial motivation decreases its power and so the interest in the FL. The last, but not the least source of FL motivation, is enjoyment in language learning. Basically, this form of motivation is the most powerful and long lasting for many reasons such as: if learners learn a language because they love it, consequently both the hemispheres activate and the motivational source is extremely powerful. Learners who learn a language because of an obligation or a need, they will lose all their knowledge as soon as they do not have the contact with the language itself. In other words, the motivation is strong in the first phases of the language learning project, but slowly will decrease its effect. There is another important element involved in obligation and need, which is the affective filter. If a student is forced to learn an FL there will be a high probability of the presence of the affective filter as his or her attitude towards the subject will be not positive. On the contrary, in the case of enjoyment, learning a language involves pleasure, and the brain will not activate the affective filter and as consequence the notions will enter the long-term memory. Before analysing the possible sources of enjoyment in FL learning, it is worth to give a last glance at the tripolar model proposed by Balboni; Caon (2008) suggested the same model but from a different perspective. In figure 8 we can see that the author placed the three elements not in a triangle but this time in a circle, indicating that the three elements have not to be considered as unconnected factors, but rather as a continuum; if in the FL acquisitional process the obligation involves also an enjoyment (learners like the teacher, the materials or the activities) there will be a high motivation to fulfil the linguistic needs and if they will lead to success there will be other enjoyment and so on. This model suggested by Caon, makes us think that motivation in language learning is not always the same and of the same intensity: some classes can be enjoyable, others can be seen as boring and the learning may be seen as an obligation and other times students will have to face the FL because they need to pass a test. The theory proposed by Caon (2008) seems to be confirmed also by the so-called CLIL (Content and Language Integrated Learning) methodology; CLIL methodology refers to situations where subjects (such as science, art, geography or history) are not thought in the mother language, but in the FL. This methodology can lead to a win-win situation, since students experience both the learning of the subject and simultaneously, the learning of the FL. CLIL can provide many benefits to FL teaching and learning, because it can boost the motivation of the single learner towards the language. If we think about FL learning, not all its tasks are considered as enjoyable, motivating and interesting. For instance, if the learning of lexical items is considered as boring and demotivating, the CLIL methodology can change this reality. As stated by Serragiotto (2012), CLIL can have a positive influence on the learning of an FL, because the focus of attention is no more on the language itself, but on the contents of the subject. Hence, if a learner is not motivated

in learning lexical items, but he or she loves history, CLIL can be a useful tool to combine obligation (the learning of the lexical items) and also enjoyment (the learning of history).

This leads us to the conclusion that language teachers should be aware that motivation cannot be always optimal, and sometimes it can be at low-levels of intensity. Consequently, instructors should find a strategy to create and to sustain motivation in their learners.

#### **2.4.4 Types of motivation in FL**

As we have said in the previous paragraphs, every human being is a different universe, and so is every student; motivational aspects can be different from student to student and the elements which could influence motivation could be various. As stated by Mariani (2012) the socio-educational model proposed by Gardner has contributed to underline the influence that two classes of variables have in motivation towards language learning. Gardner made a distinction between *integrative motivation* and *instrumental motivation*, which will be described in the following lines:

- a) *integrative motivation* “stems out from a desire to understand the language and culture of another group for the purpose of interaction” (Gardner et al., 1992) and learners aims at “resemble members of the target culture” (Pavlova, 2009). In this case learners study a language because they want to become part of the culture and society of that foreign language. This motivation involves crucial affective aspects as *desire*, *love* and *respect* for a language and its culture, necessary to hinder the raising the affective filter and to maintain and protect motivation;
- b) *instrumental motivation*: in this case acquisition is more utilitarian, and the language is studied because it is seen as “a mean for attaining instrumental goals”(Brown, 2000), for instance a student who learn English as an FL because he or she has to pass the exam or a subject who has to learn English for the job. In opposition to the previous case, instrumental motivation aims at satisfying a need or an obligation, but not an affective factor. It is useless to say, that integrative motivation is more powerful and long lasting than instrumental motivation.

There is another taxonomy of motivations involved in FL class environment, that is the difference between intrinsic motivation and extrinsic motivation.

- a) *intrinsic motivation*: as the name suggests, it is defined as “the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity” (Gardner, 1985); this motivation “can be found within the individual and is related to the

individual's identity and sense of well-being” (NG,NG,2015), and consequently the motivational energy comes from the inside of a subject;

- b) *extrinsic motivation*: in this second case “learning is done for the sake of rewards such as grades or praise that are not inherently associated with the learning itself, that is, when learning or performing well becomes necessary to earning those rewards” (NG,NG, 2015); As this definition suggests, extrinsic motivation does not come from the inside of a subject, but from the outside, from the learning context. Even if extrinsic motivation could be labelled as less powerful and less long-lasting, NG and NG (2015) provided a view in which both motivations are necessary in a FL context as “external rewards can either increase or decrease intrinsic motivation” (NG,NG,2015) and also affect self-efficacy feelings. Oroujlou and Vahedi (2011) wrote that “a good teacher [...] must tap into the sources of intrinsic motivation and find ways to connect them with external motivation factors” so as to have a combination of the two, and make acquisition more stimulating and motivating.

#### **2.4.5 Sources of enjoyment in FL learning motivation**

In paragraph 2.4.3 we have seen that motivation is triggered basically by three factors: need, obligation and enjoyment. The most relevant and long-lasting element is the last one, as enjoyment in doing something facilitates the process of acquisition (see 2.2).

In the following section we will see the main sources of enjoyment in FL learning, by following a structure proposed by Balboni (2014a).

- a) teachers should favour *the creation of a learning environment without threat or anxiety conditions* (see 2.2.2) and *favour a climate of trust and cooperation*. FL acquisition should be considered by the students as a process of ups and downs, where possible failures (e.g. a poor performance) could happen, but does not damage the *actual-self* image and the future-self project. In other words, possible failures have to be accepted by learners and then cannot lead to a lack of motivation, or to the activation of the affective filter. Teachers should promote the acceptance of possible mistakes in learners and support the idea that an error is not “the end of the world”, but part of the FL acquisitional process (see 2.3.2). In fact, instructors should promote affordable activities (the *i+1* of Krashen, in 2.2) and tasks, in order to favour success, which will produce feelings of self-confidence, self-efficacy and general happiness in students, which will generate new motivation, necessary to sustain the effort in facing new linguistic inputs;
- b) activities should *variate*, as heterogeneousness leads to curiosity and interest, and activate the attention to the external inputs. If students do always the same activities and tasks, they end to lose



interest and motivation in doing with the language, while if activities are diversified students will dedicate more attention to the task and consequently be more receptive for new FL inputs;

- c) if teachers want to promote enjoyment in learning, they have to base their classes on the concept of *novelty* and *surprise effect*. The newness of class activities triggers attention in learners, who are curious in doing something different. Also, the surprise effect tasks concur in adding colour to language classes and creating motivation, as it involves an alternative way to tediousness. For instance, a French as FL class who is focusing on the Proust's episode *Les Madeleines* (seen in 2.2.1) will be motivated and stimulated in that part of literature, if the teacher brings (as a surprise) in class a tray of these biscuits; learners will have in front of them the concretization of the words they are zooming in and also they may understand in a better way the concepts involved in the passage.
- d) another factor which concurs in the creation of motivation is *challenge*, which has to be intended as positive challenge and not negative competition. In fact, challenges should create a playful atmosphere where the aim is pure enjoyment. In this way the affective filter is down and the inputs will be more easily received. If the challenge is intended as a fierce competition things are different, as learners will play to have a winner and a loser, and in this way feelings of threat and anxiety will be created, hindering the aim of the didactic action, which is acquisition. Lombardi (2012) dealing with the nature of positive challenge contained in games, states that playful activities encourage feelings of enjoyment, humour and fun in learners/players. He wrote that "what is usually called fun is the feeling provoked by the release of a flow of the neurotransmitter dopamine in the mesolimbic region of the brain the one that contains the human reward system. This rush of dopamine, along with other chemicals like epinephrine (i.e. adrenaline) and norepinephrine (i.e. noradrenaline), is activated mostly when the brain accomplishes a difficult [but affordable] task, when it tackles and overcomes a challenge or solves a puzzle" (Lombardi, 2012). In one of my teaching experiences two classes (with roughly the same level of English as FL) were given the same identical task but each class had two different modalities to accomplish the test. The learners of the first class had to do the activity by using the game-based learning platform called Kahoot, while the students of the second class had to face the task by using a traditional method, which was answering the questions on a piece of paper. What happened was that the students who used Kahoot were galvanized by the game, by its graphic and by the use of an alternative way of answering some questions (in fact, they used their mobile phones instead of writing on a piece of paper) and they focused more on the playfulness of the activity itself, rather on the feelings of tension that an activity could comport. The final tendency was that they obtained higher scores than the peers in the second class. In the light of this example, playful activities which involve an

affordable challenge like quizzes or crossed words, impact in the emotional aspects of a learner and favour the lowering of the affective filter. It is worth saying a word also about the climate that create during playful challenges. Lombardi (2012) stated that an atmosphere of enjoyment has several benefits on the general learning process; in fact, it helps to relieve the strain, it establishes a closer student-teacher relationship, it reinforces creativity and rote learning, it attracts the attention and it creates bonds within the learning group, which we have seen in 2.3.2, is an important factor as regards the relationships between the single learner and the group class;

- e) the *systematization* of an FL can concur in the creation of motivation. In fact, systematization means discovering a language, within all its hidden processes and rules. Here the learner has an active role, he or she is the *homo faber* of the linguistic acquisition, the protagonist of the acquisitional processes. Discovery involves adrenaline, it triggers attention and curiosity towards the language itself, favouring in this way acquisition and motivation;
- f) also, the *sense of duty* towards the acquisitional processes of language learning can impact on motivation. In fact, striving to realize the future-self, helps to bear also the negative moments (e.g. bad marks or failure) and not to lose motivation. Here are necessary a strong sense of self-confidence and self-efficacy, which have to be safeguarded by the teacher.

#### ***2.4.6 The process of choice of the motivational input***

So far, we have focused on the sources of enjoyment and motivation in a language learning situation; with the next section we will see how the brain encodes the external inputs and decides if it is destined to the long-term memory (acquisition) or to the short-term memory (learning); Balboni (2014b) stated that the act of acquisition involves a huge physical and mental effort and the brain before affording it “decides” if the effort is worthy or not. But how does the brain “decide” if it is worth or not doing the effort? On the report of Daloiso (2009), the brain of a learner constantly encodes new external inputs, and these inputs are selected according to the future projects, the needs and the personal aspirations of the subject. In the selection process, which is unconscious, positive and useful inputs access the mechanisms of the memory, while negative and useless information are blocked and do not enter the memory. In other words, the brain settles in the memory what it wants (Balboni, 2015). As maintained by Daloiso (2009) the evaluation of the external inputs follows some precise principles:

- a) *novelty*: this element is the same one we have seen in the previous paragraphs (see 2.4.5) and the input is evaluated for its grade of newness or unexpectedness;

- b) *intrinsic enjoyment*: which include the attractiveness of the input (what we find beautiful or pleasant) and its possible positive or negative emotional impact. If an input is evaluated by the brain as a possible threat or displeasure, consequently the input will be not accepted. If on the contrary the input is considered as a source of pleasure it will access the memory;
- c) *need significance*: the input will be accepted if it is evaluated as useful for the realization of the future-self, while will be rejected if it is labelled as useless and a potential obstacle for the aspiration of the actual-self;
- d) *feasibility of the input*: this point refers to the concept of *zone of proximal development* seen in 2.2;
- e) *psycho-social implications*: the inputs should not threaten the self-image of the learners, and also his or her self-confidence, but on the contrary they should concur in the creation of a future-self project while protecting the *actual-self* image.

After having seen the nature of motivation and its possible sources in FL learning, we can conclude this section by saying that the factor motivation is very important in learning a language and it has to be nurtured and protected so as to open the way to acquisition.

In the next sections this research paper will deal with two factors which play a fundamental role in the FL environment: the teacher and the group class.

## 2.5 The FL teacher as a coach

So far, we have focused on the central role of the learner in the FL situation, and we have analysed his or her neurological and psychological factors. Within this section this paper wants to focus on the director of the FL situation, who is the teacher. Chiappelli and Pona (2014) talking about the role of the teacher in FL classes, use the terms *catalyst* and *facilitator* to convey the idea that instructors are those persons who facilitates the acquisition of the FL, who are tutors and coaches of the class and who intermediate the interpersonal relationships. The facilitator is also that person who *cares* about every single student, respects his or her cognitive processes and facilitates in this way the relation between the learner and the FL language, protecting motivation throughout the acquisitional process. For a learner creating his/her *possible selves*, understanding his or her strong and weak points, visualizing his or her linguistic final goal is not a simple task, and the teacher could reveal useful to sustain and motivate the learner and to help him/her during this process, made up by “ups and downs”, leading to the final goal. We have to consider the learner as an athlete and “it is obviously not enough for an Olympic athlete merely to imagine herself walking into the Olympic stadium or stepping onto

the podium if she has no coach or training plan” (Dörnyei, 2009), and we can understand from this statement how important is the role of the *teacher-coach* in guiding the learner towards his/her *future self*.

Firstly, during the pre-actional stage, the teacher should help learners to “construct their *Ideal L2 Self*” and “to create their vision” (Dörnyei, 2009) realistic and achievable, and finally to set the objectives. The concept of creating the vision in L2 learning is important because “through possible selves, learners create dynamic future guides that encourage action” which means that they will be motivated; “the possible selves gives form, meaning, structure, and direction to one’s hopes and threats [...]. The more vivid and elaborate the *possible self*, the more motivationally effective it is expected to be” (MacIntyre, Gregersen, 2012) and this is the reason why teachers should focus on the creation of the vision, which corresponds to the *future self*. Having a clear idea of what one would like to become, or fear to become, is relevant to focus energies and time primarily on what the learner needs to reach the final aim. In the *pre-actional stage* the teacher has also to create a generating initial motivation and a good atmosphere in class, both between learners and also between teacher and learners.

Secondly the *actional stage* is the hardest part of the L2 process because the teacher has to keep the classroom motivated (to protect motivation) even in case of failures, natural parts of the L2 learning process, within the successes. The teacher should explain the concept of failure in a “constructive way” (Dörnyei, 2007) as part of the learning process and as something not to be afraid of, but rather as a controllable factor that can be remedied (Dörnyei, 2007). A great importance should be given to the idea of *self-efficacy* and *self-esteem* which need to be strongly encouraged by the teacher. *Self-efficacy* in the motivating process is fundamental because if it is strongly rooted in the learner, “a failure may not have much impact” and the learner has a tendency to “persist in the face of failure” (Dörnyei, 1994) and in the end to reach the aim, the dream, the future self. This “process of *self-persuasion* [...] enhances people’s achievement behaviour by helping them to approach threatening situations with confidence, to maintain a task involvement and to heighten and sustain effort in the face of failure” (Dörnyei, 1998). In this case *proximal subgoals* are fundamental because they are more likely to be achieved, they are described as “markers of progress that provide immediate incentive, self-inducements and feedback and that help mobilise and maintain effort” (Dörnyei, 1994); not only subgoals can boost *self-confidence*, *self-efficacy* and the motivation in the learner, but also, they contribute to enhance another important factor related to the motivation, which is to say *intrinsic motivation*.

In the last part of the language learning process (post actional stage) when the learner has reached his/her goals, the teacher should give the student *positive feedbacks* even in the case of *failure*, which

has to be considered as a controllable factor which can be remedied by the student. Even failure, within success, makes part of the motivational process because it pushes the learner to overcome his/her mistakes and limits and boosts the *self-efficacy* and *self-esteem*. This is the reason why the teacher should explain failure “in a constructive way” “prompting the learner to reflect constructively on areas that need improvement” (Dörnyei, 2007) and not to see failure as a demotivating element caused by the low abilities of the learner. For this reason, it is highly recommended to “try and promote effort attributions and prevent ability attributions” (Dörnyei, 2007) in learners, where for effort attributions we mean that failures can be controlled and remedied improving the learner’s efforts and not dependent on the learner’s abilities, which are not controllable factors. If failures are not proposed in this “constructing way” to the class, motivation may decrease because the distance between the learner’s actual self and the ideal self grows bigger and to the learner’s eyes reaching his/her final goals appears harder. This is the reason why the teacher-motivator is fundamental in a classroom environment because motivation is also “the desire to reduce the discrepancy between one’s actual self and the [...] ideal/ought selves” (Dörnyei, 2009). Finally, it is worth considering also the emotional factor of failure and why it could undermine the sphere of motivation and self-esteem of the learner. The learner can experience *anxiety* and *demotivation* in case of failure (bad marks, unsuccessful exams...) and if this last one is not treated in the “constructive way” it may transform into *fear* and *anxiety*, and the learner may not be motivated to keep going on in his/her process of learning and most importantly to realize his/her future self. This is related to the concepts of *anticipatory emotions* and *anticipated emotions*: on the one hand in the case of the anticipatory emotions “a person may currently experience an emotion due to the prospect of a desirable or undesirable future event” (MacIntyre, Gregersen, 2012), on the other hand in case of anticipated emotions “a person may imagine experiencing certain emotions in the future once certain desirable or undesirable future events have occurred” (MacIntyre, Gregersen, 2012). Therefore, it’s important for the teacher to pay attention to the emotions and feelings of his/her learners, keeping their attitudes positive and guiding them through the learning process making them understand that failures can be overcome and keeping them motivated to reach their goals.

## **2.6 The importance of the group class**

In the previous paragraphs we have seen how the impact of the psychological aspects, such as sources of anxiety, stress, fear or (on the other side) motivation can strongly influence the behaviour of the

single learner in the acquisitional processes. In paragraph 2.5 we have focused on the figure of the teacher, who should not be a source of threat or of extreme anxiety, on the contrary the instructor should be considered as a coach, a facilitator, a tutor or a motivator. In this section we will deal with the second social component of the FL environment, which is the group class. To introduce this topic, it is necessary to say that a group is a “powerful social entity” (Dörnyei, 1994) and has to show some fundamental characteristics to work properly and to provide a positive feedback to the individual. First of all, the teacher has to stimulate a climate of *trust*, *support* and *tolerance* among the learners because otherwise “if learners form cliques and subgroups that are hostile to each other and resistant to any cooperation, the overall climate will be stressful for teachers and students alike and learning effectiveness is like to plummet” (Dörnyei, 2007). The teacher should promote *attraction* and *acceptance* between the members because acceptance leads the group to its *cohesiveness* which is “the internal gelling force that keeps the group together” (Dörnyei, 2007). In a group the members share a common (or very similar) ideal self because every one of them cooperates towards the same goal, which is the goal that the group has to reach. On the other hand, the actual selves of the members are different because every learner of the group has his/her own knowledge and ability, and if all these forces and resources are organized and used in a proper and clever way by the group, they can represent the key to the success of the group itself, and the final reaching of the aim. *Group cohesiveness*, which is that “we” feeling of a group (Dörnyei, 2007) is vital for the group because learners motivate each other and it enhances the *self-efficacy* and the *self-esteem* of the members and consequently the possibilities for the group to reach the aim. Indeed, *encouragement* and *reinforcement* are behavioural characteristics which can be easily found in a group, and not only they give positive feedbacks to the group itself, but also to the individual who boosts his/her *self-efficacy*, central element in the L2 learning process as it “enhances people’s achievement behaviour by helping them to approach threatening situations with confidence, to maintain a task [...] involvement, and to heighten and sustain effort in face of failure” (Dörnyei, 1998). Teachers should promote groupwork because “there is a consistent evidence [...] that, compared to competitive or individualistic learning experiences, the cooperative goal structure is more powerful in promoting intrinsic motivation, [...] positive attitudes towards the subjects area, and a caring, cohesive relationship with peers and with the teacher” (Dörnyei, 1994), and learners can more easily reach the goals once they work in group, while they reinforce their intrinsic motivation and *self-efficacy*, necessary elements to reach the goal when learners work individually.

Concluding it is worth introducing the concept of *resilience*, which is the ability to recover from stressful situations, like for instance failure during the L2 learning. “Resilient people use strengths such as humor, creative exploration, relaxation, and optimistic thinking as coping mechanisms that

both reduce levels of stress and promote faster recovery from difficulties”(MacIntyre, Gregersen, 2012) and not only this positive behaviour is beneficial to the learner, but also resilient members of a group boost motivation and *self-efficacy* in their peers in case of “ups and downs” or failure, natural parts of the L2 learning process.

## **PART TWO. THE ANALYSIS OF THE DATA**

### **3. Research**

The interest in carrying out this research was born from a personal curiosity in the connections which could exist between the psychological and cognitive aspects of a learning subject, and the possible implications that those elements could have on the linguistic acquisitional capability. The main affective aspect which has been focused so far throughout these pages, is anxiety, and if excessive, its side effects; As I have written in the introductory part of this paper, the interest towards this issue has its base on some university courses about the psychological aspects of language learning; hence, the personal aim was to provide the reader with a deeper focus with the connection between affective factors and their possible effects on FL acquisition. Finally, thanks to this second and last part of this research paper, I hope to give a current report of the implications between the affective factors and the FL acquisitional processes which characterize the sample of students involved in the survey; finally, the aim is to provide some conclusions and recommendations on the base of the findings.

#### **3.1 Research objective**

The survey was carried out during the academic year 2019/2020 and it involved 121 people attending school, who decided voluntarily to answer the given questions. The 121 interviewees were all students attending both high school (just classes with a linguistic orientation), and the three years of the single cycle degree programme in foreign languages at Cà Foscari University in Venice.

In addition, this study gives us an important opportunity to investigate in the field of language learning and to advance the understanding of anxiety, which is one of the most common feeling that impedes the student's ability during their performance in class.

The aim of this thesis, in fact, is to shine new light on the psychological implications in FL learning and teaching in the current school environment; more specifically, it aims to examine the way, and the intensity, in which emotions (especially those which debilitate the process of acquisition) impact on the capability to face foreign language learning classes. All in all, the general objective of this research is to determine if the current FL learning situation in schools presents possible sources of debilitating anxiety or if, on the contrary, the situation reveals calm and relaxed, the optimal place for



acquisition; from the analysis of the data, this research will seek ,if necessary, to provide some suggestions regarding the affective influence on language acquisition. It has been decided to investigate the situation of emotions at school, by taking into a count a wide, as regards the age of the interviewees and school type (high school and university), sample. In fact, the investigation was carried out between students who learn FL in high school, and also students who attend the three years of the single cycle degree programme in foreign language at the university, because the methodology of the teaching (the activity students do in class, the books used, the interpersonal relations between teacher and learners) and the spatial organization in class (both in high schools and in the FL classes at university, there are usually about 20/30 students) appear to be very similar. Anyway, the “age factor” was not to be considered an essential element in this research, because the real focus of the survey was on the simple interest to investigate the link between the psychological aspects of the learner, which are his or her emotions during the classes, and the impact of the affective factors in his or her behaviour and performances. Another factor which was decided not to label as essential in the research, was the foreign language learned by the students. In fact, the interest was not on one specific foreign language (the students who have participated in the research learn various language, not only English or French), but on the foreign language learning in general. The main purposes of this study can be grouped into some central questions, which regard:

- a) the overall level of anxiety in FL class;
- b) the connection between anxiety and performances in FL situations;
- c) the quality of interpersonal interactions between students and teachers;
- d) the level of cohesiveness in the group class.

The instrument used to carry out the research was the questionnaire, which will be analysed in paragraph 3.4.

### **3.2 Method**

It is worth pointing out that, even though the questionnaire implies a quantitative analysis of the data, this research aims at using the data for a more qualitative investigation on anxiety in FL; in fact, the interest is not on the specific number of students who have a low *self-esteem* or who feel anxious during the lessons or when they have to perform, but the it is rather on the interpretation of the data in order to have a general idea on the tendency of the school anxiety in FL classes and its impact on the student’s quality of acquisition and performance. Hence, the method used for this research is

descriptive as this survey aims at describing what happens in FL class, what are the most frequent emotions during FL lessons, and what is the level of influence of these emotions in acquisition.

The process that was used to carry out this research paper, consisted on different phases:

- a) prior to commencing the study, there was the ideation of a topic to investigate and in this case the topic chosen was the role of affective factors, above all anxiety, in FL acquisition;
- b) once the main questions of the investigation were decided, there was a personal acknowledgment on the specific literature, upon which the practical part of the thesis could have been based;
- c) after having selected the literature, the following step was the choice of a research tool, in this case an online questionnaire, based on the platform Google Forms. For this research it was used this application as I had already used it in other university courses, and as a consequence I knew well how it worked;
- d) following this, there was the choice of the questions to insert in the questionnaire, and for this point I decided to use a part of the questions on the FLCAS (Foreign Language Classroom Anxiety Scale) questionnaire, created in 1986 by E.K.Horwitz, M.b.Horwitz and J.Cope; I thought to choose the FLCAS questions, as I had already used them to conduct a research paper for an university course, and so I considered them as familiar and easier to interpret. In addition, my personal belief is that those questions, once answered and elaborated, provide a good tool to have a general view of the impact of psychological factors during the FL classes;
- e) after having created the online questionnaire, there was the choice of the application context and the target group. In this case I decided to involve in the investigation some classes of the high school named New Cambridge Institute, those classes where I taught FL last year (2019-2020) and some university peers attending Foreign Language at Cà Foscari. As regards the students of high school I sent them the questionnaire link via email, whether as regards the students attending university, I shared the questionnaire link on the official group of the University on the social platform Facebook;
- f) once having collected a significant sample of people (121), all the data were transferred to Excel, where they were reduced to bar charts and percentages; the decision to adopt as graphs the so-called bar-charts was believed to be useful, as bar-charts are a good tool to show the trend of the answers. This was the last step of the process adopted for the investigation.

The time covered to carry out this investigation was more or less seven months, starting from the very beginning in which there were the establishment of the research questions, to the final considerations. As it has already been said, in this study it was used the FLCAS questionnaire, as it seems to represent a good tool to investigate in the level of anxiety in FL situations. It was chosen to use an online questionnaire for some main reasons: first of all because the online questionnaire is “easily fillable”,

since the subject can answer the questions everywhere (e.g. at school during a break or on board of the train or bus while coming back home) and by using any kind of electronic device (e.g. laptop or smartphone) which nowadays are part of our everyday life and are always available to be used. Secondly, the subjects involved in the research could benefit from a complete anonymousness and tranquillity in answering the questions, since they decided the place and the time to fill in the questionnaire. Thirdly, the answers were automatically collected and elaborated from the software and it allowed an easier work and a more reliable image of the FL anxiety situation; lastly, the choice of an online questionnaire was a not optional choice but rather a forced choice, since the questionnaire was given during the first phases of SARS-COV-19 period, and this situation hindered any kind of social meeting.

All the questionnaires were anonymous and on a voluntary base, with no references to name, provenance or gender of the learner, and this was clarified in the introductive part of the questionnaire, and consisted on 30 close-ended questions (29 questions on the issue of anxiety and the first one question regarding the age of the interviewer) where the learners had to choose a possible response in a likert scale consisting of 5 options. The options for each question were: “strongly agree”, “agree”, “neither agree nor disagree”, “disagree”, and “strongly disagree”. To synthetize the data, all the responses were collected in a grid, which was divided into 5 columns, reflecting the Likert scale 5 levels, and into 29 rows, corresponding to the 29 close-ended questions. Each box of the grid was then completed with a tally referring to the answer (e.g. if the answer was “strongly agree” I wrote a tally in the box corresponding to “totally agree”) and to the question, and finally all the tallies were counted and transformed into numbers. After this, all the data were transferred to Excel, where they were reduced to bar-charts and percentages, which will be reported in the following sections. These bar-charts, which will be found by the reader in the following sections, allowed to *read* the data and to transform the numbers in a general overview on the investigated topic of anxiety in FL classes.

### **3.3 Target group**

The target group involved in this research paper was chosen randomly and it was composed by 121 persons with different ages starting from 16 years old to more than 30 years old, of different gender (even though this data was not asked in the questionnaire) and with different personal school backgrounds, since a part of them were high school attenders and the others university students. All the people involved in the representative sample participated to the investigation in an anonymous way, and this data was on of the first information which could be read in the questionnaire layout.

As said before, the high school participants involved in this research paper, were all students at the New Cambridge Institute, situated in Romano d' Ezzelino (Vicenza); the institute is a private high school with various orientations (Economic, Classic and Linguistic) but the sample involved was entirely composed by students attending the linguistic orientation. I decided to include this specific sample for the practical part of my final dissertation, as those students had a more frequent contact with the FL, rather than their peers attending the economic or classic classes. In fact, learners who study languages, have more classes of FL, they study more than two FLs, and they are usually more keen on foreign languages and their mechanisms, and consequently more interested in filling in an accurate way the questionnaire. In the light of this, after the conclusion of the questionnaire, the students showed interested in the aim of the questionnaire itself, and this note gave me the impression that they dedicated *passion* to fill in the questions.

As regards the second sample which composes the whole target group, it was formed by the students of foreign languages at University of Cà Foscari in Venice. I decided to include also this target group, because also the university students have a regular and frequent contact with the FLs.

In this research I decided not to investigate on the provenance of the participants (Italy, European countries or extra European countries) as I did not consider it a relevant element for this paper; others variables which have been neglected were: the foreign languages learned and the FL linguistic level, in fact these elements were not considered vital for the research itself. As already stated, the target group collaborated with this research because of a main aim, which was to find out the impact of the psychological factors in language learning, and as a consequence the information asked all regarded the personal affective sphere. In the very first part of the questionnaire, I included a short introduction before the questionnaire. Before writing it, I had thought about the potential subject, who would have answered the questions, so I had considered multiple factors such as: the subject's age, in most of the cases lower than 30 years old, as it can be confirmed by the questionnaire; the technological devices used to fill in the questions, and by considering the age, a big part of the sample used their mobile phones; and the time dedicated to the activity, and it is known that to free time activities like answering a non-compulsory questionnaire are usually dedicated few minutes. Hence, the introduction should have complied with the outlines to which I had thought. The introductive part was *short and sweet*, with the first lines dedicated to show the aim of the questionnaire, the second part indicated what the participant was asked to do, which was to try to look into his- or herself when answering the questions, and the last part focused on the anonymous nature of the research. The main information, the aim and the instructions for a good and correct filling out, was placed in the first rows of the introduction, because usually they are the first lines to be read. After having seen the main characteristics of the target group who have participated to the questionnaire, the next section will

deal with the questionnaire itself, the tool thanks to which we can have a general overview on what happens inside the emotions of students during FL classes, and finally seek to formulate a possible answer to the initial questions of this research paper.

### **3.4 The questionnaire. An overview**

The main aim of the questionnaire was to investigate on the level of anxiety present in FL classes and the possible impact that these affective factors have on acquisitional processes and on performances. In order to seek to find a possible answer to the main questions, I thought that the online questionnaire could represent a good tool to carry out the research. For this reason, I decided to use the FLCAS questionnaire, created by Horwitz in 1986, which was ideated to measure anxiety levels in people learning foreign languages and it was used as a base model for a many other research papers and discussed by many investigators. It is worth pointing out that the original English version of the FLCAS questionnaire was translated into Italian, as I considered that this would have allowed a better understanding of the questions; however, in this dissertation the questions will be provided in their original form. In the following lines the reader could find a detailed description of the tool for this research within all its questions.

The questionnaire consisted of a total of 31 close-ended questions: 29 regarding the main topic of anxiety, the other two regarding the age, and this was the first question, and the interest rate (that is if the subject found or not interesting the questionnaire), which represented the last question. For each question concerning anxiety (from question 2 to question 30) the learners had to choose a possible response in a likert scale consisting of 5 options, in a scale from 1 to 5. The options for each question were: “strongly agree” (which corresponded to 1), “agree” (which corresponded to 2), “neither agree nor disagree” (which corresponded to 3), “disagree” (which corresponded to 4), and “strongly disagree” (which corresponded to 5), or “never” (which corresponded to 1), “rarely” (which corresponded to 2), “sometimes” (which corresponded to 3), “usually” (which corresponded to 4), “always” (which corresponded to 5). The description of the likert scale within all the options is presented in table 1a and table 1b:

*Tab. 1a Distribution of the points regarding the position toward the topic*

<b>Position toward the topic under investigation</b>	<b>strongly agree</b>	<b>agree</b>	<b>neither agree, nor disagree</b>	<b>disagree</b>	<b>strongly disagree</b>
<b>Scale</b>	1	2	3	4	5

*Tab. 1b Distribution of the points regarding the position toward the topic*

<b>Position toward the topic under investigation</b>	<b>never</b>	<b>rarely</b>	<b>sometimes</b>	<b>usually</b>	<b>always</b>
<b>Scale</b>	1	2	3	4	5

As regards the question 1, where students were asked their age, the options were between four choices: “16-20 y/o”; “21/25 y/o”; “25/30 y/o”; and “more than 30 y/o”. Whether as regards question 31, the last one dealing with the level of interest towards the questionnaire, the choice was between three options: “very interesting”; “partially interesting”; “absolutely not interesting”. The information contained in these two questions, were not vital for the research, but were useful for two reasons: firstly, to understand the age of the different participants, and secondly, to have an immediate feedback on the interest of the participants towards the topic. In the following section the reader could find the detailed explanation of every question of the four sections. It is necessary to underline, that, even though the questions in Google Forms for this research appeared in their Italian translation, the reader will find in the following section the questions in their original English form.

### ***3.4.1 Introducing the context***

At the very beginning of the questionnaire, the subject could find a short introduction which explained the aims and some important features of the research. Subsequently, the participants could find question 1, which as said before, asked the age of the subjects involved in the research. This introductive part does not contain fundamental information, essential for our research aim; however, this section was created to introduce the topic to the participant and to have a general idea on the age range of the participants.

I am carrying out a research on the connection between our emotions (positive and negative) and their impact on the capability to acquire an FL at school. I ask you to think about what happens inside you during the FL lessons, and to answer as closer to your reality as possible. This questionnaire protects your anonymousness, as the answer given are not linked to the single participant. This questionnaire will take you just few minutes! Thank you for your participation!

1. What is your age?

- 16-20
- 21-25
- 26-30
- more than 30

### 3.4.2 *The connection between emotions and communication in FL classes*

This second section introduces the very core issue of the research paper. This part consists of thirteen questions and it aims at investigating one of the main topics, which is the connection between affective factors and FL communication in class. In this portion of the questionnaire, the central aim is to investigate the *communication apprehension* (see 2.3.4) in particular on the *oral communication anxiety*, specifically questions 2, 3, 4, 5, 6, 7, 13, 14 (see Appendix), *stage fright*, specifically questions 8, 9 (see Appendix) and *receiver anxiety*, specifically questions 10, 11, 12 (see Appendix). Moreover, these questions will seek to discover the intensity of *debilitating anxiety* (if it is present) and if anxiety is *trait* type, that is connected to the personality of the students, or if it is a specific and *situational anxiety*, linked to FL class conditions, including teacher and peers.

2. I never feel quite sure of myself when I am speaking in my foreign language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 2 introduces the core issue of the questionnaire, and seeks to investigate on the *oral communication anxiety*. In fact, the participant is asked to think how much frequent he or she feels sure of his- or her-self in FL talking occasions in class. This question will lead us also to discover the level of *self-confidence* in learners.

3. In language class, I can get so nervous I forget things I know

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Also in this case question 3 regards the *oral communication anxiety*, in particular the interest is towards the so- called *debilitating anxiety*, which hinders the mnemonic trace retrieval because of a too exaggerated affective filter (see 1.3; 1.2). In fact, if the *oral communication anxiety* is too high, the consequent cognitive response is that the access to the *long-term memory* is blocked and as the learner cannot retrieve the information, even if he or she has learned it.

4. I don't understand why some people get so upset over foreign language classes

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Question 4 aims at looking into the empathy of the participants towards their peers in FL class, as regards FL anxiety. In fact, this question seems to reveal who is more likely to experience *oral communication anxiety* (options 4 and 5) and those who are not (options 1 and 2).

5. I get nervous and confused when I am speaking in my language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 5, once again focuses on *oral communication anxiety*, and on the phenomenon triggered by anxiety (evident in the term “nervous”), which is the activation of the affective filter and the consequent creation of confusion in one’s mind.

6. I feel more tense and nervous in my language class than in my other classes

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Question 6 not only focuses on *oral communication anxiety*, but seeks also to investigate if anxiety is spread in all the school subjects (*trait anxiety*, see 2.3.1), or if it is specific for FL classes (*situational* or *state anxiety*, see 2.3.1). This information will allow us to conclude if students are anxious in general, or if their anxiety is characteristic for the FL lessons.

7. I feel confident when I speak in foreign language in class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always



With question 7 the interest is principally in the level of *oral communication anxiety* but also in investigating the level of *self-confidence* of the learner when he or she is asked to speak in foreign language in class. The level of *self-confidence* can be influenced by many factors, such as the climate of trust between the subject and the peers or the good interpersonal relationships between the single student and the teacher. Question 7 provides also an overview on the climate in class.

8. I tremble when I know that I'm going to be called on in language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 8 not only focuses on the *communication anxiety*, but also on the visible signs of anxiety, in this case the fact of trembling. Anyway, the usefulness of this question for our research is to investigate firstly in the presence of *stage fright anxiety* in learners and secondly in the level of stress experienced.

9. I feel my heart pounding when I'm going to be called on in language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 9 is similar to questions 5 and 8, because it involves the connection between *stage fright anxiety* and its physical manifestations, such as difficulty in concentrating, tendency to forget things and information, sweating, palpitations, skin issues (blushing or growing pale), difficulty in breathing, migraine or stomach-ache (Horwitz et al., 1986; Tessaro, 2015). Once again, this kind of question aims at investigating in the level of anxiety in a certain situation, in this case FL class.

10. It frightens me when I don't understand what the teacher is saying in the foreign language

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 10 investigates in one particular case of *communication anxiety*, which is *receiver anxiety*. In this specific case the tension is in "listening to or learning a spoken message" (Horwitz et al., 1986), in this case the teacher's message in the FL. The verb "frighten" underlines the anxiety involvement in the FL situation.

11. I get nervous when I don't understand every word the language teacher says

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 11 is very similar to question 10, as it deals with *receiver anxiety*. The main aim of the question is to find out how much impact has the role of the teacher in the students, and if the instructor is a possible source of anxiety.

12. I get upset when I don't understand what the teacher is correcting

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 12 still be focused on *communicative anxiety*, and more specifically on the *receiver anxiety*. In fact, the anxiety is provoked by the incapability to understand the message conveyed by the teacher, in this case the correction of some mistakes. Similarly, to the previous question, also question 12 aims at researching if the instructor could be a possible source of anxiety in learners.

13. I would not be nervous speaking the foreign language with native speakers

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

In question 13 the focus is once again on *oral communication anxiety*, but also in the kind of anxiety which could be *trait anxiety* or *state* and *situational anxiety*. Hence, the focus is also on investigating if anxiety is something connected with the character of the learner (*trait anxiety*), or if it is specific for FL classes (*situational anxiety/state anxiety*). Finally, these factors may be the indicators of a possible connection between instructor and anxiety.

14. I would probably feel comfortable around native speakers of the foreign language

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Question 14 is the last question of the section. Similarly to question 13, it aims at investigating if the level of *communication apprehension* is linked to the FL situation, or if it is part of trait anxiety.

### 3.4.3 The connection between emotions and testing (oral and written) situations

In this section is composed of nine questions and the focus is on investigating in the presence and in the intensity of *test anxiety* in FL situations; In paragraph 2.3.4 we have stated that *test anxiety* is “a psychological condition in which people experience extreme distress and anxiety in testing situations” (Cherry, 2020) and also “a type of performance anxiety stemming from a fear of failure” (Horwitz et al., 1986). The analysis of the data will allow the reader to understand the level of *test anxiety* present in the target group, and to investigate if it is a bearable element, which, according to the *Yerkes Dodson Law Model*, could allow a better performance, or on the contrary, if it is a debilitating situation, which affects negatively the performance (oral or written) of the student. In the following lines we will analyse the question of section three in detail.

15. I don't worry about making mistakes in language class

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

This first question of section three, focuses on the so-called *fear of failure*, which as we have seen, can be a source of *test anxiety*. Hence, question 15, seeks to investigate in a possible presence of *test anxiety* in FL classes.

16. I [don't] worry about the consequences of failing my foreign language class

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

It is necessary to underline that, question 16 in its original FLCAS form was “I worry about the consequences of failing my foreign language class”, however I have decided to change it in “I [don't] worry about the consequences of failing my foreign language class”, because, according to my point of view, was more comprehensible (in its Italian translation) from the Italian audience who participated in the research. However, the message conveyed still the same. Question 16, similarly to question 15, aim at focusing on the test anxiety, with a slight difference: in fact, in question 15 the focal point was on the connection between *test anxiety* and mistakes making, here the stress is on the

link between test anxiety and *fear of failure*. Notwithstanding the aim of these two questions is to investigate on the presence and on the intensity of *test anxiety*.

17. I don't feel pressure to prepare very well for language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Also in question 17 the focus is on *test anxiety*, because the subject is asked to think about his or her emotions before a testing situation.

18. The more I study for a language test, the more confused I get

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 18 focuses on the phenomenon connected to *test anxiety*, which is called *overstudying* (Horwitz et al., 1986).

19. I feel overwhelmed by the number of rules I have to learn to speak a foreign language

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Point 19 is always centred upon *test anxiety*; in this case the adjective “overwhelmed”, implies a passive role of the subject towards anxiety, since FL seems to be impossible to sustain (in this case for its quantity of rules). With this question the research aims at investigating on the level of anxiety present in the fact of studying the FL.

20. I am usually at ease during tests in my language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 20 is the classical inquiry which investigates on the possible presence and intensity of a source of anxiety during test situations.

21. Even if I am well prepared for language class, I feel anxious about it

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Question 21 stresses its interest in investigating on the level of anxiety during testing situations, even if the subject is well prepared. In the analysis we will seek to see if situations of FL *test anxiety* and *debilitating anxiety* could be connected.

22. I am afraid that my language teacher is ready to correct every mistake I make

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 22 is based on the interest in investigating if *test anxiety* is somehow linked with the figure of FL teacher, who could represent a source of anxiety and consequently hinder the interpersonal FL communication, leading to *communicative apprehension*.

23. I get nervous when the language teacher asks questions which I haven't prepared in advance

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

The last question of the section, question 23, investigates in the figure of possible source of *test anxiety*, represented by the teacher, and aims at knowing how much influence does the FL teacher have on FL apprehension.

#### ***3.4.4 The connection between emotions and interpersonal interactions***

This last section of the questionnaire regards first of all the *interpersonal interactions* in FL class, which means the interactions with the peers (see 2.6) and the possible impact on the quality of the FL lessons. This group of questions seek to provide a feedback on the atmosphere in class, and to understand if the social situation could be a source of anxiety or on the contrary if it concurs for the creation of a *club membership*. In the previous chapter we have seen that a strong group feeling, favours the decrease of anxiety states, and improves motivation, *self-efficacy* and *self-confidence*, all elements which influence positively FL acquisition. In the following lines all the questions of the last part will be described into detail. The last question of the section (question 31) is not vital for the research, but it is merely a personal curiosity on the level of interest of the questionnaire.

24. I keep thinking that the other students are better at language than I am

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

In question 24 the stress is on discovering if FL students are anxious because they fear a negative judgement by their peers, which could mean a low level of *club membership*. Thanks to this question the research seeks to find a possible level of *self-esteem* of the target group.

25. I feel very self-conscious about speaking the foreign language in front of other students

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Also in question 25 the focus is on the fear of a possible negative judgement by the peers, and consequently this questions aims at investigating in the state of discomfort in oral performances (stage fright) in FL situations.

26. I am afraid that the other students will laugh at me when I speak the foreign language

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

In question 26 there is once again, the focus on the *fear of negative evaluation* by the peers. Even in this case, the question allows to understand the relations between the single student and the group class.

27. It embarrasses me to volunteer answers in my language class

	1	2	3	4	5	
Strongly agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly disagree

Question 27 provides an overview research on two topics: the first one is the *fear of negative evaluation*, because the inquiry investigates in knowing how much tension there is between the single student and his or her peers; the second focus is on investigating on the level of *communication apprehension*, because the participant is asked about how much embarrassment there is if he or she has to volunteer in FL classes.

28. During language class I find myself thinking about things that have nothing to do with the course

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 28 is intrinsically linked with question 29, because both imply an escape from a possible source of anxiety and discomfort, which is represented by the FL class and environment. Question 28 wants to investigate in the possibility of a mental escape of a subject from the group class or from the lesson.

29. I often feel like not going to my language class

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

In question 29 the focus of investigation is on the level of stress perceived during the FL class, which could provoke in anxious students the avoidance of classes (sources of stress).

30. When I'm on my way to language class I feel very sure and relaxed

	1	2	3	4	5	
Never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

Question 30 is the reverse version of the previous question, and also in this case the research seeks to investigate the level of comfort or discomfort in FL students before the class, and also the degree of wellness of the student towards his or her class environment.

31. How did you find the questionnaire?

- very interesting
- partially interesting
- absolutely not interesting

Question 31, the last one, concludes the questionnaire, and it represents a good tool for me to have an immediate feedback on the liking of the questionnaire.

Before concluding this section dedicated to the tool of the research, it is worth reporting that the questionnaire did not seem to present any particular problem for its compilation, and the great part of the feedbacks were positive and showed interest towards the topic.

## 4. Data analysis and results

In this section the data of the FLCAS questionnaires will be presented in their bar-charts elaboration and then systematically analysed to seek to formulate a first plausible answer to the original research questions. The main interrogations of this dissertation wanted to investigate:

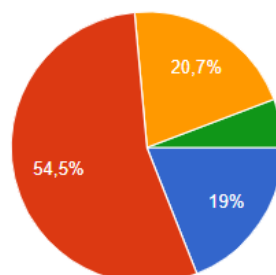
- a) the overall level of anxiety in FL class;
- b) the connection between anxiety and performances in FL situations;
- c) the quality of interpersonal interactions between students and teachers;
- d) the level of cohesiveness in the group class.

In the following part the reader will find the analysis of every section of the questionnaire and for each section the analysis of every question that composed it.

### 4.1 Introducing the context

The questionnaire began with a short introduction and presentation of the research and the first data to be asked to the participants was their age. It is worth reminding to the reader, that the age was not a vital element for the research, but only a data which would have helped me to contextualize the research. The pie-chart below shows the range of age of the interviewees and the result is that among 121 people, the 54,5 %, which is more than the half of the whole sample, has an age between 21 and 25 years old; the 20,7% has an age between 25 and 30 years old; the 19% has an age between 16 and 21 years old and the smaller percentage (5,8%) is older of 30 years old. This first data provides us a clear image of the sample who participated in the research; in fact, the higher percentage (54,5%) is eloquent, as it demonstrates that the majority of the participants were young learners, in their first years of their university life.

1. What is your age?

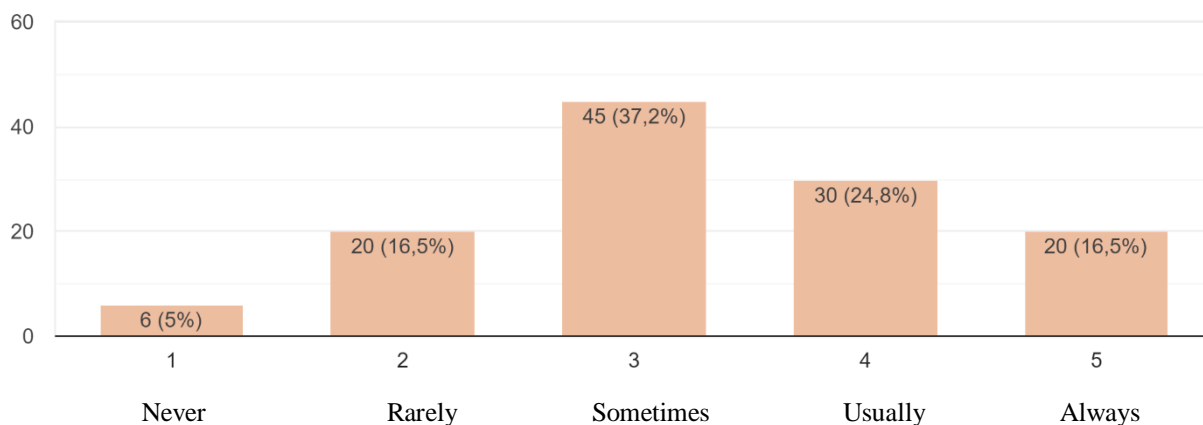




## 4.2 The connection between emotions and communication in FL classes

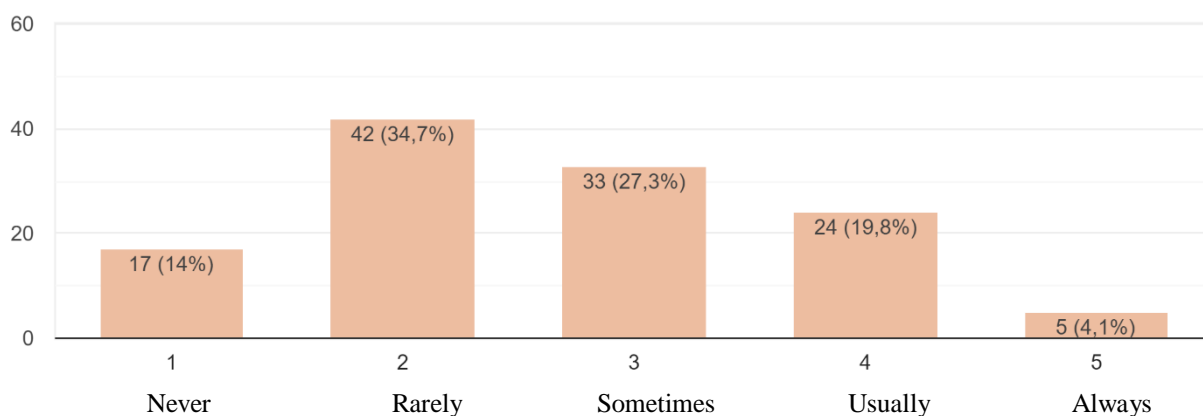
The following 13 questions (from question 2 to question 14) which compose the second section, will be analysed in the following lines. It is relevant to remind the reader that the main focus of investigation of this section of the questionnaire, was to carry out a research in the connection between affective factors and FL communication in class. In this portion of the questionnaire, the central aim is to investigate the *communication apprehension* and the intensity of anxiety present during FL classes.

2. I never feel quite sure of myself when I am speaking in my foreign language class



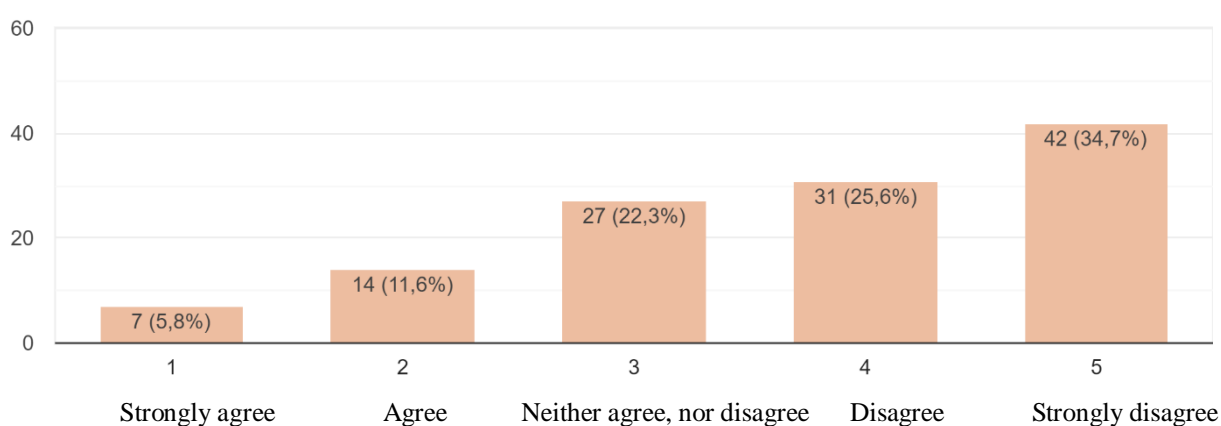
The second question sets the base for our research aim, and it was formulated to understand the level of *communication apprehension*, and more specifically of *oral-communication anxiety* in FL classes. From the chart it can be seen that when students are asked about their level of *self-confidence* in FL class speaking situations, the 37,2% answered that they feel sometimes quite unsure, the 24,8% stated that they usually feel not sure, the 16,5% found speaking situations unsure in rare occasions, the other 16,5% felt unsureness always present. It is apparent from this table that there is a light trend towards an *oral-communication anxiety*.

3. In language class, I can get so nervous I forget things I know



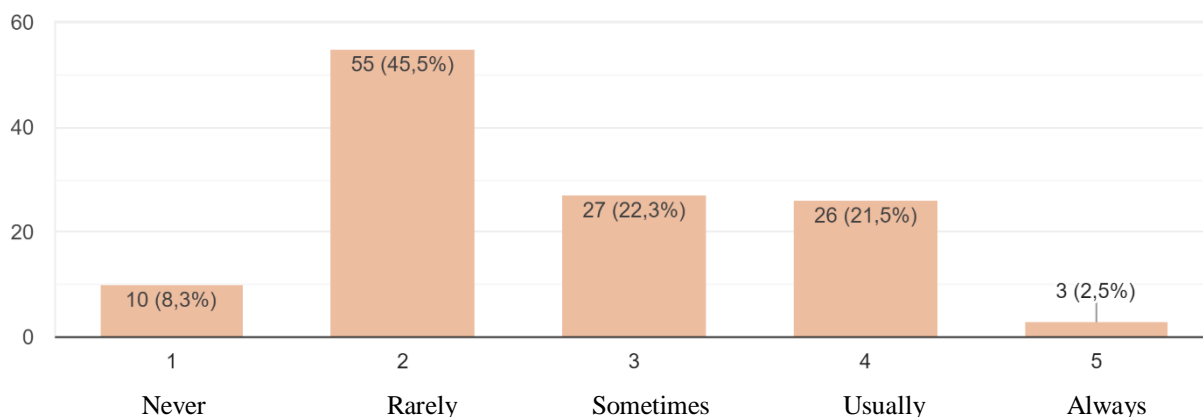
The table above presents the answers given to question 3, which aimed at investigating on a possible presence of *debilitating anxiety* in FL communicative environment. This chart is quite revealing in several ways. In fact, the 34,7% answered that they rarely forget things they know if they are nervous in language class; the 27,3% chose the option “sometimes”, the 19,8% answered “usually” and the 14% has never experienced the given situation; just the 4,1% of the people involved in the research admitted to have experienced *debilitating anxiety*. From the chart it can be seen that there is a presence of anxiety in FL class, but this seems to be not debilitating for the major part of the sample.

4. I don't understand why some people get so upset over foreign language classes



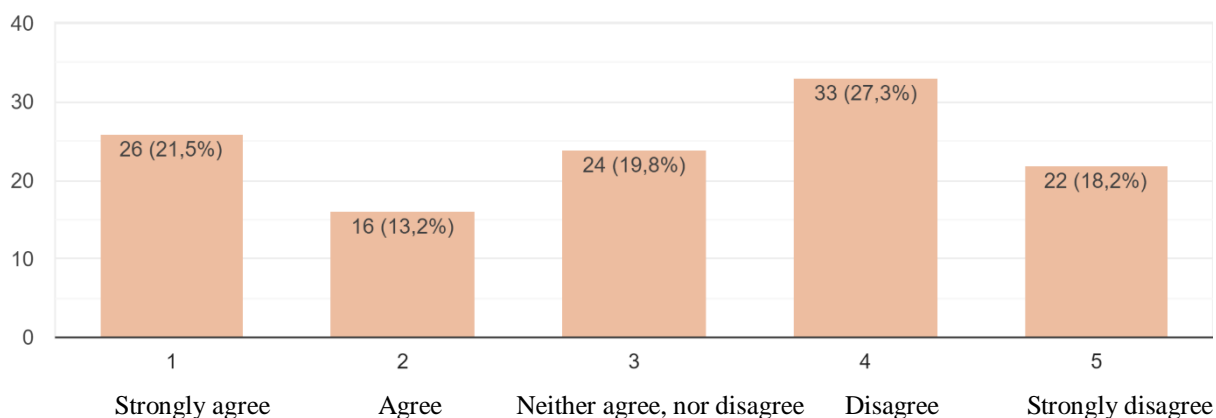
Question 4 aimed at investigating once again in communicative apprehension, and this table shows a clear trend of increasing towards the choice “strongly agree” where the percentage 34,7% is the higher. These increasing data seems to demonstrate that the empathy of the participants for their peers who are anxious towards FL classes is relevant.

5. I get nervous and confused when I am speaking in my language class



Question 5 aimed at investigating the presence of communication anxiety in FL classes. It is apparent from this table that very few chose the answer “always” (2,5%), demonstrating that the data seem to show a situation where *debilitating anxiety* has a low impact during FL speaking occasions; however the higher percentage (45,5%) “rarely”, followed by “sometimes” (22,3%) and “usually” (21,5%) appear to reveal that the presence of anxiety still be existing in class, even though not frequently.

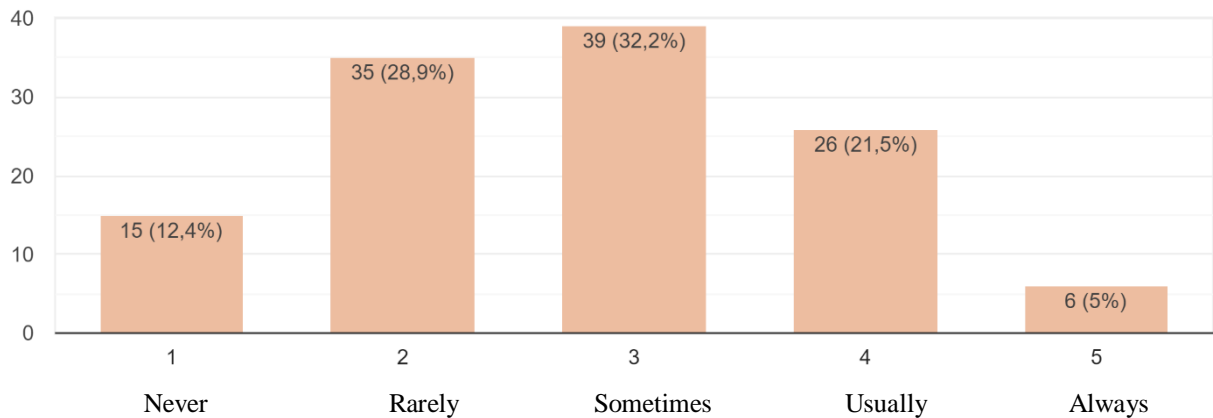
6. I feel more tense and nervous in my language class than in my other classes



In question 6 respondents were asked to indicate whether they tend to experience anxiety more often in FL classes than in other subjects. The data seem to show a general distribution of the answers, without particular peaks. However, if we give a closer glance to the bar-chart we notice that the most significant percentage is in the answer “disagree” with the 27,3%, and if we add up the results of

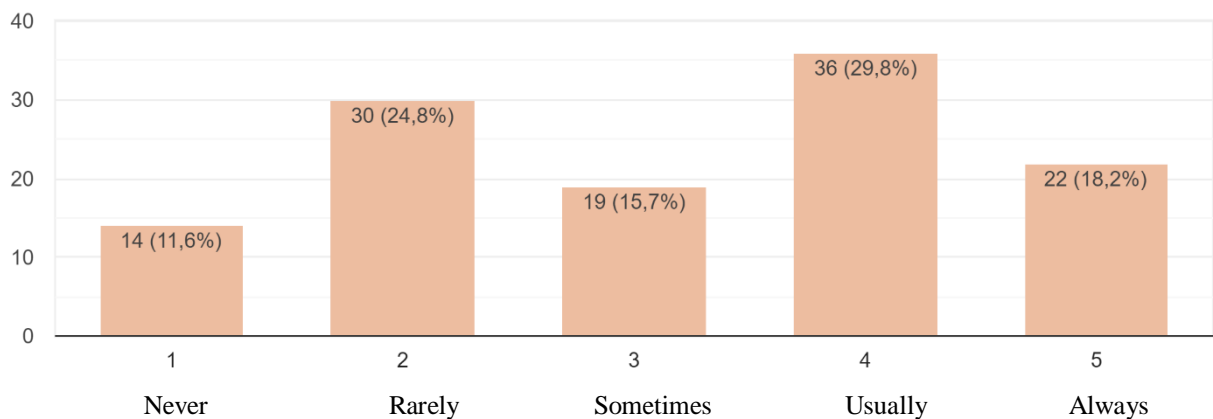
options “strongly agree” (21,5%) and “agree” (13,2%) we obtain a total of 34,7%, which in comparison to the total of the options “disagree” (27,3%) and “strongly disagree” (18,2%), which is 45,5%, a possible final consideration appears to that there is a light trend towards people who disagree with this statement. As a consequence, it may be that the sample has no tendency to show *situational anxiety* in FL class occasions.

7. I feel confident when I speak in foreign language in class



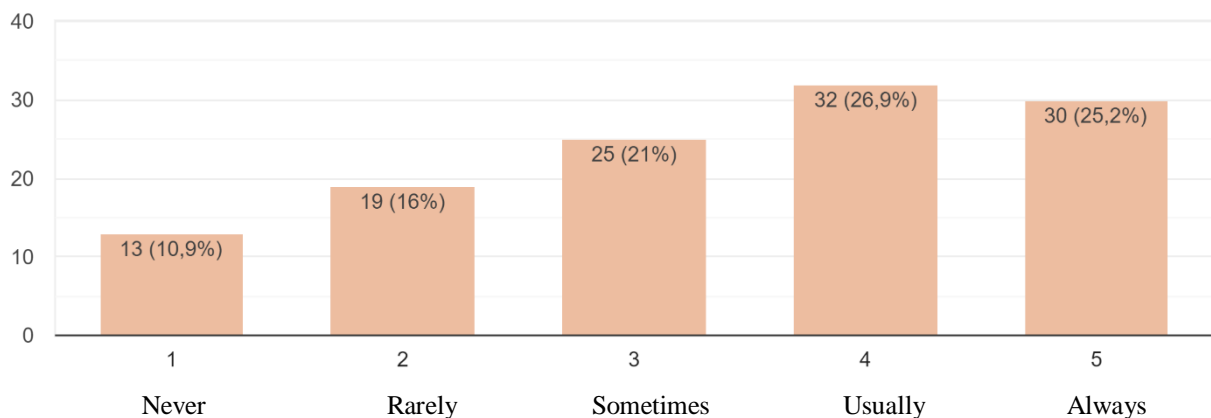
Question 7 has its focus on the concepts of *self-confidence* and *communicative apprehension*. The table above shows the most significant data in the response “sometimes” (32,2%) but it appears to be a clear trend towards the choices “rarely” (28,9%) and “never” (12,4%), which seems to demonstrate that there is a significant tendency to a general low intensity of *self-confidence*. This statement seems to be confirmed by the low percentage of participants who stated to be *self-confident* (5%).

8. I tremble when I know that I’m going to be called on in language class



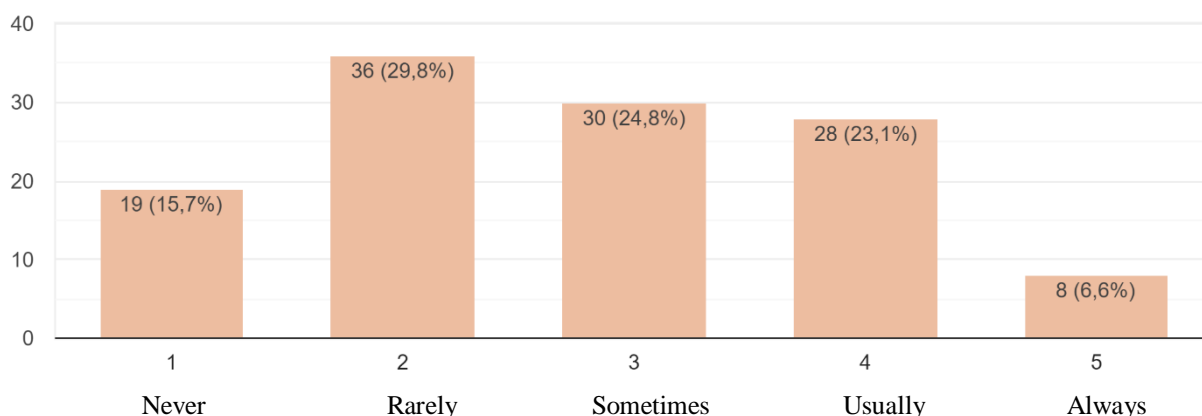
Question 8 aimed at investigating the level of *stage fright* in FL situations. From the data in the chart above, we can see that students tend to be nervous in FL speaking situations; in fact, the most significant data is the response “usually” (29,8%). What is interesting in this table is that there is a tendency to *stage anxiety*, evident in the comparison between two totals which are 36,4% (addition of “never” and “rarely”) and 48% (addition of “usually” and “always”).

9. I feel my heart pounding when I'm going to be called on in language class



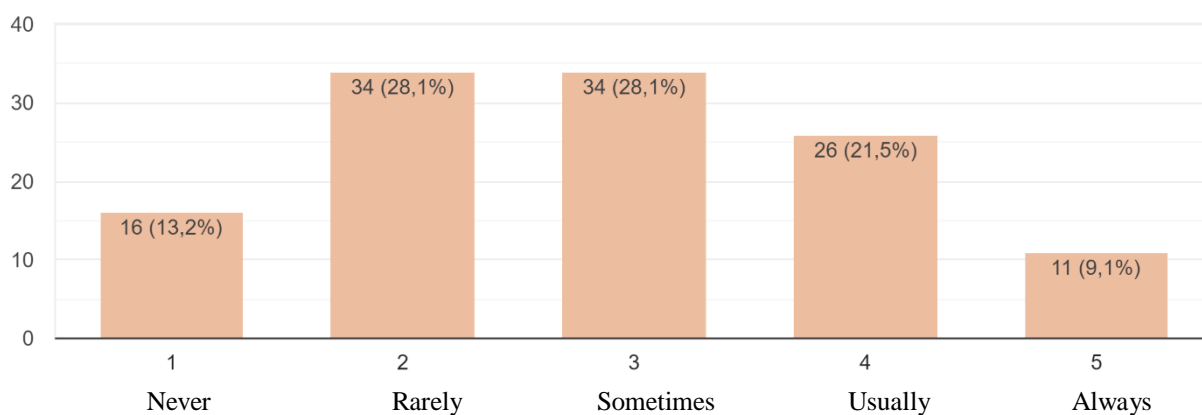
Question 9, together with question 8, has the same aim, which is investigating the presence of anxiety in communicative situations. This table is quite revealing, as it seems to confirm the data collected in the previous question 8. In fact, if we look at the chart, there is an eloquent tendency towards the percentages (“usually” 26,9%, and “always” 25,2%) which seem to validate the presence of anxiety in situations of FL communication.

10. It frightens me when I don't understand what the teacher is saying in the foreign language



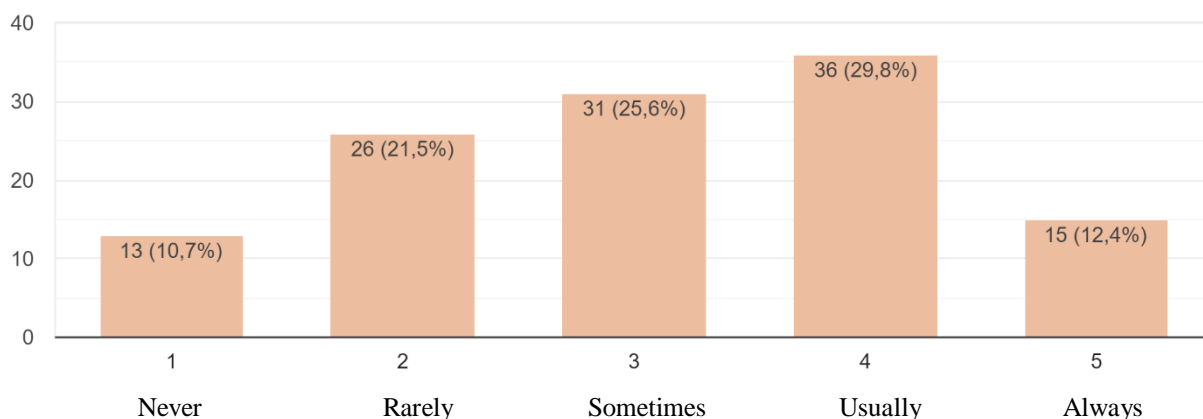
Question 10 focuses on *communicative apprehension*, but more specifically aims at investigating if students experience the so-called *receiver anxiety*. The results, as shown in the bar-chart above, indicate a general trend towards a low presence of this kind of anxiety. In fact, the most relevant percentage (29,8%) of the sample answered that they “rarely” have experienced *receiver anxiety*. However, there is a 23,1% who answered “usually” and a 24,8% who answered “sometimes”.

11. I get nervous when I don't understand every word the language teacher says



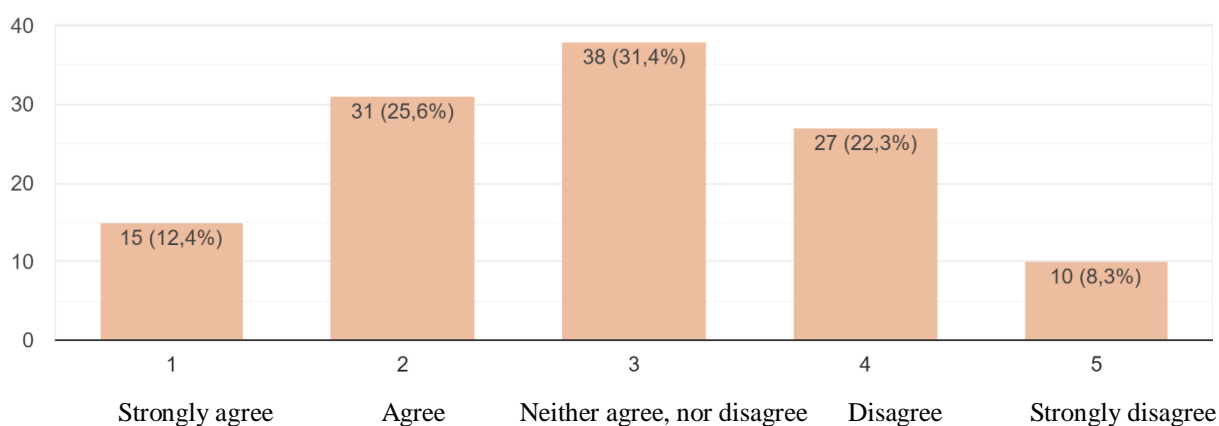
Questions 10 and 11 are very similar as they deal with *receiver anxiety*, and also with a possible connection between teacher and source of anxiety. What is interesting in this data, is that question 11 seems to confirm the data of question 10. In fact, from the chart it can be noticed that there is a tendency (“never” 13,2%. “rarely” 28,1%) not to manifest *receiver anxiety* for a great part of the sample. On the contrary, just the 9,1% of the interviewees manifest “always” anxiety in language receiving situations.

12. I get upset when I don't understand what the teacher is correcting



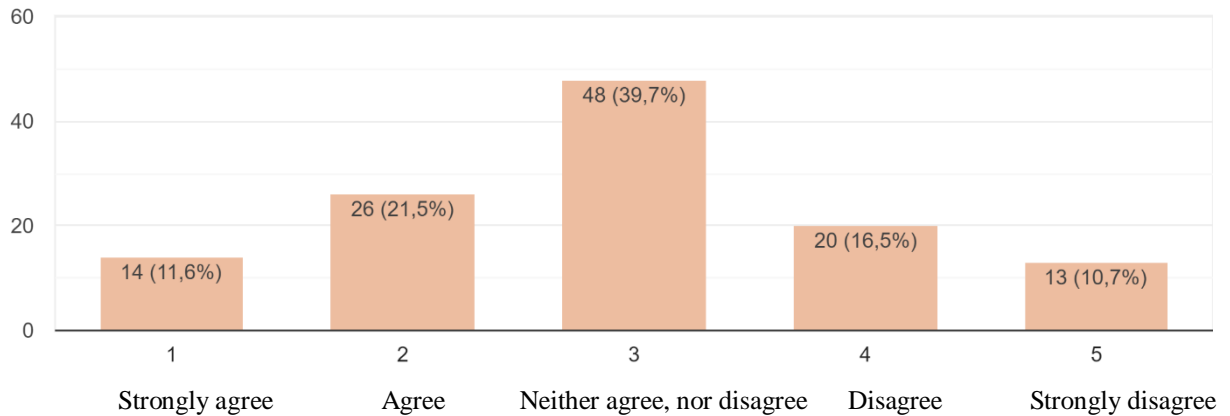
Also question 12 aims at researching a possible presence of *receiver anxiety* in students. What is interesting in these data, is that question 12 seems to reject the previous two bar-charts data. In fact, in this case it appears to be a tendency towards the presence of receiver anxiety in students: this can be seen in the peak of the chart, represented by the response “usually” (29,8%).

13. I would not be nervous speaking the foreign language with native speakers



Question 13 aims at investigating if FL anxiety is something connected to the class environment, or if it is general. From the chart we can see that there is not a strong stance towards the topic, as the higher peak of the responses can be found in the neutral choice “neither agree, nor disagree” (31,4%). However, from the table above, it can be seen that more people stated that they would be more confident with native speakers (38%, if we add up “strongly agree” 12,4%, and “agree” 25,6%), than the people who stated the contrary (30,6%, if we add up “disagree” 22,3%, and “strongly disagree” 8.3%).

14. I would probably feel comfortable around native speakers of the foreign language



Question 14 is similar to question 13, and it seems to confirm the previous data. In fact, once again the sample does not seem to show a strong decision towards the topic. Similarly to question 13, the majority of the interviewees answered “neither agree, nor disagree” (39,7%), while there are more people who seem to be more confident in native speaker environment (33,1 %, if we add together “strongly agree” 11,6%, and “agree” 21,5%) than people who affirm the contrary (27,2% if we add together “disagree” 16,6% and “strongly disagree” 10,7%).

The data of this second section show that, as regards the investigated target group, *communication apprehension* seems to be confirmed in FL class environment. More specifically this kind of apprehension appears to manifest through *oral communication anxiety* and *stage fright* but fortunately this state of tension seems not to represent a *debilitating anxiety* situation. This last data is confirmed by questions 3 and 5. As regards *receiver anxiety* questions 10 and 11 seem to demonstrate a low level of this kind of tension, even though this information appears to be partially discarded by question 12. Moreover, as regards the type of anxiety present in FL situation, the data may lead to the hypothesis of a *non-situational anxiety* in the class environment. Lastly in questions 13 and 14 the sample show a slight tendency to show less tension in FL production when in native speakers’ environment.

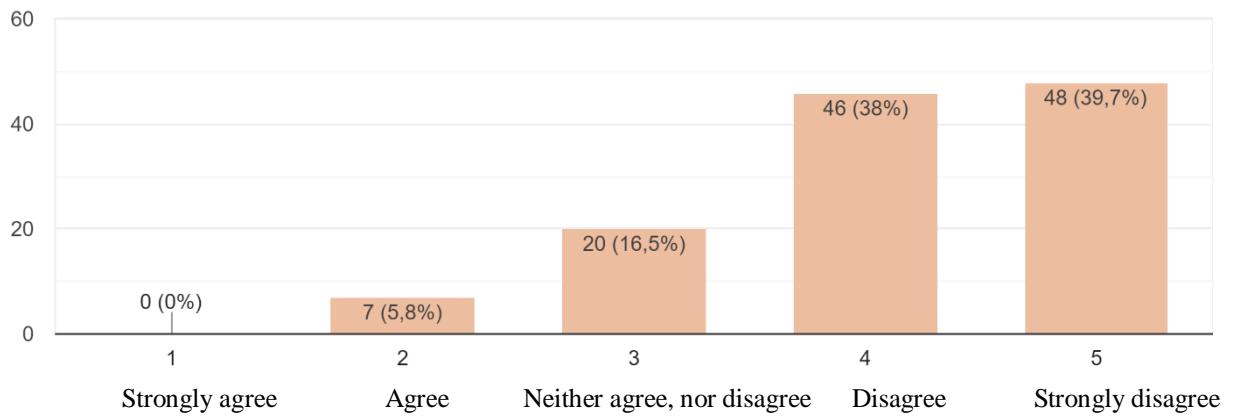
### 4.3 The connection between emotions and testing (oral and written) situations

If in the previous section the focus was on investigating in the possible presence of anxiety in communicative FL situations, in this third section we will analyse the data about anxiety in *testing situations*, both oral and written, that is when the single has to perform by using the FL. This section



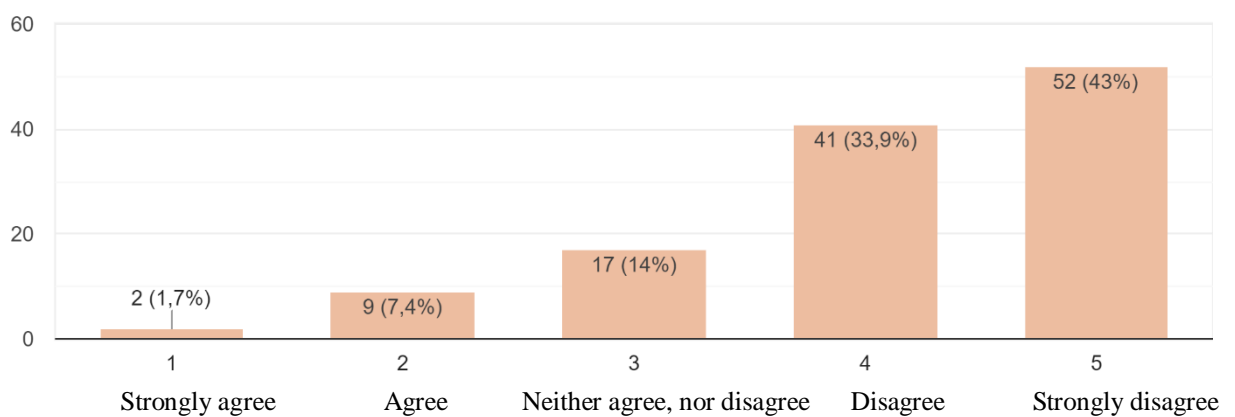
seeks also to research if a possible presence of anxiety could represent an obstacle for the correct cognitive mechanisms of the brain.

15. I don't worry about making mistakes in language class



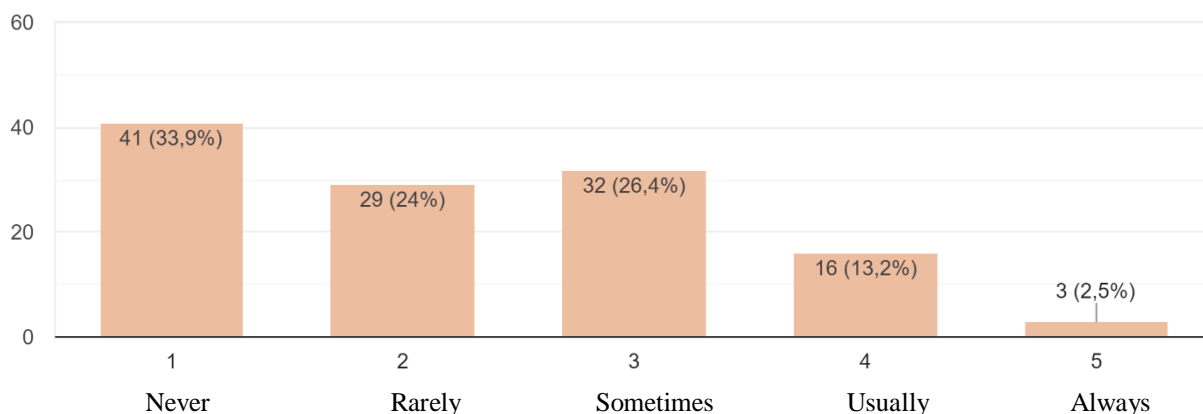
Here a striking result emerges from the bar-chart: there is an increasing trend towards the response “strongly disagree” (39,7%), while people who agree are the 0%. This data seems to show that errors are a relevant source of worry in FL students.

16. I [don't] worry about the consequences of failing my foreign language class



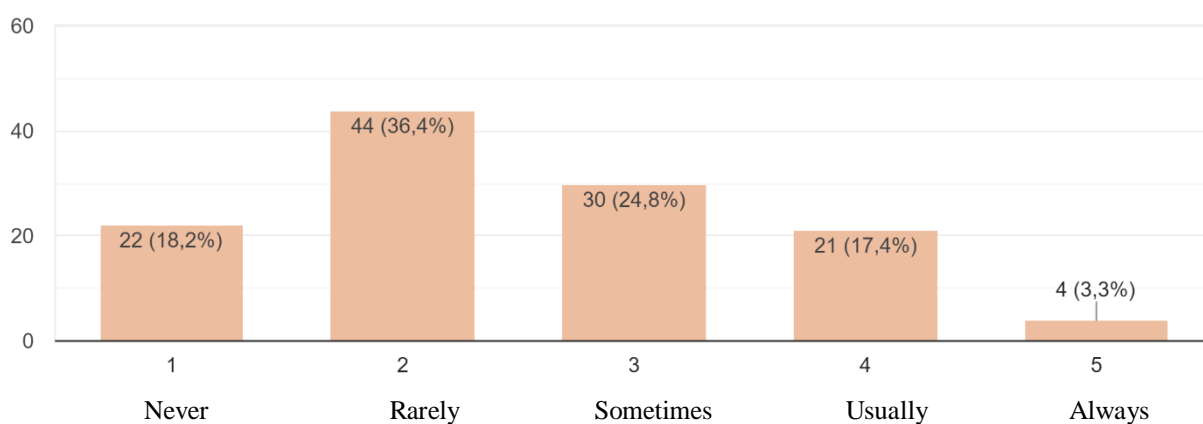
Question 16 seems to confirm the data collected in the previous question. The trend is more or less the same, and the results appear to suggest that learners are importantly concerned about *fear of failure*, which represents a source of (test) anxiety.

17. I don't feel pressure to prepare very well for language class



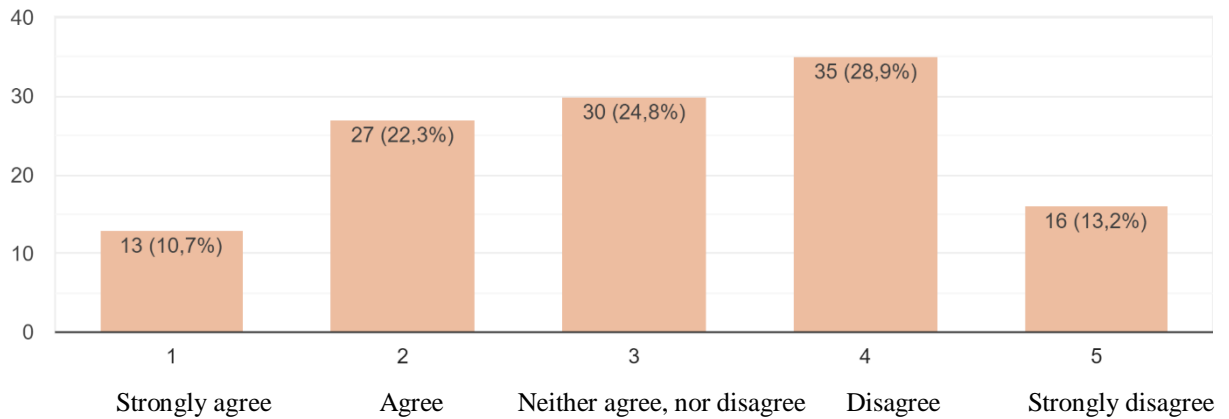
In question 17 respondents were asked to indicate whether they experience anxiety or pressure, when they have to prepare for a FL test. The overall response seems to confirm once again the data collected in the first two questions of this third section; in fact, the 33,9% of the respondents (the higher percentage) admitted to feel pressure before a test, and the other data of the bar-chart can be read as a general decreasing of the responses towards a 2,5% who stated that they do not feel tension before a test.

18. The more I study for a language test, the more confused I get



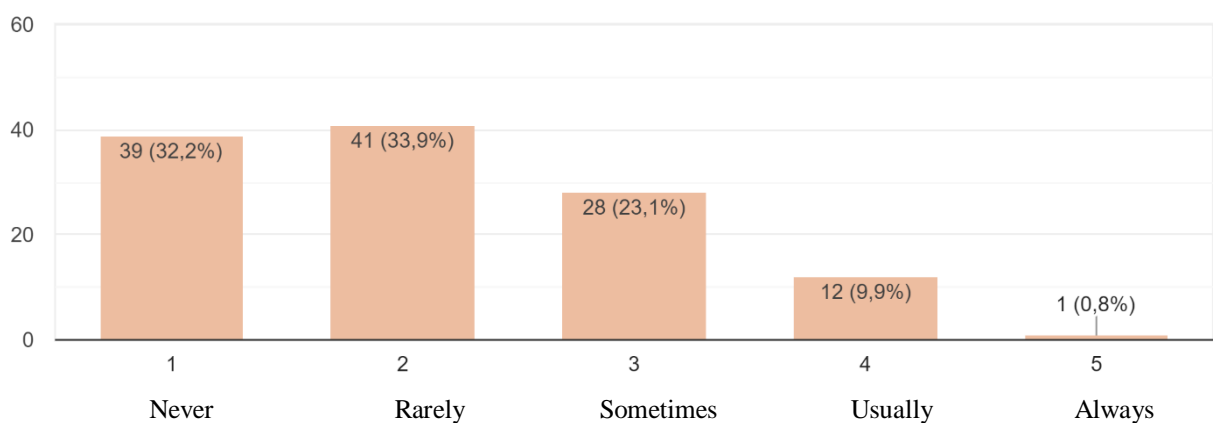
In response to the question 18, the majority of people involved in the sample (36,4%) chose the option “rarely”, the 18,2% the option “never” and the 24,8% the option “sometimes”. This data seems to suggest that anxiety is present but not debilitating for the great part of the target group. In fact, just few people (3,3%) admitted to be so concerned about language tests, to forget things they know.

19. I feel overwhelmed by the number of rules I have to learn to speak a foreign language



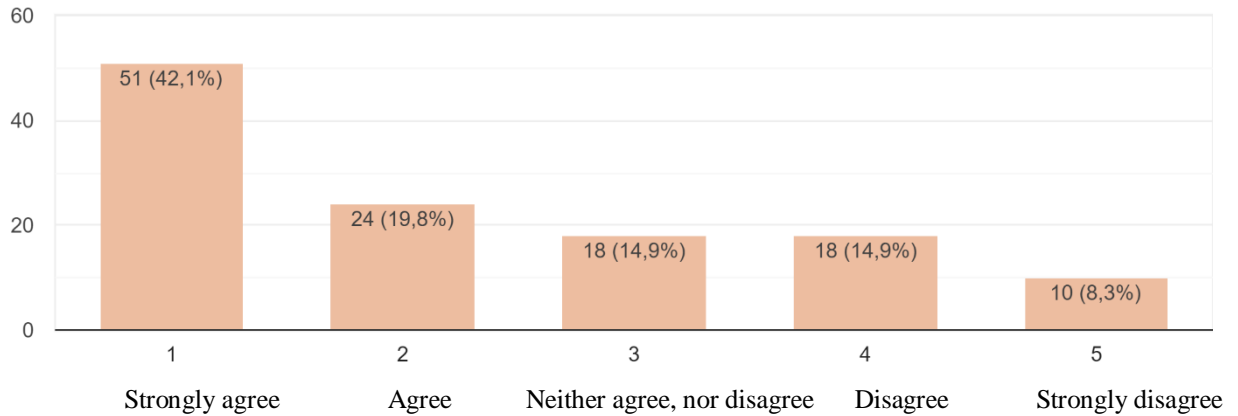
In question 19 the people involved in the target group were asked to indicate whether they feel overwhelmed by the number of rules of a FL. The 28,9% of the respondents chose “disagree” together with a 13,2% who stated “strongly disagree”. The sum of these two results provides us a 42,1% of people who do not feel so stressed as regards linguistic rules; however, there still be significant 22,3% of people who answered “agree” and a 10,7% who responded “strongly agree”. The sum of these two last data is 33% of learners who tend to be concerned about linguistic rules. In general, the tendency seems to show a light presence of *test anxiety*.

20. I am usually at ease during tests in my language class



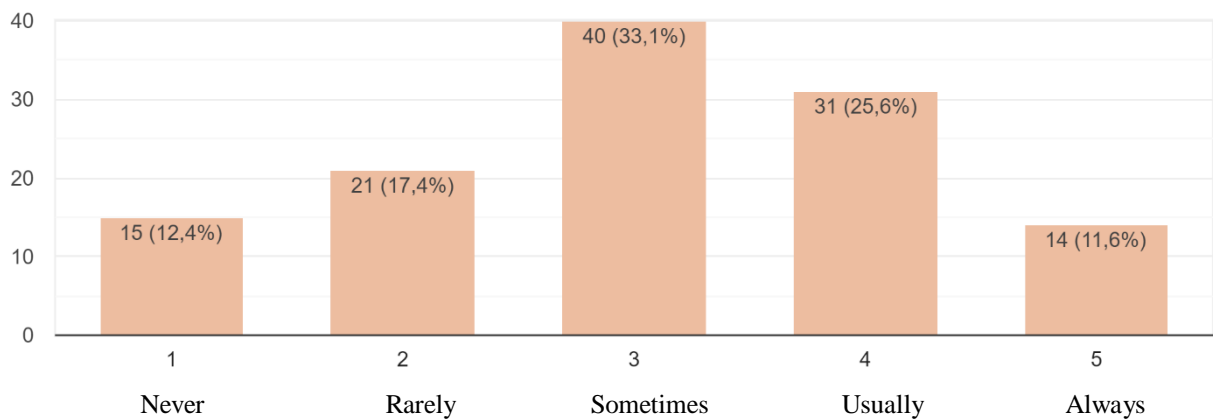
In this question the respondents were asked to provide information about their anxiety during FL tests. This table is quite eloquent, since the most relevant results show that the 32,2% answered “never”, the 33,9% answered “rarely” and just a 0,8% chose the option “always”. This bar-chart seems to confirm the theory, encountered in the previous tables, of a presence of anxiety in testing situations.

21. Even if I am well prepared for language class, I feel anxious about it



Interestingly, the reader can see that the general idea of a presence of anxiety in testing situation is once again confirmed by the bar-chart above. In fact, the major part of the respondents (42,1%), who were asked about the presence of anxiety even if they are well prepared, chose the option “strongly agree”.

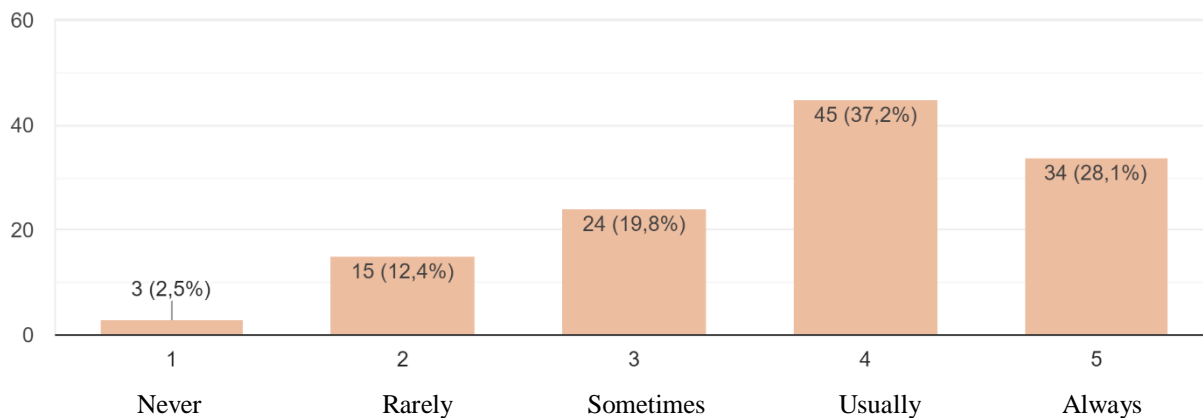
22. I am afraid that my language teacher is ready to correct every mistake I make



In question 22 the focus was on the investigation of testing anxiety connected to the figure of the instructor as a possible source of tension. As regards the sample, the 33,1% answered that they sometimes feel pressure for a possible error correction by the instructor; the 25,6% answered that they usually feel pressure; the 17,4% rarely experience similar situations, the 12,6% have never felt pressure for the correction of mistakes and the last 11,6% admit to feel always tension. The picture

that seems to emerge from this chart, is that the teacher could be a possible source of tension for the students.

23. I get nervous when the language teacher asks questions which I haven't prepared in advance



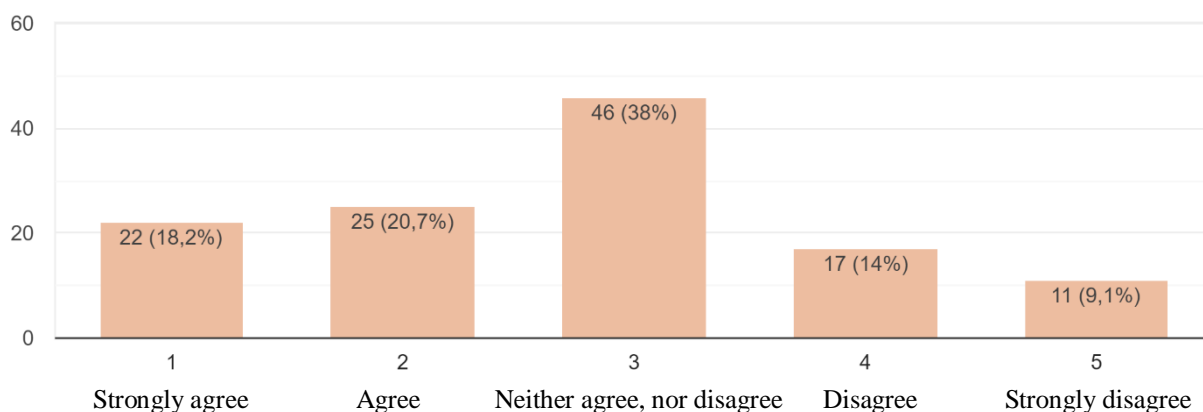
This last bar-chart of the section dedicated to the connection between affective factors and testing situations, appears to be coherent with the previous tables. Respondents were asked whether they get nervous when the language teacher asks them questions which they haven't prepared in advance. The most two significant values are the 37,2 % who answered "usually" and the 28,1% who answered "always".

This third section of the questionnaire aimed at investigating on a possible presence of anxiety in testing situation. Overall, the results seem to indicate that anxiety is present in learners during testing situations, as confirmed by the bar-charts of questions 15,16,17, 20 and 21. However, the anxiety appears to be not debilitating, as confirmed by questions 18 and 19, and questions 22 and 23 show that a possible source of anxiety could be represented by the teacher.

#### 4.4 The connection between emotions and interpersonal interactions

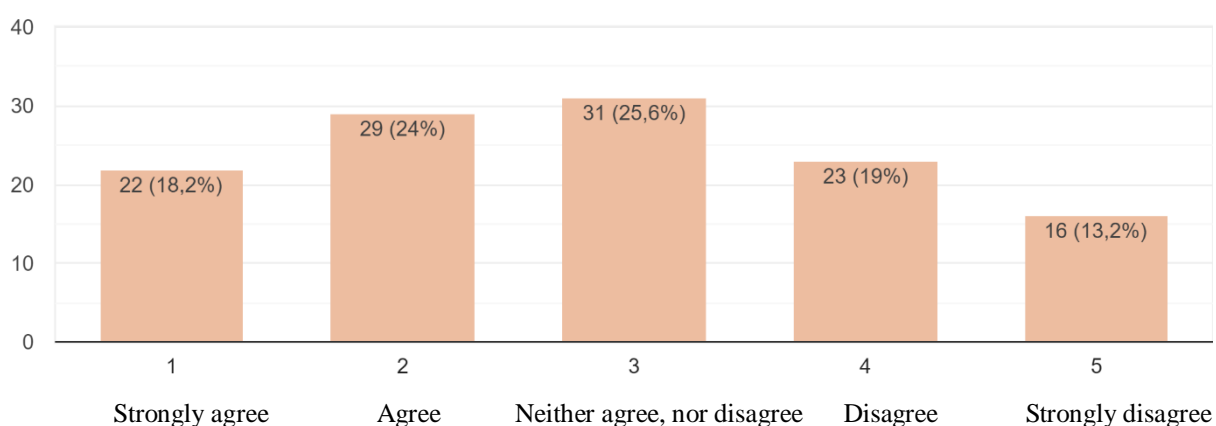
After having analysed an important core of the main investigation of this research paper, the last section of the questionnaire is dedicated to the investigation of the nature of the interpersonal relations in the FL environment. The analysis of the following eight questions will seek to provide the reader a general overview of the atmosphere present in the FL environment of the target group. The last question, as already stated before, aims at providing a feedback on the quality of the questionnaire, and to understand if the sample appreciated it.

24. I keep thinking that the other students are better at language than I am



In this first question of the third section, respondents were asked to think about their impression (as regards FL) of their peers. The results are interesting, as the 38% of the sample chose the neutral option “neither agree, nor agree”, but the 18,2% chose “strongly agree”, and the 20,7% chose “agree”, while just a small percentage (14% with “disagree” and 9,1% with “strongly disagree”) have a different idea on their class environment. From this first results the majority of the sample appears to be provided with a low level of *self-confidence*, fearing a possible negative judgement by the other students who compose the group class. This elements, low *self-confidence* and fear of judgement, may increase the level of anxiety in the single student.

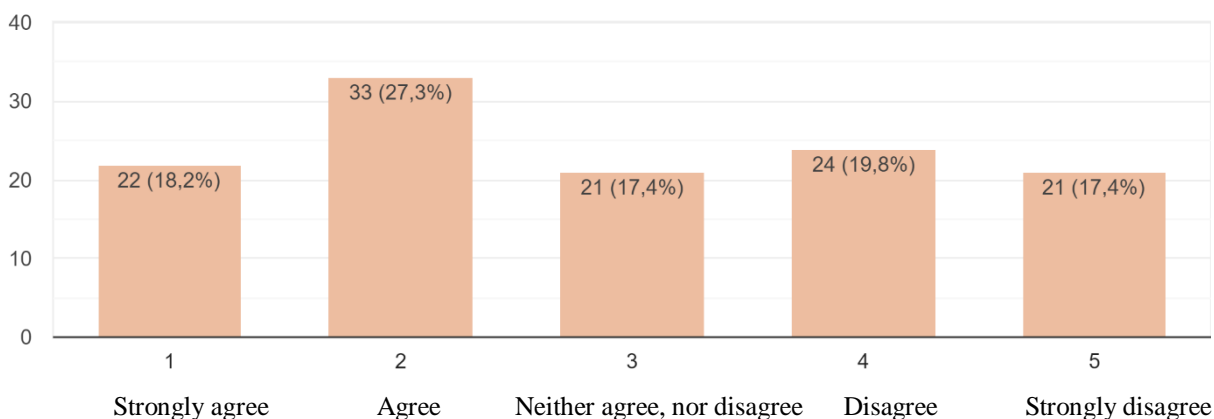
25. I feel very self-conscious about speaking the foreign language in front of other students



Question 25 required respondents to give information on their level of self-consciousness in FL speaking situations. In this case the focus is on the fear of a possible negative judgement by the peers and on states of anxiety which can damage an oral performance. The level of discomfort is present

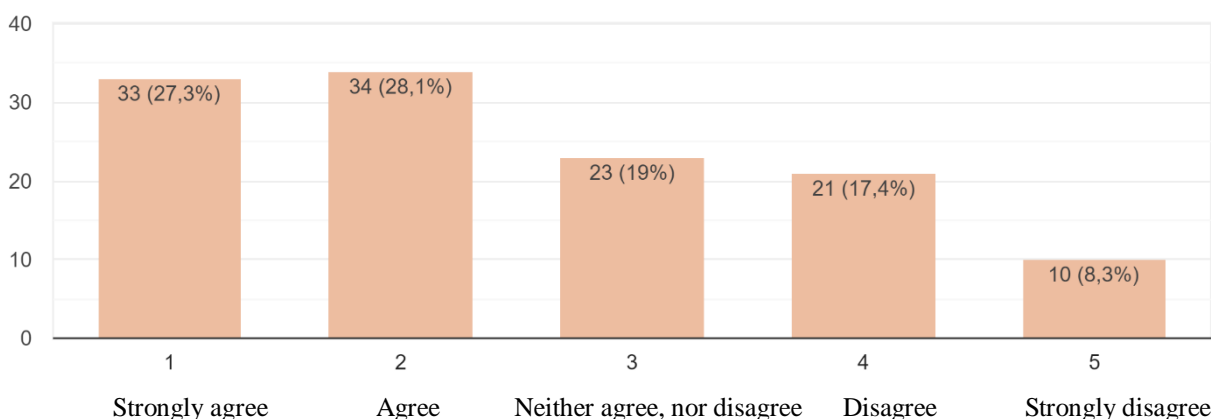
but it appears not to be excessive and consequently damaging. In fact, the 25,6% of the target group answered “neither agree, nor agree”; the 18,2% “strongly agree”, and the 24% “agree”; the 19% “disagree” and the 13,2% “strongly disagree”.

26. I am afraid that the other students will laugh at me when I speak the foreign language



In question 26 the target group was asked about their relations with the peers in FL class. What is interesting in this data is that the 27,3% of them answered “agree” and the 18,2% answered “strongly agree”. The overall idea which seems to be represented by these data is that for the majority of the sample, the oral FL performance is seen as a threatening situation and the group class seems to represent a source of *fear of negative evaluation*, and consequently anxiety.

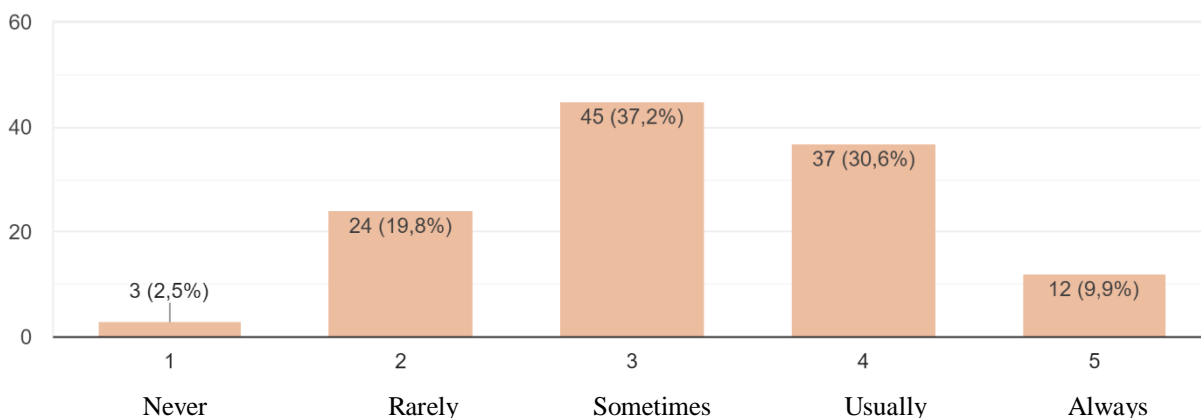
27. It embarrasses me to volunteer answers in my language class



In question 27 students were asked once again to think about their FL oral situations in class; more specifically this question aims at investigating in possible situations of *communicative apprehension*

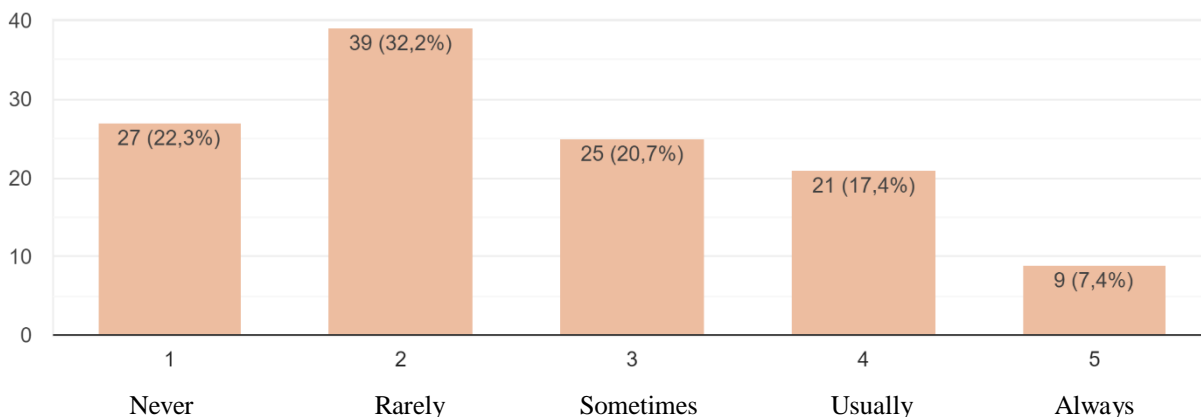
and *fear of negative evaluation* by the other peers. The bar-chart above shows that a relevant amount of the respondents chose the options “strongly agree” (27,3%) and “agree” (28,1%), while very few of them (8,3%) answered “strongly disagree”. From the chart it seems to appear a situation of general discomfort and anxiety in participating actively in FL classes. This data could be linked to the previous question 26, and the overall level of embarrassment could be justified (also) by the presence of a general *fear of negative evaluation*.

28. During language class I find myself thinking about things that have nothing to do with the course



Question 28 aims at investigating in the presence of a possible source of anxiety which could invite the students to mentally escape from the threatening situation. The most relevant results are “sometimes” (37,2%) and “usually” (30,6%), which seem to reveal a presence of anxiety in class, even if we have to bear in mind that a mental escape could be also triggered by a situation of uninterest or boredom.

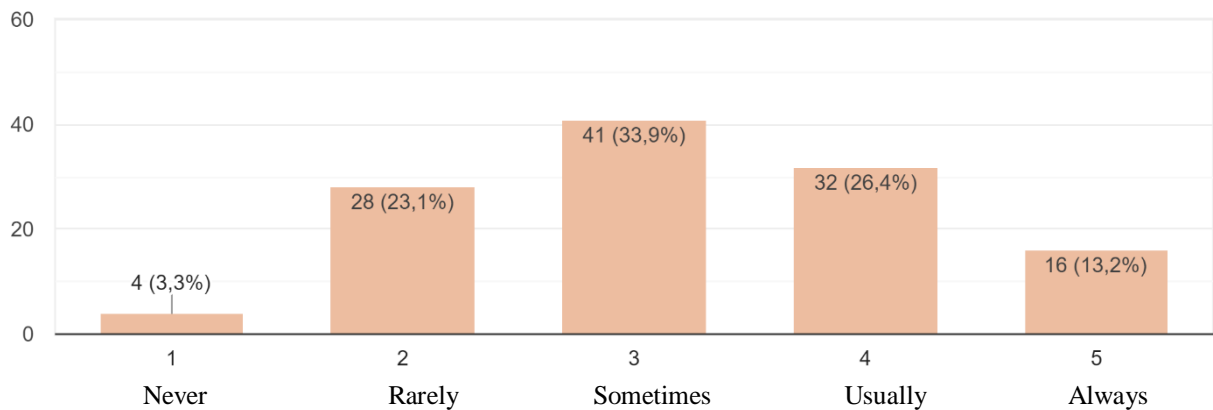
29. I often feel like not going to my language class





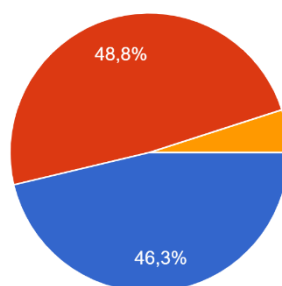
Horwitz (1986) stated that “anxious students may [...] in some cases skip class entirely in an effort to alleviate their anxiety”; in fact, question 29 aimed at investigating if students of the target group considered the FL environment as a possible source of anxiety. From the chart it can be seen that the two most relevant data are “rarely” (32,2%) and “never” (22,3%), while just the 7,4% answered “always”. This data gives us a possible interpretation, that is that the majority of the students tend not to skip class, and this could be read as a positive data as regards anxiety. However, this possible statement could have an implication, which is that in most of the cases classes are compulsory (both in high school and at university) and this element could have influenced in the answers.

30. When I’m on my way to language class I feel very sure and relaxed



The last “real” question of our questionnaire investigated in the feelings of the students before the FL classes. The overall results are that the higher amount of the sample answered “sometimes” (33,9%), the second higher percentage is “usually” (26,4%) while just the 3,3% stated that they “never” go to class very sure and relaxed. The results suggest that there is no anxiety in going to the FL class, and this could be seen as a positive element of the class atmosphere.

31. How did you find the questionnaire?



The last chart, not relevant for the final aim of our research, shows that the questionnaire was found “very interesting” (blue section) by the 46,3% of the sample, and “partially interesting” (red section) by the 48,8% of the target group. Overall, it seems that the investigation was enjoyed by almost the totality of the sample.

Taken together the results seen in this last section, suggest that the atmosphere in class presents a level of anxiety, which seems to be not excessive. In particular, questions 25,26 and 27 indicate that students generally experience discomfort when they have to perform in front of the class, and they fear the negative judgement of their peers. Question 28 shows that learners often escape from the class with their mind and thoughts, but the possibility that this effect could be provoked by anxiety seems to be discredited by the last two questions, whose results indicate that students do not perceive FL lessons as a source of anxiety.

## ***Conclusion***

The present study was set out to determine the effects of psychological aspects in language learning, in particular to focus the research section on one main affective factor which is anxiety, and its possible consequences on the acquisitional and cognitive processes of the reader.

In the chapters concerning the first theoretical part, this research paper has sought to provide the reader with an overall acknowledgement on the literature related to the neurolinguistic and psychological mechanisms of the human brain during linguistic acquisition. More specifically, we have seen how memory works, and how much impact have affective aspects in the functioning of mnemonical processes. In fact, memory has revealed to be extremely sensitive to the affective factors, and in particular to negative emotions, which can hinder the process of storage and retrieval of information in or from the *long-term memory*. Furthermore, we focused our attention on another main point of the research, that is Krashen's theory of SLAT and the concept of *affective filter* and its implications in language acquisition. This research has also determined the concept of a relevant affective factor in language learning environment, which is anxiety. After having seen a possible definition and the possible sources of this emotion, we have focused on the connection between it and linguistic performances. The study has also shown that anxiety is not always to condemn, because, if controlled it could reveal a facilitating element for a good performance. The last section of the first theoretical part was dedicated to another key aspect when we deal with affective factors in language learning, which is motivation. The main aim of this first part of the research paper, not only was to provide a general acknowledgement on the literature about affective aspects in language learning, but also to be a support on which to base the research findings of the practical section.

The purpose of the questionnaire of research, based on the FLCAS model, was to determine if anxiety was present in language learning environments, and if present, its possible implications in language acquisition and performance. More specifically, the main aspects that the questionnaire sought to research in the target group were:

- a) the overall level of anxiety in FL class;
- b) the connection between anxiety and performances in FL situations;
- c) the quality of interpersonal interactions between students and teachers;
- d) the level of cohesiveness in the group class.

As regards the first interrogative, after a deep analysis of the data collected through the questionnaires, the results of this study showed that anxiety seems to be present in FL class, particularly in situations

of communication, performance and testing. However, some positive results of the research appear to indicate that the level of anxiety is not debilitating, on the contrary it seems to be facilitating.

As regards the second question of the research, the study seems to show that anxiety is present in situations where performance (oral and written) is required, but the affective factor appears to be not a possible threat for the learner capability of performing, since the results seem to confirm that anxiety is a controllable factor. However, the learners of the sample seem to show a low level of *self-confidence* in class, and to present anxiety above all in situations of oral performances. Moreover, the results appear to indicate that students are also concerned about the *fear of failure* in their performances.

Concerning the third and fourth questions, which aimed to investigate in the quality of interpersonal interactions in class and the level of cohesiveness of the group class, we can generally state that the overall atmosphere in class seems to be good and positive, even though a level of anxiety (not debilitating) is present; more specifically, a possible source of anxiety seems to be represented by the FL teacher, who is generally connected to other factors of anxiety, such as tests or performances, which we have seen to trigger level of tension and discomfort in students.

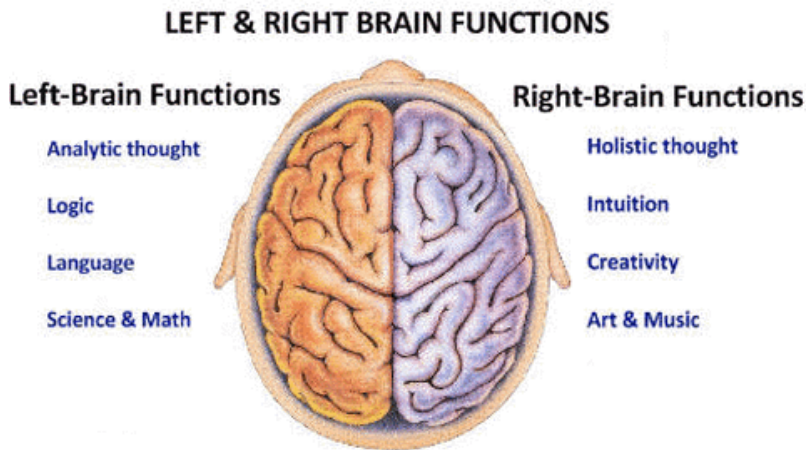
As regards the level of cohesiveness in class, the findings of this study seem to suggest a presence of a certain level of *fear of negative judgement*, which is that students seem to be worried about what their peers could think or say about their FL performances.

All in all, a first possible suggestion to decrease the level of anxiety in FL class, could be the adoption of specific policies which aim to boost the level of motivation and consequently *self-confidence* in learners; a second recommendation, could be a general enhancement of the interpersonal interactions between the students in the FL class; in fact, as we have seen, an atmosphere of trust, tolerance and cohesiveness, can have a strong and a positive influence on the creation of feelings of *self-confidence*, *self-efficacy* and encouragement, which are fundamental factors which concur in the creation of a low-anxiety FL learning environment, where acquisition is more likely to take place.

Concluding this current study has investigated how anxiety is implicated in only a sample of FL learners, but it would be interesting to assess the presence of anxiety and its effects in other contexts, involving more classes and learning situations. The topic of anxiety is not only interesting, but also useful to have a right approach with the teaching and also the learning. For this reason, a strong recommendation for further studies on the topic is highly recommended.

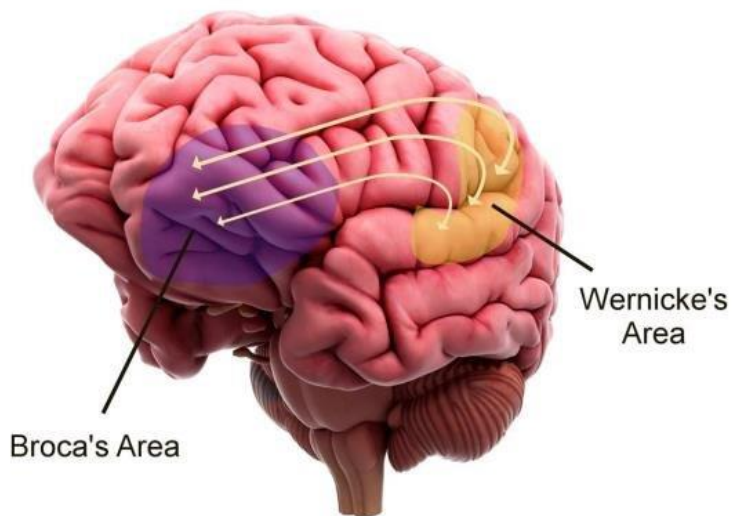
## Appendix

*Figure 1.* The principle of bimodality



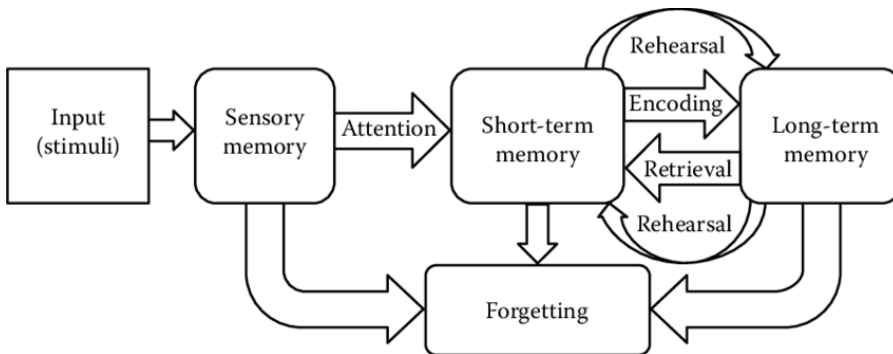
Source: [www.humanbiologybrain.weebly.com](http://www.humanbiologybrain.weebly.com)

*Figure 2.* Broca's and Wernicke's areas in the human brain



Source: [www.researchgate.net](http://www.researchgate.net)

**Figure 3.** Atkinson and Schiffrin's Model of Human Memory



Source: [https://www.researchgate.net/figure/Atkinson-and-Shiffrin-memory-model-From-Atkinson-R-C-and-Shiffrin-R-M-Th\\_fig1\\_299456892](https://www.researchgate.net/figure/Atkinson-and-Shiffrin-memory-model-From-Atkinson-R-C-and-Shiffrin-R-M-Th_fig1_299456892)

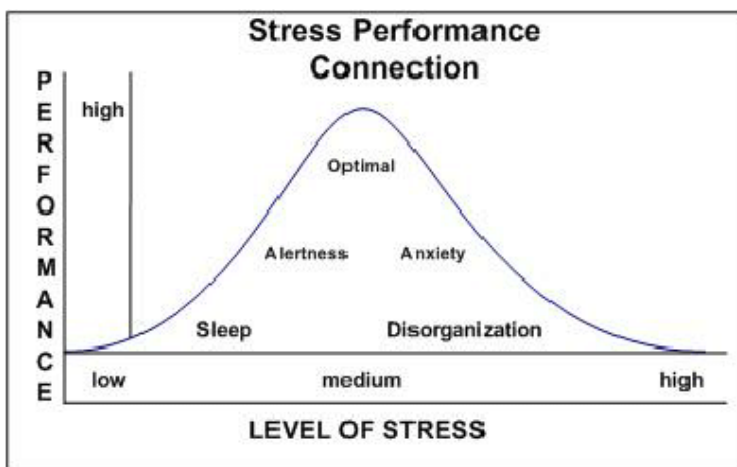
**Figure 4.** How and what we store items in our memory

Normalmente si ricorda:

- il 10 % di ciò che si legge
- il 20 % di ciò che si ascolta
- il 30 % di ciò che si vede
- il 50 % di ciò che si vede e si sente
- il 70 % di ciò che si discute con gli altri
- il 80 % di ciò di cui si ha diretta esperienza
- **il 95 % di ciò che si spiega ad altri**

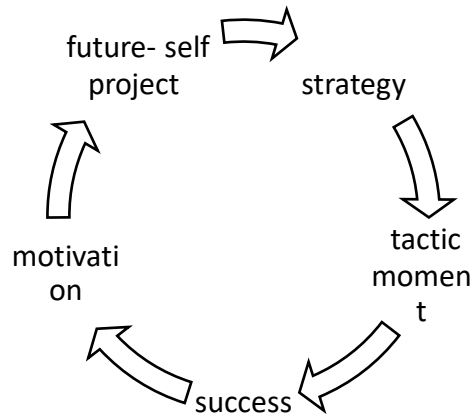
Source: <https://it.scribd.com/document/221041389/Didattica-BES-Baschiera-Barbara>

**Figure 5.** Stress Performance Connection. Yerkes Dodson Law Model



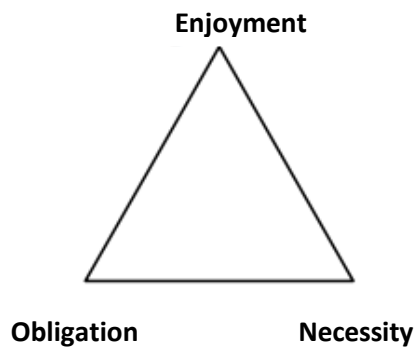
Source: [https://www.researchgate.net/figure/Yerkes-Dodson-Law-modeled-as-U-shaped-Curve-When-the-stress-level-is-low-the\\_fig1\\_221586428](https://www.researchgate.net/figure/Yerkes-Dodson-Law-modeled-as-U-shaped-Curve-When-the-stress-level-is-low-the_fig1_221586428)

**Figure 6.** Model of motivation as a self-generating system proposed by Titone



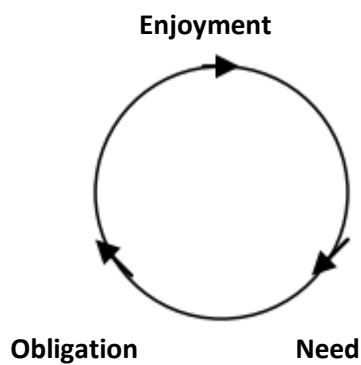
Source: personal elaboration of the literature

**Figure 7.** The tripolar model proposed by Balboni



Source: BALBONI P. E. 2008, *Una scienza dell'educazione linguistica basata sulla teoria dei modelli*, in A. MOLLICA, R. DOLCI, M. PICHIASSI (a cura di), *Linguistica e glottodidattica*, Perugia, Guerra, pp. 17-40.

**Figure 8.** The model of Balboni reworked by Fabio Caon



Source: BALBONI P. E. 2008, *Una scienza dell'educazione linguistica basata sulla teoria dei modelli*, in A. MOLLICA, R. DOLCI, M. PICHIASSI (a cura di), *Linguistica e glottodidattica*, Perugia, Guerra, pp. 17-40.

**Questionnaire (questions from 2 to 29 derive from the FLCAS questionnaire created by Horwitz in 1986):**

1. how old are you?
2. I never feel quite sure of myself when I am speaking in my foreign language class
3. In language class, I can get so nervous I forget things I know
4. I don't understand why some people get so upset over foreign language classes
5. I get nervous and confused when I am speaking in my language class
6. I feel more tense and nervous in my language class than in my other classes
7. I feel confident when I speak in foreign language in class
8. I tremble when I know that I'm going to be called on in language class
9. I feel my heart pounding when I'm going to be called on in language class
10. It frightens me when I don't understand what the teacher is saying in the foreign language
11. I get nervous when I don't understand every word the language teacher says
12. I get upset when I don't understand what the teacher is correcting
13. I would not be nervous speaking the foreign language with native speakers
14. I would probably feel comfortable around native speakers of the foreign language
15. I don't worry about making mistakes in language class
16. I worry about the consequences of failing my foreign language class
17. I don't feel pressure to prepare very well for language class
18. The more I study for a language test, the more confused I get
19. I feel overwhelmed by the number of rules I have to learn to speak a foreign language
20. I am usually at ease during tests in my language class
21. Even if I am well prepared for language class, I feel anxious about it
22. I am afraid that my language teacher is ready to correct every mistake I make
23. I get nervous when the language teacher asks questions which I haven't prepared in advance
24. I keep thinking that the other students are better at language than I am
25. I feel very self-conscious about speaking the foreign language in front of other students
26. I am afraid that the other students will laugh at me when I speak the foreign language
27. It embarrasses me to volunteer answers in my language class
28. During language class I find myself thinking about things that have nothing to do with the course
29. I often feel like not going to my language class



30. When I'm on my way to language class I feel very sure and relaxed

31. How did you find the questionnaire?

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