



Università  
Ca' Foscari  
Venezia

## Corso di Laurea Magistrale In Scienze del Linguaggio

Tesi di Laurea

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# Foreign language anxiety and developmental dyslexia

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**2013/2014**



# Language Anxiety and Developmental Dyslexia

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Over the last decades, the role of affective-related issues in foreign language learning has been redefined. Since the mid-1960s, emotional factors have become an integrative and prominent part of foreign and second language acquisition theories and conceptual frameworks. The management of affective variables has been acknowledged as an essential ingredient in successful language learning.

When dealing with emotional factors, two influences must be taken into account: the energizing power of positive affective variables, such as a strong motivation and high self-esteem, and the harmful effect of negative affective reactions, such as apprehension, fear, and stress. This thesis examines the problem of anxiety in foreign language learning and proposes ways to manage it.

Anxiety is claimed to be the psychological construct that most extensively impedes the language learning process. It correlates with a wide range of undesirable emotional and cognitive effects, such as discomfort, disappointment, lack of confidence, and limited attentional resources. Its arousal is attributed to several factors, some of which are related to teaching methodologies and classroom procedures. The first chapter of this dissertation discusses foreign language anxiety conceptualization, describing its sources and effects.

Chapter 2 illustrates how language anxiety manifests in students with developmental dyslexia. Dyslexia has a negative impact on the psychological and social profiles of individuals. Students with learning difficulties frequently experience lack of success and frustration, which inevitably result in low self-esteem, negative self-image, demotivation, and anxious reactions.

Fortunately, educators are becoming increasingly aware of how to create a low-anxiety classroom environment. Chapter 3 introduces some methodological paradigms and practical implications relevant in reducing language anxiety, with specific references to learners with dyslexia. The last chapter presents the results of a case study whose purpose was to evaluate the efficacy of the implementation of some anxiety-reducing strategies in a specific context of dyslexia.

*Ai miei nonni,  
Bianca, Emilio, Miria e Giorgio  
Con immenso affetto e  
gratitudine*

*Vorrei ringraziare tutti coloro che mi hanno sostenuto in questo percorso di studi.*

*Un ringraziamento particolare al mio relatore, il Professor Daloso, per la sua disponibilità ed i suoi preziosi consigli durante la stesura di questa tesi.*

*Un ringraziamento ai miei genitori, Luisa e Francesco, e a mia sorella Letizia per il loro costante e paziente supporto.*

*Ringrazio il mio fidanzato, Filippo, per non aver mai smesso di credere in me.*

*Un grazie alle mie amiche di sempre, Anna, Carla, Giorgia, Giulia e Michela che non hanno mai mancato di sostenermi ed essere presenti, nonostante le distanze.*

*Un grazie a Barbara e a Beatrice per avermi accolta durante le ore di inglese.*

*Grazie a Venezia e alla Giudecca.*

*Ed un ringraziamento molto speciale ai miei nonni e a tutti i nonni della mia vita.*

# CHAPTER 1:

## Foreign Language Classroom Anxiety

Language anxiety is one of those topics on which noteworthy contrasting views have been expressed (MacIntyre, 1999). According to some people, anxiety is an inconsiderable occurrence for a language learner, maybe a justification for not being involved into class activities, or a mask to conceal insufficient study. Others conceive anxiety as a crucial aspect to deal with to ensure foreign language learning and retention. These contrasting opinions on the value of language anxiety can be found within the research literature as well. While Horwitz, MacIntyre and Gardner argue that anxiety reactions in the foreign language classroom are a quite relevant phenomenon (Horwitz, Horwitz, & Cope, 1986) (MacIntyre, 1989), Sparks and Ganschow (Sparks & Ganschow, 1991) claim that research on anxiety is not helpful in having a deeper insight into language learning. According to them, language anxiety is a mere side effect of deficits rooted in the native language coding system.

This chapter intends to display that language anxiety has a substantial impact on language learning and communication. A number of issues will be discussed. First, foreign language anxiety theoretical framework and its definition will be addressed. Second, components and sources of language anxiety will be identified. A description of the main effects of language anxiety will follow. Finally, the most authoritative foreign language anxiety scales will be illustrated.

## 1.1 Theoretical framework

An increasing number of studies have been published on the topic of foreign language anxiety since the mid-1960s. Early investigations were carried out within the wider context of research on the potential impact of individual learner differences on the language learning process. Affective variables, such as anxiety, motivation and related constructs were considered to be a key predictor of language learning success. Thereafter, a considerable amount of articles directly focused on foreign language anxiety and its effects has been produced.

### 1.1.1 *Early research on Language Anxiety*

Two different approaches have been adopted to the study of language anxiety (LA): the anxiety transfer approach and the unique anxiety approach (Horwits & Young, 1991).

According to the first approach, LA is the product of the projection of other forms of anxiety, such as test anxiety or communication apprehension, into the foreign language field. Early research on anxiety assumed this perspective, reporting conflicting findings within and across studies (*ibid.*).

In 1975, for instance, Chastain (as cited in MacIntyre, 1989) conducted an investigation on how anxiety arousal interferes with language achievement - measured in terms of final course grades. He took into account students' performance in three language programs: German, French and Spanish. Results indicated that each language displayed a different type of correlation between anxiety arousal and language achievement: with reference to Spanish, the increase of language anxiety was related to an increment in academic achievement (i.e. positive correlation), outlining anxiety as a facilitating factor in language learning. About French, the higher the students' degree of anxiety, the lower the language performance accomplished (i.e. negative correlation), acknowledging the hypothesis that anxiety hinders the language acquisition process. Finally, about German, Chastain reported a lack of relationship between anxiety and language achievement (i.e. zero correlation).

Many other early investigations failed to find any evidence of a definite relationship between anxiety and language learning, providing further inconclusive results (Aida, 1994).

According to Scovel's review of available anxiety literature on anxiety (Scovel, 1978) such inconsistent findings were to be attributed to the lack of a suitable LA scale, i.e. a scale specifically conceived to assess the level of students' anxiety in a foreign language classroom. Researchers used to exploit a number of pre-existing anxiety scales which had been created to evaluate other forms of anxiety. The lack of a specific language anxiety scale was a direct consequence of the lack of an adequate and clear definition of language anxiety as a psychological construct. Although many teachers and students intuitively claimed that anxiety negatively influenced the language learning process, research outcomes in this area were not straightforward (Horwits, 2001).

### *1.1.2 Language Anxiety conceptualization*

Research took a step further when scholars began to adopt the "unique anxiety" approach to the study of FLA. This second approach argues that language anxiety is a unique and distinct product of the language learning process, which should be measured using a specific scale (ibid.).

The theoretical model of LA as it is today known was conceptualized by Horwits and her associate (Hortwitz, Horwitz, & Cope, 1986), who identified a multi-compositional nature of FLA. Language anxiety was no longer to be considered just as the mere addition of other forms of anxiety. It was defined as:

*A distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom language learning, arising from the uniqueness of the language learning processes (ibid.: 128).*

In order to record the specific anxiety reaction of discomfort experienced by students within a language learning setting, Horwits designed the Foreign Language Classroom Anxiety Scale. Studies that adopted this perspective were uniform in asserting that LA was negatively correlated to language learning (Aida, 1994) (Saito & Samimi, 1996).

### *1.1.3 How language anxiety develops*

Before analysing FLA components in depth, it is useful to place the FLA construct within the literature on the nature of general anxiety. Psychologists have identified three types of anxiety: trait anxiety, situation specific anxiety and state anxiety (MacIntyre & Gardner, 1991). Trait anxiety is the manifestation of a personality trait, the anxiety proneness, i.e., the predisposition to become nervous in a variety of circumstances (Johnson & Spielberger, 1968). Situation-specific anxiety can be defined as the likelihood to suffer from anxiety in reaction to particular situations (MacIntyre & Gardner, 1991), such as taking a test (test anxiety) or performing on a stage (stage fright). The term state anxiety refers to the concrete and transitory experience of anxiety arousal, regardless of the situation or of one's personality (Johnson & Spielberger, 1968). It is a label used to describe the effects of anxiety, both physical (such as sweaty palms or altered heartbeat) and cognitive, behavioural or emotional. According to this distinction, LA falls into the category of a situation-specific type of anxiety, related to the experience of being in a foreign language classroom (MacIntyre & Gardner, 1991).

The identification of trait, state and situation-specific anxiety is useful to understand the way FLA develops. MacIntyre (1989) elaborated a model of how FLA arouses, operates and differentiates from other forms of anxiety. According to this model, students originally can experience a generic negative affective reaction in the language class, due to some unpredictable factors. Anxiety experienced at this stage is labelled as state anxiety and it is a transitory episode. However, if the experience of discomfort becomes a repeated occurrence, students begin to associate their anxiety with the language learning situation. A negative attitude toward the foreign language program is created and students will manifest anxiety as a permanent state during future languages classes.

## **1.2 Sources and components of language anxiety**

Several studies have investigated the sources of LA (Young, 1991) (Hortwitz, Horwitz, & Cope, 1986). The main instruments which have been used to collect data on the causes of language anxiety are questionnaires, interviews and self-reflective accounts. Results indicate that there is a wide range of factors which can

trigger an anxiety reaction. The following list is not meant to be exhaustive, it intends to give an account of the main components which may determine LA arousal.

### *1.2.1 Communication apprehension*

Communication apprehension can be defined as the nervousness an individual may experience about the act of communicating (McCroskey, 1984). It is related both to productive and to receptive skills.

According to Horwits (Hortwitz, Horwitz, & Cope, 1986), anxious students often report speaking the FL in class as one of the most difficult tasks, especially if free speech delivery is required. Discriminating sounds and structures is also complained as a source of stress, especially if the language is spoken rapidly (ibid.). Students claim to feel a sense of discomfort when they are not able to grasp the meaning of a message in the target language or if they fail to understand the instructions required to accomplish allocated tasks.

Therefore, the foreign language class context can exacerbate a pre-existing communicative apprehension, since individuals are demanded to interact using a language they have little command of.

### *1.2.2 Test anxiety*

Test anxiety refers to the apprehension about performing insufficiently in a formal evaluative situation (Sarason, 1978). It permeates a wide range of academic fields. Nevertheless, those students who are required to take an exam in a foreign language, are likely to feel stronger pressure because they are asked to simultaneously process a variety of information under time constraints (Ohata, 2005). After test taking, students often report that they knew the correct answer, but that they forget it or carelessly put down the wrong one due to apprehension (Hortwitz, Horwitz, & Cope, 1986). Test anxiety is generated as well when hard study before an examination does not produce expected results, when students are not familiar with test techniques and when new content are tested without any preparation (Donley, 1999). Being evaluative situations in FL classroom frequent, test anxiety is a quite relevant issue for language learners.

### 1.2.3 *Fear of negative evaluation*

*Fear of negative evaluation* stems from the combination of a high concern about the perceptions that other people are forming about oneself and the belief that such evaluation will not be favorable (MacIntyre, 1989) As Horwitz says, *anxious students seem to feel constantly tested and to perceive every correction as a failure*" (Horwitz, Horwitz, & Cope, 1986: 130). Since language proficiency is tested while it is being acquired, students can experience apprehension persistently. The language learning process inevitably entails making mistakes, which can be perceived as a threat to one's own image if not correctly contextualized as a natural part of the learning experience (Aida, 1994).

### 1.2.4 *Self-concept*

According to Horwitz (1986) *communicative apprehension, fear of negative evaluation* and *test anxiety* are the three main components of FLA. Nevertheless, FLA is not the mere product of their combination. Language learning directly questions an individual's self-concept.

When interacting in the FL, people are deprived of their usual means of communication. While the competence is immature and the range of communicative choices limited, the capability of expressing oneself in an authentic way is restricted. Horwitz describes the effect of foreign language anxiety with a witty paragon:

*Recently, I have begun to see an analogy between such things as unflattering clothing and bad haircuts and foreign language anxiety. When we wear clothing that is unbecoming or have a "bad hair day" we feel uncomfortable because not only do we not feel like ourselves, we feel that we are presenting a less positive version of ourselves to the world than we normally do. In an analogous way few people can appear equally intelligent, sensitive, witty and so on when speaking a second language as when speaking their first. This disparity between how we see ourselves and how we think others see us has been my consistent explanation for language learners' anxiety* (Horwitz, 2000: 258)

The lack of genuineness and the fear of not being able to communicate effectively can lead to a feeling of inadequateness:

*You feel frustrated because you are an interesting adults and you sounds like a bubbling baby (Price, 1991: 105)*

According to Horwits (Horwits 1986) such a strict relationship among language, identity and self-expression, differentiate FLA from any other kind of anxiety in the academic field:

*The importance of the disparity between the "true" self as known to the language learner and the more limited self as can be presented at any given moment in the foreign language would seem to distinguish foreign language anxiety from other academic anxieties such as those associated with mathematics or science. Probably no other field of study implicates self- concept and self-expression to the degree that language study does. (Hortwitz, Horwitz, & Cope, 1986:128)*

### *1.2.5 Individual learner differences*

Individual learner differences, such as self-esteem, motivation or competitiveness, are frequently cited among the primary sources of LA (Young, 1991).

A competitive attitude can generate apprehension and nervousness, both when students compete with other students and when they compete with an idealized image of themselves (Young, 1991). Furthermore LA can emerge according to one's degree of self-esteem. People with low self esteem are more likely to experience anxious reactions because they usually are over concerned about making the proper social impression and because they tend to underestimate their own competence. Other personality traits such as shyness and introversion, could be predictors of language anxiety arousal (MacIntyre, 1999).

Language learning is a highly demanding task for shy students because communication is frequently required as part of the learning process. Some instructional practices which promote frequent interactions may induce high levels of anxiety among shy students. Students with perfectionist tendencies may also suffer from language anxiety, because they are not able to accept any performance in the FL short of perfection.

### 1.2.6 *Students' beliefs about learning a language*

The proliferation of some unrealistic and erroneous beliefs about the language learning process can provoke an escalation of anxiety. Horwitz investigated students' opinion about language learning (1988), discovering that several pupils think that:

- a two year course is enough to gain a competence which approximates a native speaker's one;
- learning a new language requires a special aptitude;
- pronunciation is the most important aspect of language learning;
- they should be engaged in communicative tasks only when accuracy and fluency have been achieved;
- it is necessary to understand every word of an utterance in order to comprehend a foreign language message.

Such beliefs can generate anxiety and inhibit students *willingness to communicate* (McCroskey, 1984), thus preventing learning and retention.

### 1.2.7 *Teachers' beliefs about language teaching*

A teacher's beliefs about language teaching can lead to additional anxiety for their students. For instance, some instructors believe that (Young, 1991):

- being intimidating is needed to ensure learning;
- recurrent and harsh corrections of any error is necessary;
- pair-work activities and confrontation among students inevitably turn into chaos;
- poor performance has to be attributed to the lack of motivation or skills.

### 1.2.8 *Student-teacher interaction*

The student-teacher interaction is very important in creating a positive learning environment. With reference to error correction practice, for instance, students agreed that error correction is necessary but they do not necessarily appreciate

the *manner* in which they are corrected (Koch & Terrell, 1991). Furthermore, learners and teachers may not always agree on the teacher's role: students often seek for a friendly and supportive figure, while teachers act as an authoritarian sergeant (Young, 1991).

### *1.2.9 Instructional practices*

Several instructional practices are considered as a bothering aspect in a language class. Required oral performances, as well as unpredictable questioning increase apprehension among students. (Koch & Terrell, 1991). In a study focused on the relationship between language anxiety and final grades, Kim (Kim as cited in Horwitz, 2001) noticed a significant difference of the degree of anxiety between reading classes and conversational classes, supporting the hypothesis according to which required oral communication is one of the most anxiety provoking factors. Students identify as worrying also oral quizzes, being called on to speak individually, not providing grammar explanation (Koch & Terrell, 1991). Furthermore, teachers' predilection for a specific range of classroom procedures which are akin to their cognitive and learning styles can generate conflicts with those students who prefer different or even opposite methodologies (Oxford, 1999).

### *1.2.10 Social factors*

Some social and interpersonal aspects of language learning may contribute to generate LA, especially within an L2 context. Two opposite phenomena can be associated to second language learning (Horwitz, 2001):

- the willingness to learn a new language and to become a member of the group who speaks that language;
- the fear of being assimilated and of losing one's own language and cultural identity.

Such phenomena can cause deep apprehension. As Eva Hofmann points out in her book (1989), learning a second language is a deep destabilizing experience:

*But mostly, the problem is that the signifier has become severed from the signified. The words I learn now don't stand for things in the same unquestioned way they did in my native tongue. "River" in Polish was a vital sound, energized with the essence of riverhood, of my rivers, of my being immersed in rivers. "River" in English is cold— a word without aura. It has no accumulated associations for me, and it does not give off the radiating haze of connotation. It does not evoke (Hoffman, 1989: 106).*

### **1.3 Language anxiety effects**

The impact of language anxiety on language learning is perhaps the most crucial aspect of the LA issue. Several studies have investigated the effects of LA, (Hortwitz, Horwitz, & Cope, 1986) (MacIntyre, 1989). Four main areas in which LA operates have been identified: academic, cognitive, psychological and behavioral.

#### *1.3.1 Academic Effects*

Since the *unique anxiety approach* has been adopted, research has been uniform in declaring the negative impact of anxiety on language proficiency. Several studies, across a wide range of instructional level and examining different target languages, consistently indicate that there is a significantly negative correlation between high levels of LA and indicators of academic achievement, such as final course grade (Horwits , 2001).

In 1994, Aida examined Horwits et al.'s construct of FLA, investigating how anxiety relates to Japanese language learning among college students at University of Texas at Austin (Aida, 1994). Anxiety was recognized as one of the elements which impedes success and retention in the language program. Students' levels of anxiety were proven to be negatively related to their overall performance in Japanese.

Such results were confirmed by Saito and Summy, who examined the impact of anxiety on language achievement among beginners, intermediate and advanced students of English (Saito & Samimi, 1996). Coloumbe as well indicated the existence of a negative correlation between anxiety and measures of achievement. He took into consideration 11 different French classes of Canadian learners of French, ranging from beginners to advanced students (Coloumbe as cited in Horwits, 2001). In an Asian EFL context Kim found a significantly negative

correlation between language achievement and levels of anxiety. (Kim as cited in Horwitz, 1991)

Thereafter, it has been largely demonstrated that anxiety negatively affect language achievement. On the other hand, it is important to point out that students who perform unsuccessfully in their language program would naturally and logically become anxious about language learning (Horwits, 2001). The causality issue has been discussed by many researchers. Does anxiety lead to poor performance or does low proficiency cause anxiety as a mere product? There have been a number of articles which have strongly raised doubts about the existence of FLA (Sparks & Ganschow, 1991) (Sparks, Ganschow, & Javorsky, 2000). In particular, Sparks and his associates elaborated the *Linguistic Coding Differences Hypothesis (LCDH)*, according to which poor language achievement has to be attributed to some language processing deficit in the native language (Sparks & Ganschow, 1991). In their view, anxiety should be consider as an end-product, more truly than a source, of inadequate learning. In other words, Sparks and his associates believe that the anxiety aroused within the language classroom is not due to the act of learning a new language, but it is caused by a specific learning disability that students manifest while intaking, processing and producing the new language, denying the existence of FLA as a psychological construct.

As argued by Horwits in his reply to Sparks (Horwitz, 2000), it's undeniable that the linguistic coding hypothesis may explained the anxiety reactions of *some* language learners. Nevertheless it cannot function as explanation of the countless anxiety reactions reported by teachers and students. There is evidence that the number of students showing FLA is clearly greater than the number of students who suffer from others kind of cognitive disabilities attested by college screening procedures. In addition, several students experience anxiety while learning a new language, but do not manifest any kind of deficit in processing their first language or other languages, thus invalidating Spark's hypothesis. Language anxiety should not be uniquely considered as a consequence of learning disabilities; it should be regarded as a key central affective variable in language achievement.

### 1.3.2 Cognitive effects

FLA effects on academic achievement are in some cases the consequence of FLA effects on cognitive processing. Anxiety interferes with language processing in a subtle and pervasive way (MacIntyre, 1994).

A clear explanation of the phenomenon was offered by Eysneck (as cited in MacIntyre, 1994), who elaborated the *divided attention theory*, according to which:

*Anxiety arousal is associated with distracting, self-related cognition such as excessive self-evaluation, worry over potential failure, and concern over the opinion of others; therefore the anxious person has his/her attention divided between task-related cognition and self-related cognition, making cognitive performance less efficient. (MacIntyre, 1994: 285)*

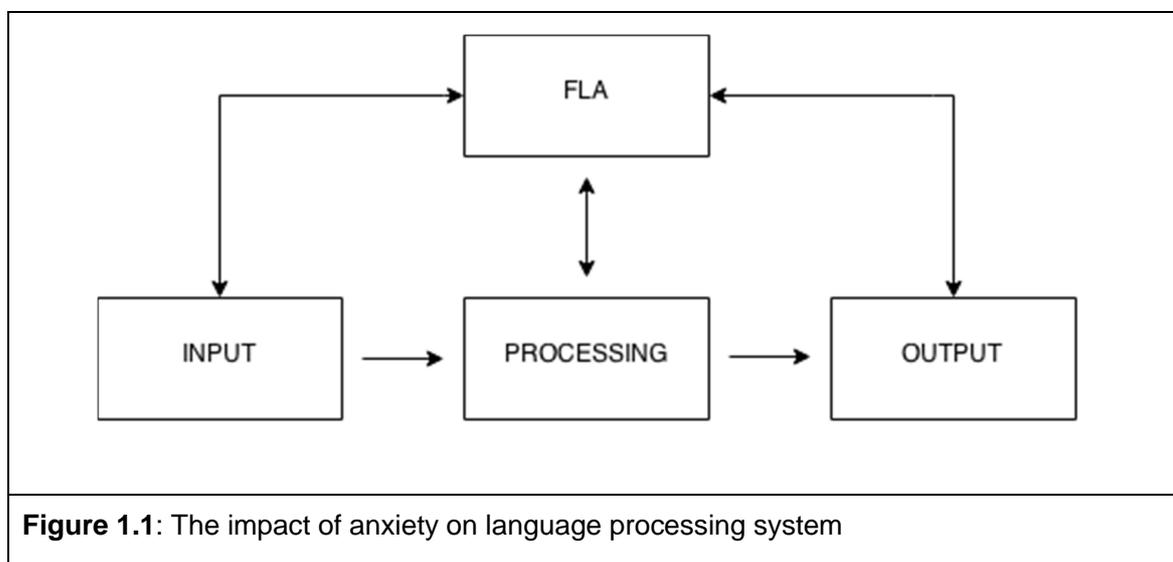
Therefore, task-irrelevant thoughts (fruitless concerns) consume available cognitive resources, which should be focused on the class activities.

Gardner and MacIntyre attempted to offer a deeper insight into the cognitive effects of FLA, based on a model of information processing developed by Tobias (Tobias, 1986). According to Tobias, language processing includes three stages: input (when linguistic items are first approached), central processing (when linguistic items are manipulated) and output (when previously processed linguistic items are produced)<sup>1</sup>. At the input stage, FLA acts as a filter, preventing some information from entering the processing system. Applied to the language classroom, this means that students might find difficulties in attending to and intaking the necessary information. At the processing stage, anxiety causes a decline in the cognitive efficiency, making processing slower and less accurate. At the output stage, anxiety can generate a dysfunction in the retrieval from the memory of linguistic items and competences previously acquired. For example, many students under stressing conditions claim that they know the correct answer but they are not able to recall it. Gardner and MacIntyre (1994) conducted a study

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<sup>1</sup> Tobias is aware that the learning process is an ongoing and continuum process and that these three stages are arbitrary established, anyway they are considered as a useful mean to isolate and identify specific effects of FLA

to assess the impact of anxiety on the language processing system (Figure 1.1). Results confirmed Tobias's theory.



**Figure 1.1:** The impact of anxiety on language processing system

Kleinmann (1977) investigated how anxiety had an impact on the oral production of linguistically difficult English structures<sup>2</sup> among Spanish speaking and Japanese speaking students of English as a second language. The research found that less anxious students tended to use more difficult syntactic structures than their more anxious counterparts.

Steinberg and Horwits (1986) conducted a study on how induced anxiety interrelated with the ability of denoting and interpreting story content using English as the foreign language. They reported that learners experiencing an experimental condition intended to induce anxiety attempted an inferior number of elaborated and personal messages than students experiencing a treatment designed to relax them.

Another study conducted by MacIntyre and Gardner (1994) found that foreign language anxiety negatively affects foreign language vocabulary learning and

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<sup>2</sup> For 'difficult English structures', Kleinmann chose structures which were distant from structure commonly used in the students native language, such as infinitive complement and direct object pronoun for Spanish speaking students or passive forms and present progressive tense for Japanese speaking students.

production. The experiment involved three different activities concerning vocabulary production in the target language. The level of anxiety was manipulated by placing time limits to the task. The results indicated that a high level of anxiety impaired both the learning and the production of new vocabulary.

### 1.3.3 *Psychological effects*

LA not only affects academic results, which tend to be lower, but also people's perceptions: students tend to have a distorted image of themselves and their competences. MacIntyre, Noels and Clement (1997) reported a negative correlation between the level of language anxiety and students self-rating of their language proficiency: the higher the level of anxiety, the lower the expectation for good grades. Furthermore, apprehension can hinder self-esteem, motivation and self-efficacy.

### 1.3.4 *Behavioural and Physical effects*

Two behavioral patterns are frequently adopted by highly anxious students:

- 1) *over-studying*: it's very likely that students who experience LA, try to study harder in order to avoid unsuccessful performances. Sometimes, these efforts do not result in the desired outcome, generating frustration and demotivation (Price, 1991).
- 2) *avoidance behaviors*: apprehensive students are reluctant to get involved in classroom activities. In an L2 context of social interaction, they tend to withdraw from conversation to minimize the possibility of embarrassment or a negative evaluation. As Horwitz notes "*When they affiliate with others [anxious people], they often fail to initiate conversation or participate only minimally in the conversation, as by just smiling and politely nodding, or listening to others talk and only interacting with occasional "uh-huh's"*" (Horwitz, Horwitz, & Cope, 1986:157). In extreme cases, anxious students can even miss classes. Such behavior prevents language skills from being improved. (Koch & Terrell, 1991) Therefore, when communication is engaged anxious student will do worse than

non anxious student. Such activity will be responsible for further anxiety and, as a consequence, may culminate in new avoidance behaviors. Therefore, a vicious cycle will be created which constantly nourishes language anxiety. (McCroskey, 1984)

Physical/somatic manifestations of anxiety include physiological effects, such as sweaty palms, heart palpitations, high blood pressures, headache, stomach disease and tight muscles. Other symptoms which might reflect language apprehension are playing nervously with one's hair or other objects, fidgeting and stuttering. (Oxford, 1999).

## 1.4 Scales

Several instruments were developed to assess the impact of anxiety on language learning. Early scales were based on the anxiety transfer approach and were part of batteries designed to measure other psychological constructs. Studies which adopted such perspectives and scales found mixed and inconsistent results (Horwits, 2001).

The first two scales directly intended to measure language anxiety were developed by Gardner and his associates (Gardner, Smythe, Clement, & Glikzman, 1976). They are called the *French Class Anxiety Scale* and *French Use Anxiety Scale*.

The most authoritative FLA scale was elaborated by Horwits and her associated in 1989, when FLA was conceptualized as it is now known. It is called the *Foreign Language Classroom Anxiety Scale* and it is made up of 33 items (Appendix A). Answers include five possible choices: strongly disagree, disagree, neither agree nor disagree, agree, strongly agree. The scale included items indicative of three main sources of anxiety within the language classroom:

- a. communication apprehension (e. g., *It frightens me when I don't understand what the teacher is saying in the foreign language*);
- b. test anxiety (e.g., *The more I study for a language test, the more confused I get*);

- c. and fear of negative evaluation (e.g., *I am afraid that the other students will laugh at me when I speak the foreign language*).

Each option corresponds to a score. The sum of the scores indicate the level of anxiety.

In 1994 MacIntyre and Garder updated this scale and created a more specific set of scales which tried to assess the impact of FLA at the input, output and processing stage (MacIntyre, 1994).

More recently, some researchers have pointed out that the FLCAS is essentially focused on the oral production of LA. Therefore, several new scales were developed in order to measure anxiety aroused in reaction to other language skills such as reading (Saito, Horwits, & Garza, 1999), listening (Vogely, 1998), and writing (Cheng, 2004).

## **1.5 Summary**

FLA is a situation-specific anxiety that relates to the experience of learning a new language. Its arousal can be determined by the combination of several factors. Some of them are associated with the learner, such as his or her beliefs about the language learning process, or his or her degree of self-esteem and competitiveness. Other sources of anxiety are related to the teacher's role and way of interacting with students (e.g., adopted error correction procedures and teaching styles can negatively affect students' attitudes toward language learning). Classroom methodologies and activities may also trigger apprehension reactions. Students often report being called on to speak as one of the most anxiety-provoking situations. With reference to FLA anxiety effects, they spread over four main areas: academic, cognitive, psychological and behavioral. Research has consistently indicated that there is a significantly negative correlation between high levels of anxiety and indicators of academic achievement: students who suffer from FLA are likely to achieve a lower competence. In addition FLA affect cognitive processing: it arises self-related negative cognition which consumes important cognitive resources, thus preventing attention from being focus on the learning process. FLA also negatively influences the development of self-efficacy. Highly anxious foreign

language students tend to adopt two behavioral patterns: over-studying (i.e., studying harder to minimize the possibility of failure, which does not always result in the desired outcome) or avoidance behaviors (i.e., the tending to withdraw from communication, which impedes language skill improvement). Since the first step to coping with language anxiety is identifying it, several scales have been produced. The Foreign Language Classroom Anxiety Scale is the most authoritative.