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# Anxiety in Spanish EFL students in different university degree programmes

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Título: La ansiedad entre estudiantes españoles de inglés como LE de diferentes titulaciones universitarias.

Resumen: Los efectos de la ansiedad en el aprendizaje de una lengua extranjera se han estudiado desde los años setenta, y a pesar de significativos avances en los enfoques para la enseñanza de la lengua, la literatura continúa asegurando la existencia de aprensión lingüística en el aula y su efecto debilitador en el proceso de aprendizaje. Sin embargo, muy pocas investigaciones se han llevado en un contexto sociocultural comparable al nuestro, esto es, una universidad española donde se aprende inglés. Este estudio tiene como objetivo examinar y comparar los sentimientos de ansiedad de universitarios de seis titulaciones diferentes. Un total de 200 estudiantes participaron en el estudio. Los datos fueron recogidos con la medida Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz, Horwitz y Cope, 1986). Los análisis revelan, en primer lugar, que todos los alumnos tienen niveles de ansiedad medios; en segundo lugar, que en sólo uno de los aspectos el nivel de ansiedad de los participantes que han escogido el inglés como especialidad es más bajo que el de los estudiantes que tienen el inglés como asignatura obligatoria en titulaciones dirigidas a la especialización en otros campos; y, en tercer lugar, que la relación entre la ansiedad y la nota de los alumnos es mayor en el caso de los que tienen inglés como asignatura obligatoria. Se comentan las implicaciones de estos resultados para una mejor comprensión de la ansiedad y del aprendizaje de la lengua extranjera. Palabras clave: Ansiedad ante el aprendizaje de una lengua extranjera;

Palabras clave: Ansiedad ante el aprendizaje de una lengua extranjera FLCAS; aprendices de español como lengua extranjera; titulación; nota.

# Introduction

In recent years, the field of foreign language education in Spain has become increasingly concerned with the fact that Spanish students do not reach an adequate level of English. As Pavón and Rubio (2010, p. 45) have pointed out, "few people would deny that the situation of foreign language teaching and learning in Spain requires a drastic change". At a time when an English-only Europe is expanding quickly (Phillipson, 2002; Vez, 2002) it seems appropriate to focus our attention on those aspects that might be hindering the language learning process of these students.

The literature reviewed, pertaining mostly to other socioeducational contexts, shows that the anxiety felt by students when speaking a foreign language represents a significant obstacle in the language learning process and may be the cause of many learners' underachievement (Aida, 1994; Fukai, 2000; Gardner and MacIntyre, 1993; Gregersen, 2007; Horwitz, Horwitz and Cope, 1986).

However, before describing the effect anxiety can have on the language learning process, it is important to take note of the fact that affect and emotion have not always occupied a central place in discussions of classroom foreign language learning. With the exception of some research (Arnold, 1999; Horwitz, 2001; Horwitz and Young, 1991), the main Abstract: Researchers have studied the effects of anxiety on foreign language learning since the 1970's, and despite significant advances in approaches to language teaching, the literature continues to report the existence of language apprehension in the classroom and its debilitating effect on the learning process. However, very few studies have been developed in a socio-cultural context comparable to ours, namely, a Spanish university in which English is learnt. This study set out to examine and compare the feelings of anxiety experienced by university students enrolled in six different degree programs. A total of 200 students participated in this study. The data were collected using the Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz, Horwitz and Cope, 1986). The analyses reveal, firstly, that all the students suffered from average anxiety levels; secondly, that only in one of the aspects is the anxiety level of participants with English as a main subject (i.e. chosen) lower than that of participants for whom English is a non-elective degree requirement; and in the third place, that the relationship between anxiety and the mark obtained by participants is stronger in the case of those who have English as a degree requirement. The implications of these results for a better understanding of anxiety and foreign language learning are discussed.

Key words: Foreign language anxiety; FLCAS; Spanish EFL learners; degree programme; mark.

centre of attention in most studies has been the development of knowledge and use of the new language. "This is due to the fact that emotion was not taken into account by psychologists during most of the 20th century" (Garrett and Young, 2009, p. 209). As Damasio (1999) explains, emotion was considered to be 'too elusive and vague', as it was thought to be on the opposite side from reason and reason was understood to be totally independent from emotion (p. 39). It was not until the 21st century, following Damasio (1994, 1999), that the study of the relationship between emotion and cognition gained weight among psychologists. In the language learning field, the relevance of examining the emotional dimensions of foreign language learning has been highlighted by several authors (Dewaele 2005; Harris, Gleason, and Aycicegi, 2006; Panksepp, 1998; Pavlenko and Dewaele, 2004).

In the case of the emotional dimension selected for this paper, foreign language anxiety (FLA), its consequences go beyond the classroom. A person who has studied a foreign language (FL) up to graduation but experiences high levels of anxiety may actually never feel capable of engaging in FL communication after leaving school (Dewaele, 2007, p. 392). This can only be interpreted as a failure not only for the individual concerned but also for the whole education system that has devoted money, effort and time to the teaching of a skill that will not subsequently be used. Besides, in today's society this failure will entail economic consequences for the individual, as the command of at least one foreign language (English in most cases) is an increasingly imperative prereq-

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uisite for many jobs; widespread failures of this kind could ultimately affect the economy as a whole.

Foreign language anxiety is a complex, multidimensional phenomenon (Dewaele, 2007, p. 392). Research has confirmed that FLA produces negative experiences and reactions, including concentration difficulties, worry, dread, perspiration, lack of comprehension, mistakes, forgetfulness, tension, frustration, avoidance, absenteeism, lower grades and even a complete inability to perform (Aida, 1994; Arnaiz and Guillén, 2012; Casado and Dereshiwsky, 2001; Ewald, 2007; Gregersen 1999-2000; Horwitz, 2001; Horwitz et al., 1986; Pappamihiel, 2002; Sheen, 2008). MacIntyre (1999, p. 5) defined language anxiety as follows:

[...] apprehension experienced when a situation requires the use of a second language in which the individual is not fully proficient [...] the propensity for an individual to react in a nervous manner when speaking, listening, reading, or writing in the second language.

As opposed to trait anxiety (an animic state of some individuals to feel anxious in any situation) or state anxiety (apprehension experienced at a particular moment in time, for example, having to speak in a foreign language in front of classmates) (Spielberger, 1983), language anxiety is a specific kind of anxiety, induced by situational factors (Horwitz et al., 1986; MacIntyre and Gardner, 1989; Tóth, 2008, Tallon, 2009). There is sufficient evidence to affirm the existence of an inverse relationship between FL-related anxiety and various measures of FL performance (Clément, Gardner, and Smythe, 1980; Gardner, Smythe, Clément and Gliksman, 1976; Gardner, Smythe and Lalonde, 1984). However, in spite of this evidence, FLA continues to be one of the enigmas in Second Language Acquisition search<sup>1</sup>. It is related to an individual's personality, language level, type of situation, course marks, gender, identity of interlocutors and to more general socio-educational factors.

Horwitz et al. (1986) presented three constructs for the description of foreign language anxiety: communication apprehension, fear of negative evaluation, and test anxiety. Communication apprehension refers to the uncomfortable feeling an individual experiences when expressing himself/herself in front of others. Fear of negative evaluation is likely to be manifested in a student's disproportionate worry about academic and personal evaluations of his or her performance and competence in the target language (MacIntyre and Gardner, 1991). The construct of test anxiety also seems relevant when examining the anxious foreign or second language learner as some learners may consider foreign or second language production as a test situation rather than as

an opportunity for communication (Gregersen and Horwitz, 2002; Horwitz, 1986).

Although the three anxiety constructs are presented by Horwitz et al. (1986) as conceptual foundations, these authors do not consider FLA as the mere transfer of these constructs to language learning. They define FLA as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 128). As Tóth (2008, p. 58) explains, what makes FLA more than a combination of communication apprehension, fear of negative evaluation and test anxiety transferred to L2 learning is a metacognitive element, which is reflected in students' awareness that, 'deprived' of their usual means of communication, i.e., their mother tongue, they must express themselves using a language they do not master. The obstacles encountered when trying to communicate are likely to challenge the concept that the individual has of him/herself as a competent speaker and result in his/her self-consciousness; the learner's self-consciousness is usually associated with his/her concern that he/she is not able to convey an image of him/herself that corresponds to his/her true personality, but rather, that of an unsatisfactory self (Hilleson, 1996; Tsui, 1996). This may involve feelings of inappropriateness in terms of academic achievement as well as selfpresentation (Schlenker and Leary, 1985). Conscious of their linguistic shortcomings, language learners may perceive the considerable distance that separates their "true" self and the more limited self they are able to present in the FL, which in the view of Horwitz et al. (1986, p. 128) makes FLA different from other academic anxieties. All these considerations suggest that the requirements of the language learning process are likely to make the language classroom an anxietyinducing context. Several studies have even indicated that foreign language courses produce more anxiety than courses in other disciplines (Campbell and Ortiz, 1991; Horwitz et al., 1986; MacIntyre and Gardner, 1989).

Thus, the main difference between learning a second language and learning other skills lies in the strong connection between self-expression through language and one's self-image. Guiora and Acton (1979), for example, defend the presence of a different self in the foreign language which they have coined "language ego". This concept refers to a psychological experience common to many language learners, who often feel like a different person when speaking a second language and often act very differently as well (Cohen and Norst, 1989; Guiora, 1972; Guiora and Acton, 1979). Similarly, Young (1992) supports the premise that language learning may provoke existential anxiety in learners. The following quotation explains this statement: "If I learn another language, I will somehow lose myself; I, as I know myself to be, will cease to exist" (p. 168). This frustration experienced by the L2 user is perfectly described by Hoffman (1989, pp. 118-119), as she reports her experience as a young Polish immigrant in Canada:

<sup>&</sup>lt;sup>1</sup> Although conscious of the difference between 'second language' and 'foreign language', in this paper the term 'second language' will be used to refer in general to the field centred on the study of an additional language, since that is what the literature reviewed does. However, when presenting the different studies we will specify whether participants were studying that 'additional' language in a foreign or in a second language context.

I am enraged at the false persona I'm being stuffed into, as into some clumsy and overblown astronaut suit. I'm enraged at my adolescent friends because they can't see through the guise, can't recognize the light-footed dancer I really am.

A third theory, defining second language acquisition as a *clash of consciousness*, also seems to allude to the same or very similar psychological experience (Clarke, 1976). Following Bateson's ideas (1972), Clarke described L2 learning as a form of 'schizophrenia'. Other researchers have studied similar possibilities. Hodge (1976) and Marcos, Eisma, and Guiman (1977) found evidence for the notion of a language related duality in the sense of self.

All these theories share the premise that learning a foreign language is a unique learning experience and emphasize a key psychological phenomenon that is essential for understanding the particular anxiety underlying this experience (MacIntyre, 2002; Williams, 1994).

Among the variables that may interact in multiple ways to create anxiety-inducing situations and that have been examined by previous research, this paper has chosen to focus on type of situation, language level and marks. In this case, type of situation refers to whether students study English by choice because it is a core or compulsory subject. The levels of foreign language anxiety experienced by learners may be determined by whether English is studied voluntarily or as a compulsory degree subject. A key study on this specific issue was undertaken in Venezuela by Rodríguez and Abreu (2003) with preservice English language teachers. The authors noted that participants' mean language anxiety score was lower than the scores reported in other studies (see below). Research has demonstrated that motivation and anxiety have opposite effects on FL learning (Gardner, Day and MacIntyre, 1992). Motivation encourages learners in their FL learning whereas anxiety interferes with it. Rodríguez and Abreu (2003) argue that these effects of motivation and anxiety might explain, at least partially, the relatively low levels of general FL anxiety in their study. Similar anxiety levels are found in the study by Pérez-Paredes and Martínez-Sánchez (2000-2001) with Spanish students learning English.

In most of the previous research (Aida, 1994; Horwitz, 1986; Kim, 2009; Marcos-Llinás and Juan-Garau, 2009; Saito, Horwitz and Gaza, 1999), the students were taking FL classes as a non-elective degree requirement. By contrast, the learners in Rodríguez and Abreu's (2003) study were training to become FL teachers and were therefore likely to be more integratively motivated than those learners from previous studies; and the participants in Pérez-Paredes and Martínez-Sánchez (2000-2001) were enrolled in the Official School of Languages, a school students usually enroll in voluntarily and are likely to be more motivated than in other learning contexts.

However, Ortega-Cebreros's (2003) research leads us in the opposite direction, despite the fact that participants had selected English as a main subject. The 33 Spanish university students were studying to become Secondary Teachers and in some items exhibited even higher anxiety levels than participants in Horwitz and Young (1991), who were learners of Spanish, and Spanish was not their main subject.

Studies focusing on the relation between FL anxiety and learners' level have yielded somewhat inconsistent results. Liu (2006) found evidence in his work with Chinese learners of English that the higher their language level, the less anxious they were in oral English. Fear of something new and over which one does not have much control may be making these learners feel more anxious. However, other studies (Ewald, 2007; Kitano, 2001; Marcos-Llinás and Juan-Garau, 2009) have suggested the opposite, *i.e.* that as the level of language rises, so does the learners' anxiety level. As Kitano (2001) has suggested, this may be due to the fact that at higher levels instruction is aimed at developing more authentic and sophisticated communication skills, and this increase in the complexity of instruction may lead students to be more apprehensive about communication or to feel less comfortable when speaking English both inside and outside the classroom.

In terms of the relationship between anxiety and course marks, research also demonstrates a variety of results. MacIntyre and Gardner (1994) found that language anxiety was negatively correlated with language course marks in French as a L2. Likewise, in the works by Sparks and Ganschow (2007), with learners of French, Spanish and German, and by Yashima (2002), with Japanese learners of English, those participants with the lowest levels of foreign language anxiety on the FLCAS received the highest marks. However, Omwuegbuzie, Bailey, and Daley (1999) found a positive relationship between university academic achievement and language anxiety in learners of French, Spanish, German and Japanese. Lastly, in the study by Marcos-Llinás and Juan-Garau (2009), students with high levels of anxiety did not exhibit lower course achievement in comparison to students with low levels of language anxiety.

This paper presents the results of a survey conducted with Spanish university college students on anxiety levels experienced in the learning of English as a foreign language. It constitutes one of a series of studies which contributes to providing evidence of the levels of anxiety Spanish university students suffer from with the aim of shedding light on this reality.

The present study was motivated by the realization that while foreign language anxiety is a well-researched aspect in other socio-cultural contexts, especially North America, it has been overlooked in the Spanish context. Therefore the context itself is one of the main strengths of this research, which attempted to examine and compare the feelings of anxiety experienced by university students enrolled in six different degree programmes during foreign language learning. Considering the above-mentioned difficulty Spanish students encounter when studying English, and the fact that anxiety might be one of the factors that could be hindering the learning process, our interest in carrying out this study is totally justified.

Specifically, this study sought to analyze the differences in anxiety levels in students who had chosen English as a main subject and students for whom it was a non-elective obligatory subject. The first group consisted of participants studying to be either translators/interpreters or Primary English teachers, which means they had voluntarily chosen to study the foreign language and would have it in each of the four years of their degree; the latter, composed of Computer Science students and pre-service Primary Generalist, Music and Physical Education teachers had English as just one more subject in their degree and would only study it in one of their four academic years.

Besides, and with the aim of providing an accurate account of the anxiety levels of one of the collectives examined, a second division of the subjects was made, consisting of future primary teachers of English on the one hand, and future Generalist, Physical Education and Music Teachers on the other hand. We believed that the degree of commitment to the English language could constitute an influential factor in anxiety levels.

This investigation was organized around the following questions:

- 1. Do students who have selected English as their main subject experience lower anxiety levels than students with English as a degree requirement?
- 2. Do pre-service Primary English teachers have lower anxiety levels than pre-service Primary Generalist, Music or Physical Education teachers?
- 3. What is the degree of correlation between anxiety levels, on the one hand, and language level and entry mark, on the other hand, for students with English as a main chosen subject?
- 4. What is the degree of correlation between anxiety levels and entry mark for students with English as a degree requirement?

## Method

#### **Participants**

Participants in this study consisted of 200 students enrolled in English language courses in a Spanish university. Their language levels in English ranged from B1 to C1: 102 were B1-level students, 86, B2- level and the rest, 12, C1level. English class groups at university are organized according to these levels, established following The Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR) (2001), a guideline used to describe foreign language learners' achievements across Europe<sup>2</sup>. The sample consisted of 109 females (54.5%) and 91 males (45.5%). The ages of the respondents ranged from 18 to 39 (M = 20.47; SD = 3.80). Students came from six different degree programmes. There were 140 students from the Teacher Training Faculty, 50 of whom were studying to be Primary English teachers, which means English was their main chosen subject and was consequently a voluntary part of their curriculum, while 90 of them were studying to be Primary Generalist teachers, Physical Education teachers and Music teachers, for whom English was a non-elective degree requirement. The other two groups of students came from the Translation and Interpreting Faculty (30) and the Computer Science Faculty (30). The former had English as a main chosen subject, i.e. they were studying it voluntarily, while for the latter it was a prerequisite for graduation.

Prior to the study, all participants agreed to sign the consent form which indicated the aim and characteristics of the study. They were assured that their privacy would be preserved.

#### Instruments

The Foreign Language Classroom Anxiety Scale (FLCAS), developed by Horwitz et al. (1986), was administered to the students in order to investigate students' anxiety levels in English language classrooms. This is the most widely-used scale for assessing general foreign language anxiety and it consists of 33 items, 20 of which focus on listening and speaking skills, while the remaining items are related to general language anxiety and no items are related to writing or reading. Consequently, the main focus of the FLCAS is on anxiety related to oral communication. The FLCAS is measured using a five-point Likert response format. The range is as follows: 1) strongly agree; 2) agree; 3) don't know; 4) disagree; 5) strongly disagree. It measures a person's anxiety level by calculating an anxiety score, equal to the sum of the scores on the 33 items. Hence, the theoretical range of the FLCAS is from 33 to 165. The version used in the research presented here was the one that Pérez-Paredes and Martínez-Sánchez (2000-2001) translated and adapted to the Spanish context.

Furthermore, a background questionnaire including information regarding students' language level, gender, age, and the entry mark obtained in English was used.

### Procedure

Permission was requested from the deans of the three Faculties involved to conduct the survey.

Once the principal investigator (P.I.) had explained the purpose of the study, the participants were asked to complete the background questionnaire.

<sup>&</sup>lt;sup>2</sup> The 2008 study by Martínez Baztán has addressed correspondence with the The American Council on the Teaching of Foreign Languages (ACTFL) Guidelines. Thus, B1 would correspond to Intermediate Mid and Intermedi-

ate High, B2 would correspond to Intermediate High and Advanced Low, and C1, to Advanced Mid, Advanced High.

Subsequently, the Spanish students were given the FLCAS translated into Spanish and the P.I. read the written instructions aloud, encouraging the participants to ask questions if they did not understand the directions. The researchers told the learners to think of their previous English learning experiences at the university. Participants had about 20 minutes to complete the questionnaires during class time.

Subjects completed the FLCAS in the second semester of the academic year. Learners were assured that the results would not have any kind of effect whatsoever on their final mark or on their academic record. The researchers also attested to the confidentiality of the information to be gathered. All the students took part in the experiment voluntarily.

#### Data analysis

The analyses described below were performed using the SPSS 17.0 for Windows. Descriptive statistics (mean and standard deviations) of the anxiety scale and subscales were calculated for the whole group, and separated according to degree course studied.

Independent sample *t*-test analyses were used to determine whether there were statistically significant differences among students taking different degrees in terms of anxiety levels. In this research, results are not presented by item, but by subscale. In a previous study (Arnaiz and Guillén, 2012), a factor analysis was carried out to reduce the number of variables and to detect the structure in the relationships between variables. Three subscales were established: *Communication Apprehension, Evaluation Anxiety* and *Discomfort in Using English inside and outside the Classroom*.

Firstly, the scores of the group formed by students who had English as a non-elective degree requirement -which included those enrolled in the Computer Science Faculty and in the Teacher Training Faculty specializing to become Primary Generalist teachers, Physical Education teachers and Music teachers- were compared with the scores of the students for whom English was a main chosen subject in their curriculum -those enrolled in the Teacher Training Faculty to become Primary English teachers and in the Translation and Interpreting Faculty.

Secondly, and with the purpose of shedding light specifically on the anxiety levels experienced by future Primary Teachers, the research focused on these students. The scores of future Primary English teachers (PET) were compared with those of future Generalist teachers, Physical Education teachers and Music Teachers (PT).

In order to investigate the relationship between the overall anxiety scale and the subscales, on the one hand, and participants' language level and mark, on the other hand, the data were analyzed inferentially by means of correlation analyses. The entry mark obtained by students in English, which in all cases was the one obtained in the first semester of the academic year, was used as the basis for the correlation. Again, the analyses were conducted by student degree program.

### Results

### Reliability

This version of the FLCAS yielded an internal consistency of .93, using Cronbach's alpha coefficient, which gives information as to the degree to which the items in a scale measure similar characteristics. This figure reveals high internal reliability, coincides with that obtained by Horwitz, et al. (1986) in their study, (a = .93), and is slightly higher than the one obtained by Pérez-Paredes and Martínez-Sánchez (2000-2001) (a = .89).

#### General means

Table 1 shows the mean and standard deviation for answers to the scale and the three subscales. The *Communication Apprehension* subscale shows the highest score (M = 3.28), followed by the *Evaluation Anxiety* subscale (M = 3.05) and the *Discomfort in using English inside and outside the Classroom* subscale (M = 2.61). The *Communication Apprehension* score is higher than the mean score for the whole scale, while the evaluation anxiety subscale is closer to it and the *Discomfort in using English inside and outside the Classroom* score is below the scale mean score.

#### Mean differences

The independent sample *t*-test analysis performed to determine the differences in anxiety levels between the group who had English as a non-elective degree requirement and the group who had it as a main subject (*i.e.* had chosen to study it voluntarily) revealed that the latter felt more comfortable when using English inside and outside the classroom, t (4.97), p < .000. As regards the other two subscales and the total score, no statistical differences were detected between these two samples of students.

A similar pattern of results was obtained with the independent sample *t*-test analysis conducted to observe the differences in anxiety levels between primary teachers who had English as a non-elective degree requirement and primary teachers for whom it was a main chosen subject. The significant difference detected again reflects how comfortable they felt when using the English language. Future Primary English teachers felt more comfortable than future Generalist teachers, Physical Education teachers and Music teachers, who had English as a mandatory subject, *t* (4.65), *p* < .000. See Table 1 for details.

	Communication apprehension M (SD)	Evaluation anxiety M (SD)	Discomfort M (SD)	FLCAS M (SD)
General $(N = 200)$	3.28 (.91)	3.05 (.63)	2.61 (.78)	3.14 (.72)
All degrees				
EDR(n = 120)	3.38 (.91)	3.07 (.61)	2.83 (.77)	3.22 (.72)
EMS $(n = 80)$	3.14 (.90)	3.01 (.66)	2.29 (.69)	3.01 (.69)
t (p)	1.77 (.079)	0.65 (.516)	4.97 (.000)	1.94 (.053)
Teaching degree				
PT (n = 90)	3.43 (.92)	3.07 (.62)	2.83 (.82)	3.25 (.72)
PET $(n = 50)$	3.15 (.93)	3.09 (.70)	2.18 (.70)	3.03 (.73)
t (p)	1.63 (.105)	-0.19 (.842)	4.65 (.000)	1.55 (.123)

EDR = English as a degree requirement; EMS = English as a main chosen subject; PT = future Generalist, Music and Physical Education teachers; PET = future Primary English teachers

#### Correlations

Pearson correlation coefficients, presented in Table 2, indicated the relationship among the three anxiety subscales and the total anxiety score and participants' language level and entry mark.

With respect to students who had English as a main subject, significant negative correlations were detected between *entry mark* and the *Communication Apprehension* subscale (r = -.310), the *Evaluation Anxiety* subscale (r = -.336), and the *To-tal anxiety score* (r = -.353). The variable *level* did not maintain any significant correlation either with the subscales or the to-tal anxiety score.

In the case of students who had English as a nonelective degree requirement, the *entry mark* variable maintained a very high negative correlation with the *Communication Apprehension* subscale (r = -.320), the *Evaluation Anxiety* subscale (r = -.325) and the total anxiety score (r = -.333) and a moderate negative correlation with the *Discomfort in using English inside and outside the Classroom* subscale (r = -.190).

Table 2. Pearson product-moment correlations among anxiety subscales, the total scale and level and entry mark by degree studied.

	Level	Entry Mark
ENGLISH MS ( $n = 80$ )	r	r
Communication apprehension	.108	310**
Evaluation anxiety	.055	336**
Discomfort	.074	102
FLCAS	.082	353**
ENGLISH DR* ( $n = 120$ )	r	R
Communication apprehension		320***
Evaluation anxiety		325***
Discomfort		190*
FLCAS		333***

\* p = .05; \*\* p = .01; \*\*\* p = .001

ENGLISH MS = English as a main chosen subject; ENGLISH DR = English as a degree requirement

\*All the students for whom English is a degree requirement (ENGLISH DR) were at B1 level, so no correlation was possible.

## Discussion

Before discussing the results of the tests performed to detect the differences between the different samples and to establish the degree of correlation between anxiety and the variables chosen for the groups selected, we will focus our attention on the general anxiety mean corresponding to all participants in our study.

The results of the present study indicate that students have average anxiety levels, consistent with recent research carried out with students from a variety of degree programs in different socio-cultural contexts. In one of these studies, the participants were learners of Spanish as a foreign language in a Midwestern American university context (Marcos-Llinás and Juan-Garau, 2009); in a second one, they were learners of EFL in a Korean university (Kim, 2009). However, these results contrast with those obtained in other studies as well with students from a variety of degree programs. Lower anxiety levels were registered by Aida (1994) when examining the anxiety levels of students of different nationalities learning Japanese, and by Horwitz (1986) when investigating the anxiety level suffered by learners of Spanish. In both cases, the context was the University of Texas, Austin. In this same vein, but more recently, we can cite Liu's (2006) findings corresponding to learners of EFL registered in a university in Beijing, China.

On the one hand, our findings lend credence to and broaden the findings in research from other socioeducational contexts focused on various foreign languages; on the other hand, the discrepancy with the results in other studies reinforces our belief that each specific learning environment needs to be examined or, at least, data pertaining to contexts with similar characteristics need to be provided.

The results obtained were synthesized and interpreted for each research question. The first two questions address the issue of whether the subject is compulsory or elective. One of the aims of this paper was to find out the extent to which studying English as a result of a personal decision might influence anxiety levels.

### **Research Question 1**

Do students who have chosen English as their main subject experience lower anxiety levels than students with English as a degree requirement? Globally, there are no significant differences between the two profiles. Contrary to our expectations, the re-

sults yielded significant differences in just one of the subscales, which showed that students with English as a main subject felt more comfortable in using English inside and outside the classroom and therefore suffered less from this type of anxiety related to comfort levels than students with English as a compulsory degree requirement. Given the professional aspiration of future translators/interpreters and future Primary English teachers, a larger distance between the two profiles was expected. The explanation given below for possible reasons of the difference found in the second comparison may be applied here.

#### **Research Question 2**

Do pre-service Primary English teachers have lower anxiety levels than pre-service Primary Generalist, Music or Physical Education teachers? Total scores indicate that there are no significant differences between future Primary English teachers and future teachers of the other specialties with English as a degree requirement. Unexpectedly, future English Primary teachers did not have lower anxiety levels. As we saw in the previous comparison, it was only in the Discomfort in using English inside and outside the Classroom subscale that a significant difference was found between the two groups formed. Pre-service primary English teachers felt more comfortable, and consequently had lower comfort-related anxiety levels than preservice Primary Generalist, Music or Physical Education teachers.

So, if we look at our results from a global point of view, we can infer that they coincide with the results obtained by Ortega-Cebreros (2003), in the sense that future English Primary teachers manifest anxiety levels comparable to those of students with English as a compulsory degree requirement. Participants in the research by Ortega-Cebreros were studying to become Secondary English teachers, and therefore had English as a main subject, *i.e.*, they studied it by choice, and nevertheless suffered from anxiety levels similar to those presented in studies carried out with participants from a variety of degree programs in which English was not their main subject (Kim, 2009; Marcos-Llinás and Juan-Garau, 2009).

But if we focus on the results obtained in the FLCAS subscales, we can affirm that our results are partially congruent with Rodríguez and Abreu's (2003) findings for preservice English language teachers. These authors detected in their Venezuelan participants a considerably lower mean language anxiety score than those detected in previous studies on foreign language anxiety (Aida, 1994; Horwitz, 1986; Saito et al., 1999). The results obtained in our study in the Discomfort in using English inside and outside the Classroom subscale can be said to point in the same direction as Rodríguez and Abreu's in the sense that participants who had chosen English as a main subject felt more comfortable with their English and consequently had lower levels of that type of anxiety than students who had English as a degree requirement. Likewise, our findings partially confirm those in Pérez-Paredes and Martínez-Sánchez's (2000-2001) research with Spanish students enrolled voluntarily in English lessons.

Although small, the difference detected between the two profiles requires an explanation. We might speculate that higher levels of aptitude and motivation among future primary English teachers are likely to lie at the heart of this difference. We share Rodríguez and Abreu's (2003, p. 371) idea that complex relationships may be established between FL anxiety and different affective, cognitive and demographic aspects such as learners' aptitude, motivation, and culture. Sufficient evidence exists to affirm that motivation and anxiety have opposite effects on FL learning (Gardner, Day and MacIntyre, 1992; Gardner and MacIntyre, 1993; MacInyre, 1995; MacIntyre, 2002; Matsuda and Gobel, 2004). We believe that the voluntary choosing of English implies a high level of motivation, which presumably will condition both learning quality and anxiety levels.

The following two research questions were intended to establish to what extent the language level and entry mark variables correlated with the anxiety level in students with English as a main subject, and to what extent the variable entry mark correlated with anxiety levels in students with English as a degree requirement.

#### **Research Question 3**

What is the degree of correlation between anxiety levels, on the one hand, and language level and entry mark on the other hand, for students with English as a main chosen subject? Unlike previous research, which has indicated either a negative correlation between anxiety levels and language level (Liu, 2006) or a positive correlation between the two (Ewald, 2007; Kitano, 2001; Marcos-Llinás and Juan-Garau, 2009), our results revealed no statistically significant associations between these two variables.

However, this lack of statistical significance may be due to methodological decisions. Determining with precision the language level of a group of students is not easy, since the tests used to this end vary not only across countries but also within the same country.

In terms of entry mark, strong associations with anxiety levels were observed in all cases but one, the Discomfort in using English inside and outside the Classroom subscale. For these students, the higher the level in Communication Apprehension Anxiety, Evaluation Anxiety and total anxiety, the lower their entry mark. This aspect is discussed in the answer given for research question 4, below.

#### **Research Question 4**

What is the degree of correlation between anxiety levels and entry mark for students with English as a non-elective degree requirement? All measures considered showed a negative correlation with the variable entry mark and three of the four figures indicate that the correlation is very strong; only in the case of the

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subscale Discomfort in using English inside and outside the Classroom is the correlation 'moderate'. This means that anxiety is playing a relevant role in students' language learning process, and may well be impairing it. Previous research has also noted this strong association (Aida, 1994; Ganschow et al., 1994; Horwitz, 1986). These coincidences, however, should be viewed with caution, since in the three studies referred to above the subjects were beginners, whereas participants in our study were at B1 or pre-intermediate levels.

A more recent study that points in the same direction as the present study although using a different approach is that of Koul, Roy, Kaewkuekool and Ploisawaschai (2009) with Thai university students learning English. The results reveal that participants who exhibited higher anxiety levels gave themselves a lower mark in English language proficiency.

Findings to the contrary have also been encountered. Marcos-LLinás and Juan-Garau's investigation (2009) demonstrates that high levels of anxiety do not lead to poor course achievement.

Undoubtedly, the findings presented above corroborate Spielmann and Radnofsky's (2001, p. 261) statement that language learning is a complex experience. Language learning anxiety at all levels needs careful attention on the part of researchers and teachers. Numerous investigations on FL anxiety have been undertaken in other contexts at different levels of instruction. Research is needed within the Spanish university context in order to help professionals become aware of the importance of devoting time and effort to exploring the specific characteristics of this aspect and helping learners achieve success at this level. The importance of affect in foreign language learning and the need to develop rigorous ways of researching this aspect was also emphasized by Garrett and Young (2009). The influence of emotional factors on cognitive and metacognitive processes such as attention, memory, planning and hypothesis construction has been sufficiently proven (Damasio, 1994; Lantolf and Thorne, 2006, 2007).

As Ewald (2007, p. 123) has put forward, some teachers might even believe that students who have decided to specialize in foreign language study do not suffer from anxiety or that it is a personal aspect of academic experience that students must overcome by themselves. It is a mistake to assume that all language teachers are familiar with foreign language anxiety.

# Conclusions

There seems to be sufficient evidence to affirm that anxiety is inherent in the learning process of foreign language students at university level. A major finding of this study is that, although no significant differences between the different student profiles explored were found, the correlations established between anxiety level and the *entry mark* variable are much stronger for students with English as a non-elective degree requirement than for students with English as a main chosen subject. This implies that anxiety affects students who have English as just another subject in their curriculum more than those who have chosen to study it. Therefore, reducing language apprehension should be a key aim of all university degree programs, but particularly in those cases in which English is not the discipline selected by the student as their specialty.

Teachers can do a lot to create non-intimidating learning environments for students and, in turn, alleviate their anxiety. Some researchers have offered suggestions for teachers to help students decrease their anxiety levels such as helping students understand that being a competent speaker in a foreign language takes many years of study and practice in most cases (Casado and Dereshiwsky, 2001) or convincing them of their abilities to learn and improve and that making mistakes is part of the learning process (Ewald, 2007, p. 134).

But in order to help students reduce their foreign language anxiety levels, it is necessary to have the resources available to identify signs of anxiety (Dewaele, 2007; Gregersen, 2007; Horwitz, 1996; Young, 1991, 1992). We coincide with Ortega Cebreros's (2003) suggestion that an anxiety scale be used in the language classroom, as it can offer many advantages for the language learning process. It allows teachers to assess the socio-affective atmosphere of a particular classroom context and determine which aspects cause most anxiety. This information would enable the teacher to think up his /her own plan of classroom intervention with the aim of guiding the students to cope with their anxiety. Besides, the mere act of completing the anxiety scale may have a positive effect in itself, helping students to see that the teacher is aware of their negative thoughts and worries and thereby including them as part of the learning adventure.

As indicated, the scale used in this study, the FLCAS, designed by Horwitz et al. (1986), has been proved to be reliable and valid. However, from our point of view, there are two aspects of the scale that could be improved:

- a) The Likert-scale goes from *totally agree* (1) to *totally disagree* (5) and it would be more reasonable and less confusing for the completion of the questionnaire to reverse this order, starting with *totally disagree* (1). Ortega-Cebreros (2003) also reversed the order in her research.
- b) The scale does not follow a fixed pattern as regards the wording of the statements and this makes the completion of the scale more complicated and tedious for participants. Besides, the existing scale requires some of the statements to be reversed in order for the scores to be calculated. For example, in (2) *I don't worry about making mistakes in language class*, worded in negative form, the option 5 (totally disagree) would mean a high anxiety level; whereas in (9) *I start to panic when I have to speak without preparation in language class*, a 5 (totally disagree) would imply a low anxiety level. Research could dedicate effort to improving the scale.

Finally, and as a future line of research, we suggest concentrating on students' voices on FL anxiety issues.

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