

The Achievement Emotions of English Language Learners in Mexico

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Abstract

This study examined university students' reports of eight achievement emotions in their EFL classes in Mexico. Although anxiety has dominated the research agenda in language learner emotions for decades, second language researchers have begun to examine more recently the role of other emotions. Pekrun's (2006) framework includes three positive (e.g. hope) and five negative emotions (e.g. shame) that learners might experience in class. These emotions are important because they influence learners' use of learning strategies and, in turn, performance. In this study, 412 participants (M = 173, F = 239) voluntarily completed an online Spanish version of Pekrun's (2006) Achievement Emotions Questionnaire, namely the AEQ-Argentine (Sánchez-Rosas, 2015). The results indicated that learners report significantly higher levels of enjoyment, hope, and pride, in their English classes, while three negative emotions: anger, shame, and boredom were rated as highly as anxiety was. No gender differences were found in the eight emotions. However, analyses revealed that two cohorts (low achievers and students in higher semesters) experienced significantly more negative emotions than did high achievers and first-semester students. The importance of understanding how to respond to the negative emotions experienced by these two groups is emphasized.

1 Introduction

1.1 Language learning and emotions

Language teachers know how important emotions are. Students laugh at funny comments, tremble during an oral presentation, and experience relief after an exam. Although learners experience a world of emotions, with the exception of anxiety, research into language learner emotions had been minimal (e.g. Dewaele & MacIntyre, 2014; Piniel & Albert, 2018) until recently. However, over the preceding four years, both qualitative (e.g. Ross & Rivers, 2018) and quantitative (e.g. Pishghadam, Zabetipour, & Aminzadeh, 2016) studies have been completed on emotions. This shift suggests SLA researchers have begun to act on what educational psychologists (e.g. Frenzel, Thrash, Pekrun, & Goetz, 2007; Pekrun, Goetz, Titz, & Perry, 2002) pointed out over a decade ago: emotions – beyond anxiety – influence learning and performance, for better or worse, in fundamental ways and, therefore, warrant our examination.

1.2 Affective variables and anxiety

Stevick (1980) wrote that success in language learning depends more on what goes on "inside and between people" (p. 4) than it does external factors. Over the nearly 40 years since, a myriad of individual differences have been researched, including aptitude (e.g. Dörnyei & Skehan, 2003); learning styles (e.g. Oxford, 1990); learning strategies (e.g. Chamot, 2005); motivation (e.g. Dörnyei, 1998); and one emotion: anxiety (e.g. Horwitz, 2001). Arnold (2011) suggested that these variables are important, because teachers need to take the "inside" of language learners into account, if not, the cognitive aspect of learning becomes more difficult. In the midst of all this growth in understanding of the *inside and between*, researchers now recognize that an exploration of emotions beyond anxiety has been neglected (e.g. MacIntyre & Gregersen, 2012).

1.3 What is an emotion?

It is not surprising that a psychological construct such as emotion has about as many definitions as it does researchers. In fact, Izard (2010) found "no consensus on a definition of emotion" (p. 363) among 34 scientists. Further, Izard found that researchers use this term in ways that reflect different meanings and functions. However, for the purpose of this study, a four-part definition seems acceptable. First, there is a perception of a stimulus (e.g. a teacher advises the class of an upcoming exam); second, a physiological response (e.g. a student feels butterflies in his stomach); third, a psychological labeling (e.g. *I am nervous about the test*); and fourth, a behavior (e.g. darting eyes and backward movement demonstrating anxiety).

Perhaps SLA researchers could benefit from the work of Ekman (2017), who has explored the nature of human emotions for half a century. He has completed detailed investigations on human emotions (e.g. joy, anger, fear, love). If teachers were familiarized with specific emotions that tend to arise in their students, they might develop attitudes and strategies that serve as antecedents for the rise of positive emotions, and thereby create a classroom climate that benefits language learning.

1.4 Emotions in educational settings

One framework of emotions that has received increasing attention in educational research is Pekrun's (2006) control-value theory. It posits that emotions are determined by an individual's perception of two factors: 1) control over activities and outcomes; and 2) the importance of these activities and outcomes for him or her. For example, an English language (EL) learner may experience positive emotions (e.g. enjoyment), if she is asked to create a video demonstrating her English level (control) on a topic she finds interesting from her major (importance). Conversely, she may experience negative emotions (e.g. anger) if she receives a low score on the video based on a scoring rubric that the teacher never presented to the students (no control). Control-value theory gave rise to the Achievement Emotions Questionnaire (AEQ; Pekrun, Goetz, Frenzel, Barchfeld & Perry, 2011), an instrument designed to assess various achievement emotions experienced by students in academic settings. The AEQ, used for this study, is described in the Instruments section below.

Eight achievement emotions that Pekrun (2006) has identified are presented in Table 1. The dimension of valence refers to pleasantness vs. unpleasantness. Activation refers to the tendency for a person to act or not because of this emotion. These eight emotions are not comprehensive, rather a limited list relevant to the current study. A thorough review of all the achievement emotions is found in Pekrun, Frenzel, Goetz, and Perry (2007), and also in Piniel and Albert's (2018) work.

Emotion	Definition	Valence, Activation
Enjoyment	Experience of interest and appropriate challenge	Positive/activating
Hope	Success is perceived as being attainable	Positive/activating
Pride	Pleasure resulting from a completed positive outcome	Positive/activating
Anger	Displeasure due to being blocked or treated unfairly	Negative/activating
Anxiety	Displeasure due to a future uncertainty	Negative/activating
Shame	Displeasure due to a failure, humiliation	Negative/activating
Hopelessness	Success is perceived as not being attainable	Negative/deactivating
Boredom	Displeasure due to lack of interest	Negative/deactivating
Emotion	Definition	Valence, Activation
Enjoyment	Experience of interest and appropriate challenge	Positive/activating
Hope	Success is perceived as being attainable	Positive/activating

Table 1. Achievement emotions, definitions, valence and activation

1.5 Emotions in educational settings

Two frequently cited researchers on the impact of affect and emotions in EL learning are Arnold (e.g. 2011) and Dewaele (e.g. 2015). After writing a ground-breaking book, "Affect in language learning" (1999), Arnold reiterated why language teachers need to pay attention to affect (Arnold, 2011). She stated that if teachers want students to share their interest in language learning, they can find a valuable ally in affect. She offers numerous examples of how teachers can give more attention to affect, including attending to student self-esteem, incorporating humanistic teaching and testing practices, enhancing group dynamics, and encouraging teachers to become emotionally self-aware.

Apparently, the first researchers to study an emotion other than anxiety were Dewaele and Mac-Intyre (2014), who examined the report of enjoyment and anxiety among 1,746 foreign language learners worldwide, finding that L2 learners report more of the former. Considering that research from educational psychologists (e.g. Pekrun, 2006; Schunk, 2008) suggests that positive emotions such as enjoyment, hope, and pride are associated with higher academic achievement and negative emotions such as anger, shame, and boredom are associated with lower achievement, it is obvious that SLA researchers ought to continue on this path of unpacking the emotions that language learners experience.

Other studies that have been published quite recently that explore the role of emotions in EL learning cover topics such as language learners' emotions outside the classroom (Ross & Rivers, 2018) and love for the language (Pavelescu & Petrić, 2018). It is evident that such research is giving positive emotions their due attention. MacIntyre and Gregersen (2012) have discussed the benefit of positive emotions for learning:

Positive emotions lead to action tendencies that differ from negative emotions. Joy ignites the urge to play, interest kindles the urge to explore, contentment awakens the urge to savor and integrate, and love inflames a continuing series of these human yearnings within protected intimate relationships. If teachers can inspire these positive-broadening emotions, the ensuing actions seem likely to boost language learning; what could be healthier for language growth than learners who want to play, explore, integrate and establish relationships. (p. 208)

1.6 Description of EL teaching in Mexico

In 2009, the Secretariat of Education initiated a plan for EL education entitled the "Program for English Language Learning in Mexico" (Ramírez-Romero & Sayer, 2016). It mandates that all students from the third grade of kindergarten through the ninth grade of lower middle school (ages 6 to 15) receive 2+ hours of instruction per week, or nearly 100 hours per year. In total, students take approximately 1,000 hours of English class over this 10-year period. They are expected to progress from an A0 to a B1 level in the Common European Framework by the age of 15.

Pedagogy and curriculum. As part of a broader educational reform in 2013, the pedagogy and curriculum of EL teaching were officially changed from a communicative to a sociocultural approach (Ramírez-Romero & Sayer, 2016). This meant that teachers stopped defining the learning objectives in terms of competencies, and started teaching the English required for social practices surrounding family, social, work-related situations. Furthermore, it changed the focus of materials and learning activities away from grammatical elements and towards a project-based approach.

Challenges. The challenges facing the field of EL teaching in Mexico involve the shortage of qualified teachers and the conditions under which they work. Regarding the lack of teachers, Ramírez-Romero and Sayer (2016) reported that the country would need to hire almost 100,000 teachers to reach all the students in primary and secondary education. Furthermore, teachers are expected to have a B2 level of English and a BA in EL teaching. Ramírez-Romero (2013) has commented that the shortage is especially serious considering that Mexico has not been able to develop teacher education programs designed to fill this need.

Regarding working conditions, Ramírez-Romero (2013) reported that most teachers earn a modest \$3–5 USD per class hour and most work with a temporary contract that covers a semester or school year. The contracts rarely guarantee employment stability, nor do they offer health insurance and paid vacations. It is not uncommon that teachers complain that they are not paid in a timely manner and that pay raises are infrequent. The situation is worse for female teachers who are normally not entitled to maternity leave or pay if they become pregnant. Considering these poor working conditions, the high teacher turnover rate is not surprising.

Results of EL study in Mexico. Academic achievement is relatively weak across different subjects. In math and science, Mexican 15-year-olds have repeatedly been ranked in the bottom fifth among the 70 OECD countries (OECD, 2015). In English, "Mexicanos Primero" (2015), a non-governmental initiative dedicated to improving education in Mexico, reported that only 3% of middle school graduates achieve the targeted B1 level on the CEF. Incredibly, 79% of them score at an A0 level after ten years of study. A primary conclusion of "Mexicanos Primero" is that the educational system is a *simulation* which hands out diplomas, but does not guarantee real learning.

1.7 Emotions of EL students in Mexico

Mendez (2011) has published the only research on the emotional experience of EL learners in Mexico. By asking 24 university students to keep an emotional journal during 12 weeks of EL study, she found that the emotions most frequently reported were fear, happiness, worry, calm, sadness and excitement. This is a valuable finding, because most studies on affect "focus on a single negative emotion such as anxiety and overlook the diversity of students' experiences and emotions" (Barcelos, 2015, p. 308). Second, Mendez's subjects reported experiencing about twice as many negative emotions than positive ones, a finding that contradicts Dewaele's discovery to the contrary. Finally, Mendez identified five main sources of students' emotions: their insecurity about their speaking ability, comparisons with peers, the type of learning activity, the teacher's attitude, and the classroom climate. The last two – attitudes and classroom climate – were found to have the most impact on student motivation.

Mindful of Stevick's (1980) insight about the importance of what happens inside and between learners, Mendez's (2011) findings regarding the impact of the teachers' attitude and classroom climate seem on target. Mendez gave an example of the impact of the teachers' attitudes. One student wrote, "The teacher didn't motivate us to participate because he made gestures or certain comments that inhibited me. I didn't like to participate because I felt afraid of the teacher's comments" (p. 53). Mendez also exemplified the effect of the classroom climate. Another student wrote, "... in this class, we all participated ... you cannot feel tension in the environment and everything just flows. This teacher made everyone participate without showing you up when you made a mistake" (p. 55). The first student's comment evidences a detrimental teacher attitude. The second student's comment elief that teachers' attitudes can inspire positive emotions and, hence, boost language learning.

1.8 The AEQ and EL learners

A review of the literature found only two studies that applied the AEQ to EL learners. First, Tan (2017) used an abbreviated 25-item version of the AEQ to explore the emotions experienced by 74 Chinese university EL learners. He found that students experienced more positive than negative achievement emotions, a finding that coincides with Dewaele's conclusion. Tan also reported, not surprisingly, that low-achieving students reported more negative emotions than their high-achieving classmates did. Tan's finding in China is relevant for the current study in Mexico, because both have an above average class size among OECD nations (OECD, 2012). According to the British Council (2017), large classes often bring a wide range of abilities, which in turn makes teaching more challenging. Weaker learners, in contrast with stronger learners, may feel humiliated, if they cannot answer a question and may resort to misbehavior out of frustration.

In the second study, Yükselir and Harputlu (2014) administered the AEQ to 215 Turkish university EL learners. They found that male students report significantly higher levels of pride and enjoyment during learning, while female students report significantly higher levels of anxiety and shame. In mathematics, Frenzel, Pekrun, Goetz, and vom Hofe (2007) also found that females reported less enjoyment and more anxiety and shame that males did. These findings are also relevant for the current study in Mexico because results from the OECD (2015) revealed that female students not only underperform in comparison to males in math and science (there are no studies of gender differences in EL learning), but women are four times more likely to be *neither in education nor employed* (NEET) than men in the 20–24 age range (39% to 9%, respectively; OECD, 2018). Perhaps the tendency for females to do more poorly and leave school is associated with the experience of negative emotions. This study will not seek to find causal relationships between emotions and complicated life decisions; however, because emotions are salient sources of actions, an examination of gender-specific emotional experience is warranted.

A third study involving language learners that used Pekrun's (2006) emotional framework to code learners' emotions – but not the AEQ per se – was completed by Piniel and Albert (2018). They used a qualitative research design to explore the emotions reported by 166 Hungarian EL majors when practicing the four skills. Their findings included: 1) the predominant emotions reported were enjoyment and anxiety; 2) emotions reported varied according to the skill being practiced and whether they were done in or out of the class; and 3) second- and third-year students reported a significant increase in negative achievement emotions, adding that perhaps students in higher semesters are less eager to learn than first-semester students, and are more focused on avoiding failure and simply getting their degree.

1.9 Why is exploring EL learner emotions important?

First, an understanding of emotions is important for teachers. Positive emotions have been linked to learners' tendency to play, explore, and establish relationships (MacIntyre & Gregersen, 2012); increased attention and motivation to learn (Schunk, 2008); the employment of flexible, deep and creative learning strategies (Pekrun, 2014); cognitive load theory (Pekrun & Stephens, 2010); and self-regulated learning, (e.g. the use of planning and monitoring of learning) (e.g. Ahmed, van der Werf, Kuyper, & Minnaert, 2013; Mega, Ronconi, & De Beni, 2014). Negative emotions decrease learners' academic achievement, because they reduce concentration, comprehension, and effort (Pekrun, 2014). Hence, it is crucial that EL teachers foster the experience of positive emotions and decrease that of negative emotions in order to optimize learning processes.

From a student perspective, understanding emotions is important as well. Social-emotional learning (e.g. Martinez, 2017) posits that students benefit from noticing, accurately naming, and interpreting their emotions. In the language class, some students may ignore their feelings hoping that they will go away; whereas others may become paralyzed by them. Emotional literacy can be taught and developed with practice, and the place to start is increasing both teachers' and students'

awareness of what emotions may arise during the language learning process. Basically, when teachers and students are clear about what is happening *inside*, they can communicate and understand each other better, thereby creating a better learning environment and improving academic performance.

1.10 A practical example

The teacher of a TOEFL preparation course may ask his students to create a video of different grammar points related to the exam (e.g. the use of although vs. despite). If the teacher explains that this grammar point is tested on the TOEFL grammar section, then students may see the practical value of the activity. At the same time, if the teacher encourages the students to be creative, allowing them leeway to include music, graphics, and peers in the video, they may perceive the *control* they have over the project. Furthermore, if the teacher asks the students to develop an evaluation rubric with which the videos will be graded, the students may perceive their *control* over the learning outcomes.

1.11 The purpose and research questions

The purpose of this study is to develop an understanding of the emotions experienced in class by EL learners at a Mexican university, comparing learners of different sex, achievement level, and semesters of a program. Perhaps such a mapping of student emotions will deepen teachers' and researchers' understanding of what goes on *inside* learners. With that understanding, teachers may manage classroom interaction in ways that enhance the classroom climate and learning.

Four research questions were proposed for this study aimed at identifying the achievement emotions that EL learners experience. Consequently, the first research question was: *What achievement emotions do Mexican university students report experiencing in their English course*? If the presence of specific emotions can be identified, the findings could be valuable for researchers, educators, and students, because emotions influence learning and performance (Pekrun, 2006). Such a mapping of the eight emotions has not been completed in Mexico to date, and it may help these educators to adjust courses and communicate explicitly about emotions in order to create a better learning environment. Educators could make more informed decisions when planning courses and managing emotions that arise during the course. Students could learn to identify and regulate their own emotions when learning.

Mindful that researchers in Germany and Turkey (e.g. Frenzel et al., 2007; Yükselir & Harputlu, 2014) have found that male students reported higher levels of enjoyment and pride (positive emotions), while female students reported higher levels of anxiety and shame (negative emotions), it is essential to examine if these tendencies apply to Mexican learners as well. Consequently, the second research question was: *Are there any significant gender differences in the achievement emotions that Mexican university students report experiencing in their English course*? If, for example, negative emotions such as anxiety and shame are found to be more prevalent in Mexican female students, it is important that teachers take steps to ameliorate those negative emotions, and thereby maximize the achievement of female students.

In light of Tan's (2017) finding that low-achieving learners demonstrated more negative emotions than did high-achieving students, it is valuable to examine if these tendencies apply to Mexican learners as well. Accordingly, the third research question was: *Are there any significant differences in the achievement emotions that high-achieving and low-achieving Mexican university students report experiencing in their English course*? If negative emotions are found to be more prevalent in low-achieving students, it is important that teachers take steps to ameliorate those negative emotions, and thereby maximize the achievement of low-achieving students.

Considering that language students learn English over the course of various semesters, it is valuable to examine if levels of the achievement emotions vary in different semesters. Thus, the fourth research question was: Are there any significant differences in the achievement emotions that firstsemester students and students in higher semesters report experiencing in their English course? If emotions do vary in different levels, it might be helpful for researchers, writers, and educators to be aware, and thereby customize strategies and materials accordingly in an effort to maximize positive emotions and reduce negative ones.

2 Method

2.1 Participants

412 (F = 239; M = 173) students from two universities, one private and one public, located in central Mexico voluntarily took part in the study. The participants' ages ranged from 18 to 24 (mean = 19.7, SD = 4.76). Participants were enrolled in one of four different schools within the university: business (35%); engineering (30%); education (25%); and law (10%). Students study 5 to 7 hours of English per week. A C1 level on the CEF is a graduation requirement for the students at the private university; a B1 is a requirement for those at the public university. Spanish was the L1 of all students.

2.2 Instruments

Consent forms were distributed and collected from all participants. The form contained information about the purpose, procedures, and benefits of the study, an explanation of how to acquire the results of the research, and contact information of the researchers.

In order to collect data, an online, Spanish version of the AEQ, namely the Achievement Emotions Questionnaire-Argentine (AEQ-AR) was applied to the participants. This instrument has demonstrated high validity and reliability (Sánchez-Rosas, 2015). The purpose of the instrument is to collect data about eight emotions that learners may experience during class. Specifically, the AEQ-AR reports on the experience of three positive emotions. Sample items from the instrument are presented in italics. The positive emotions include enjoyment: *My enjoyment in class makes me want to participate*; hope: *I am optimistic that I will be able to keep up with the material*; and pride: *I would like to tell my friends about how well I did in this course*. The AEQ-AR reports on experience of five negative emotions, including anger: *Thinking about all the useless things I have to learn makes me irritated*; anxiety: *Even before class, I worry whether I will be able to understand the material*; shame: *I am ashamed because others understood more of the class than I did*; hopelessness: *I'd rather not go to class since there is no hope of understanding the material anyway*; and boredom: *I think about what else I might be doing rather than sitting in this boring class*. The instrument uses a 5-point Likert Scale, including 1) never; 2) rarely; 3) sometimes; 4) often; and 5) always. There are between 5 and 7 items pertaining to each emotion.

2.3 Procedure

In the seventh week of the 16-week semester, students voluntarily completed the in-class section of the AEQ-AR (see Appendix A) online. Students could complete the survey in class or out of class. The data were downloaded onto Excel sheets where descriptive statistics as well as one paired samples t-test and three independent t-tests were completed.

3 Results

3.1 Achievement emotions beyond anxiety

The first research question asked: *What achievement emotions do Mexican university students* report experiencing in their English course? This question was included to determine if the other emotions in addition to anxiety in Pekrun's (2006) framework are experienced in class by language

learners in Mexico. To address this question, descriptive statistics were completed on the eight emotions. Table 2 shows the means, standard deviation, skewness, and kurtosis for each of them. The assumption of normally distributed scores was examined and satisfied based on the fact that the skew and kurtosis levels (with the exception of the skew for hopelessness) were estimated to be less than the maximum allowable values for a t-test (i.e. skew < |2.0| and kurtosis < |9.0|; Posten, 1984).

Results of paired-samples t-tests show that the means for all three positive emotions (enjoyment, hope, and pride) were significantly higher than that of anxiety. Further, Cohen's d indicates large effect sizes (Cohen, 1992). The means for three of the negative emotions (anger, shame, and boredom) were non-significant; while the mean for hopelessness was significantly lower than that of anxiety. Cohen's d for hopelessness indicates a small effect size. These results suggest that six of the seven emotions reported by language students in Mexico are either higher or at about the same level as anxiety. Hopelessness was the lone emotion measured by the in-class section of the AEQ-AR that was significantly less than anxiety.

Table 2. Descriptive statistics and results of paired t-tests comparing anxiety with other seven emotions

]	Descrip	tive stati	stics	Paired t-test results				
Emotion	М	SD	Skew	Kurtosis	Mean	t	df	d	
					difference ^a				
Enjoyment	3.88	0.95	-0.79	0.46	2.01	34.46***	411	1.69	
Норе	3.98	0.72	-0.49	-0.25	2.11	33.29***	411	1.64	
Pride	3.97	0.78	-0.72	0.01	2.10	33.58***	411	1.65	
Anger	1.85	0.76	1.26	1.98	-0.02	-0.55	411	0.00	
Anxiety	1.87	0.86	1.06	0.70	*	*	*	*	
Shame	1.83	0.95	1.23	0.81	-0.04	1.60	411	0.07	
Hopelessness	1.47	0.72	2.15	5.18	-0.40	14.13***	411	0.69	
Boredom	1.95	0.93	0.95	0.31	0.08	1.46	411	0.07	

Note: All items were rated on a 5-point Likert-type scale $***p \le .001$, N = 412

^aMean difference between each emotion and anxiety

3.2 Achievement emotions and gender

The second research question asked: *Are there any significant gender differences in the achievement emotions that Mexican university students report experiencing in their English course*? To address this question, we computed the mean scores and conducted independent t-tests to determine whether there were differences between females and males in their ratings. The means, standard deviations, and results of the t-tests are presented in Table 3. No significant differences were found between men and women for the eight emotions. Both men and women rated enjoyment, hope, and pride near or above 4.0 on the 5-point Likert-type scale. Both cohorts also rated anger, anxiety, shame, hopelessness, and boredom below 2.0 on the scale. These results indicate a similar and overall positive emotional experience of both genders in their English course.

	De	scriptiv	e statist	Independent t-test			
Emotion	Ma	les ^a	Fem	ales ^b			
	М	SD	М	SD	t	df	d
Enjoyment	3.93	0.69	3.85	0.77	1.11	410	0.22
Норе	4.06	0.64	3.92	0.77	1.90	410	0.05
Pride	3.99	0.74	3.96	0.82	0.28	410	0.77
Anger	1.88	0.80	1.83	0.74	0.68	410	0.49
Anxiety	1.80	0.86	1.93	0.86	1.48	410	0.13
Shame	1.75	0.96	1.88	0.95	1.39	410	0.16
Hopelessness	1.48	0.78	1.46	0.68	0.27	410	0.78
Boredom	1.89	0.87	1.99	0.97	0.99	410	0.318

Table 3. Means, standard deviations, and t-tests results of students' reports of the achievement emotions by sex

Note: All items were rated on a 5-point Likert-type scale ${}^{a}n = 173$; ${}^{b}n = 239$

3.3 Achievement emotions and high-vs. low-achievers

The third research question asked: Are there any significant differences in the achievement emotions that high-achieving and low-achieving Mexican university students report experiencing in their English course? Again, independent t-tests were used to determine whether there were differences between these two cohorts. High-achieving students were those who reported having an average grade of 81 or higher; the low-achieving students, an 80 or lower. The means, standard deviations, and results of the t-tests are presented in Table 4. High achievers provided statistically higher ratings than low achievers for the three positive emotions. Low achievers provided statistically higher ratings than high achievers for three of the five negative emotions: anxiety, shame, and hopelessness. Cohen's d for enjoyment, pride, anxiety, and shame indicate a small effect size. For hope, a medium effect size is indicated. No statistical differences were found between high and low achievers for anger and boredom.

		Gro	oups		Independent t-test					
Emotion	High	-ach ^a	Low	ach ^b						
	Μ	SD	М	SD	Mean Dif	t	df	р	d	
Enjoyment	4.01	0.75	3.72	0.70	0.29	4.00***	410	.001	0.39	
Норе	4.18	0.63	3.76	0.75	0.42	6.14***	410	.001	0.60	
Pride	4.15	0.71	3.77	0.82	0.38	5.03***	410	.001	0.49	
Anger	1.80	0.81	1.90	0.71	0.10	1.31	410	.18	0.13	
Anxiety	1.71	0.89	2.05	0.89	-0.34	4.11***	410	.001	0.40	
Shame	1.68	0.80	2.00	0.99	-0.32	3.42***	410	.001	0.33	
Hopelessness	1.38	0.73	1.56	0.70	-0.18	2.47*	410	.01	0.24	
Boredom	1.90	0.95	2.00	0.90	-0.10	1.15	410	.24	0.11	

 Table 4. Means, standard deviations, and t-tests results of students' reports of the achievement emotions by high- and low-achievers

Note: All items were rated on a 5-point Likert-type scale *p <= .05; ***p <= .001 ${}^{a}n = 216$; ${}^{b}n = 196$

3.4 Achievement emotions and first-semester vs. higher-semester learners

The fourth research question asked: Are there any significant differences in the achievement emotions that first-semester and students in higher-semesters report experiencing in their English course? Again, independent t-tests were used to determine whether there were differences between first-semester students (n = 132) and higher-semester students (n = 120). Second-semester students (n = 160) were omitted to eliminate a grey area and highlight possible differences between the two groups. The means, standard deviations, and results of the t-tests are presented in Table 5. First-semester students provided statistically higher ratings than higher-semester students on the three positive emotions: enjoyment, hope, and pride. Higher-semester students provided statistically higher ratings than first-semester students for three of the five negative emotions: anger, hopelessness, and boredom. Cohen's *d* for these six emotions indicate a small effect size. No statistical differences were found between the groups for anxiety and shame.

	Groups				Independent t-test					
Emotion	First	sem ^a	Higher sem ^b							
	М	SD	Dif.	Т	Mean df	р	d			
Enjoyment	4.04	0.67	3.71	0.74	0.33	3.71***	250	.001	0.46	
Норе	4.02	0.69	3.81	0.78	0.21	2.24*	250	.02	0.28	
Pride	4.05	0.71	3.81	0.83	0.24	2.43*	250	.01	0.30	
Anger	1.77	0.60	1.99	0.81	-0.22	2.51*	250	.01	0.31	
Anxiety	1.89	0.79	2.00	0.92	-0.10	1.00	250	.31	0.12	
Shame	1.86	0.89	1.94	0.99	-0.08	0.72	250	.47	0.09	
Hopelessness	1.40	0.61	1.60	0.76	-0.20	2.35*	250	.01	0.29	
Boredom	1.77	0.83	2.12	0.94	-0.35	3.13**	250	.00	0.39	

 Table 5. Means, standard deviations, and t-tests results of students' reports of the achievement emotions by first semester and higher semester students

Note: All items were rated on a 5-point Likert-type scale *p <= .05; **p <= .01; ***p <= .001 an = 132; bn = 120

4 Discussion

4.1 Variety of achievement emotions

The results of the first research question show that enjoyment, hope, and pride were reported more highly than anxiety. Further, the ratings for anger, shame, and boredom were similar to anxiety. These findings coincide with the vast literature from educational researchers (e.g. Pekrun, Goetz, Titz, & Perry, 2002; Schunk, 2008), as well as the limited research in second language learning contexts (e.g. Dewaelle & MacIntyre, 2014; Mendez, 2011; Tan, 2017; Yükselir & Harputlu, 2014). Considering that educational psychologists have linked achievement emotions to encoding and retrieval memory processes (Schunk, 2008), cognitive load theory (Pekrun & Stephens, 2010), the use of metacognitive learning strategies such as planning and goal-setting (e.g. Ahmed, van der Werf, Kuyper, & Minnaert, 2013; Mega, Ronconi, & De Beni, 2014), intrinsic and extrinsic motivation (Schunk, 2008), the budding effort by SLA researchers (e.g. Dewaelle & MacIntyre, 2014; Ross & Rivers, 2018) to broaden the research agenda on emotions beyond anxiety seems warranted. A deeper understanding of the role of how these emotions influence language learning might benefit researchers, materials writers, and educators to design and provide more effective EL programs.

Curiously, these results contradict Mendez's (2011) finding that language students in Mexico reported twice as many negative emotions than positive ones. Perhaps the difference in methodology (Mendez used student journals, whereas this study used a questionnaire) could account for the different results. Future studies that combine qualitative and quantitative measures might shed light on the reasons for this discrepancy between results found in Mexico.

4.2 Gender differences

Regarding the second research question, despite educational research (e.g. Zeidner, 1998) suggesting that females report higher anxiety in academic settings, and Yükselir and Harputlu (2014) found that they reported higher achievement anxiety and shame than did males in EL classes, and Frenzel et al. (2007) in mathematics classes, no statistical difference was found between genders in this study in Mexico. A possible explanation for this is that females who make it to university do not represent the population at large. In other words, perhaps females, aged 12 to 15, enrolled in lower secondary school, would report more negative emotions, which would contribute to their decision to abandon their education. As a consequence, the females, aged 18 to 22, who took part in this study are those who experience more positive emotions earlier on and, therefore, have continued studying.

Not finding gender differences is also surprising considering that academic performance is linked to emotions (Pekrun, 2006), and females perform more poorly academically than males in Mexico (OECD, 2018). If emotions are not contributing to the lower achievement of Mexican females, the question arises: What societal factors and antecedents in academic settings are negatively influencing females' academic performance? Furthermore, this contradictory finding in Mexico underscores the need for future research on this variable in Mexico and across cultures. For example, it would be valuable to explore the emotional experience of girls in secondary education that may be contributing to 39% of this cohort dropping out of school and failing to enter the workforce (OECD, 2018).

4.3 High- and low-achievers

The third research question sought to identify differences between high- and low-achieving learners. The results herein confirm Tan's (2017) study in China that high-achieving language learners report experiencing more positive emotions and lower negative emotions than do low achievers. The fact that high achievers experience more enjoyment, hope, and pride, whereas low achievers experience more anxiety, shame, and hopelessness suggests that there is a huge divide in the emotional experience between these two groups. This finding ought to serve as a call to teachers to reach out to and aid struggling learners, who not only experience anxiety, but also shame and hopelessness.

This finding should also prompt researchers and teachers to examine what shame and hopelessness are from the struggling students' perspective. Investigation on how these emotions influence aspects of language learning, such as developing the four skills, improving one's vocabulary and grammar might aid educators in creating strategies to help students overcome the experience of negative emotions. This has been done with anxiety, but our understanding of the role of other emotions is just beginning.

4.4 First-semester and higher-semester students

Results of the fourth research question suggest that participation in a language program influences learners' emotional experience in a negative way. The fact that students in higher semesters report a lower experience of enjoyment, hope, and pride, and at the same time an increase in anger, hopelessness, and boredom than do first-semester students ought to be worrisome for every member of a language department. If the topic were marriage, and after two years there were decreases in enjoyment and hope and increases in anger and boredom, then divorce would be inevitable. Any university and its EL program must seek to cultivate life-long learners, and that means learning needs to be a positive emotional experience. The results of this study suggest the opposite is true. 5

There are several limitations to this study. First, learners' emotional experience extends beyond the eight emotions measured by the AEQ. Not being an open-ended instrument, the AEQ only detects those emotions identified within Pekrun's (2006) framework and not the totality of learners' emotional experience. Second, this study has shed light on the academic emotions reported by language learners during the learning process. However, it did not explore the environmental, trait or genetic antecedents of those emotions in subjects nor the effects of those emotions on learning and performance. Third, the subjects of this study were limited to university students in Mexico. Therefore, the results may not be generalizable to other age groups and cultures. The antecedents and effects associated with a particular emotion such as hope, for example, in an 8-year-old refugee would be different than those that give rise to it in a 20-year-old university student. Hence, it cannot be considered surprising that differences were found in the reports of emotions in this study and those reported in prior studies in Germany (Frenzel et al., 2007), China (Tan, 2017), and Turkey (Yükselir & Harputlu, 2014).

6 Future research

Considering that only quantitative data were collected in this study, it will be valuable for future researchers to use and combine alternative methods – students' journal entries, interviews, and focus groups – to more fully understand their experience of achievement emotions. The combination of quantitative and qualitative approaches should deepen our understanding of the role of emotions in language learning. Such efforts may allow researchers to identify additional emotions not included in Pekrun's framework, such as "feeling special or privileged" (Piniel & Albert, 2018) when completing learning activities.

Furthermore, research needs to extend to the teaching strategies and learning materials associated with learner emotions. Once materials writers, program leaders, teachers, and students are sufficiently aware of which curricular components and learning activities can increase the experience of positive emotions, and which may lessen the deleterious impact of negative emotions, then language learning should improve. A research question that may be asked, for example, is: *How can designers of EL courses respond to the learners' need to feel hope and pride during their learning?* Also: *How can teachers counter the negative effects of feelings of hopelessness and shame, and foster resilience in the language class?*

Perhaps the insights of Eskreis-Winkler, Shulman, Beal, and Duckworth (2014) regarding the nature of resilience, or the capacity to "bounce back" from negative events, can contribute to an improvement of language teaching, especially with struggling learners. Cahill, Beadle, Farrelly, Forster, and Smith (2018) have reported on the research related to resilience in the classroom. They pointed out, for example, that even the most at-risk students are more likely to achieve success, if they believe they have one positive relationship with a caring adult at school. Strategies that have been designed to foster resilience, and thereby reduce the impact of negative emotions, are discussed in educational psychology literature (e.g. Child Welfare, 2018) and are beginning to appear in second language research (e.g. Kim & Kim, 2016). They include the teacher modeling a positive attitude, helping students create realistic goals, and increasing a student's sense of belongingness. These advances from the field of educational psychology offer second language researchers an avenue for future research.

Additional research ought to examine the emotions reported on by distinct groups from different cultural backgrounds. Researchers need to ask: *What emotions do language learners in primary and secondary education experience?* A second example is: *How do the extreme life-changing events of immigrant populations impact their emotional experience when learning a second language?* Considering the essential role that emotions play in language learning, it is important to identify and respond to the variety of emotions reported by groups such as these.

7 Conclusion

In conclusion, although anxiety has dominated the research agenda into language learners' emotions, this study shows that enjoyment, hope, and pride were reported more highly than anxiety. Further, the ratings for anger, shame, and boredom were similar to anxiety. These emotions are important, because they influence different aspects of language learning – working memory, use of higher-level learning strategies, motivation, and self-directed learning – and, consequently, performance. Further, two of the groups studied, low-achieving students and those enrolled in higher semesters, appear to be at an emotional disadvantage, because they report experiencing fewer positive emotions and more negative emotions than do high-achieving students and those in lower semesters. Researchers, program coordinators, teacher trainers, and educators ought to develop ways to help these two groups to have a more positive emotional experience when learning English as a second language.

References

- Ahmed, W., van der Werf, G., Kuyper, H., & Minnaert, A. (2013). Emotions, self-regulated learning, and achievement in Mathematics: A growth curve analysis. *Journal of Educational Psychology*, 105(1), 150– 161.
- Arnold, J. (1999). Affect in language learning. Cambridge: Cambridge University Press.
- Arnold, J. (2011). Attention to affect in language learning. *Anglistik: International Journal of English Studies*, 22(1), 11–22.
- British Council. What to consider when teaching English in large classes. Retrieved from https://www.britishcouncil. org/voices-magazine/what-consider-when-teaching-english-large-classes
- Cahill, H., Beadle, S., Farrelly, A., Forster, R. & Smith, K. (2018). Building resilience in children and young people. Melbourne: Youth Research Center, Melbourne Graduate School of Education, University of Melbourne. Retrieved from https://www.education.vic.gov.au/Documents/about/department/resiliencelitreview.pdf
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112–130.
- Child Welfare. (2108). *Building resilience in children and teens*. Washington, DC: Children's Bureau. Retrieved from https://www.childwelfare.gov/pubPDFs/resilience_ts_2018.pdf
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.
- Dewaele, J.-M. (2015). On emotions in foreign language learning and use. The Language Teacher, 39. 13–15.
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, *4*(2), 237–274.
- Dörnyei, Z., & Skehan, P. (2003). Individual differences in second language learning. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (pp. 589-630). Oxford: Blackwell. Retrieved from https://doi.org/10.1002/9780470756492
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117–135 doi: 10.1017/S026144480001315X
- Eskreis-Winkler, L., Shulman E. P., Beal, S. A., & Duckworth, A. L. (2014). The grit effect: predicting retention in the military, the workplace, school, and marriage. *Frontiers in Psychology*, 5(36). doi: 10.3389/ fpsyg.2014.00036
- Ekman, P. (2017). Atlas of emotions. Retrieved from http://atlasofemotions.org/#introduction/
- Frenzel, A. C., Pekrun, R., Goetz, T., & vom Hofe, R. (2007). Girls' and boys' emotional experiences in mathematics. In P. Schultz & R. Pekrun (Eds.), *Emotion in education*. Amsterdam: Academic Press.
- Frenzel, A., Thrash, T., Pekrun, R., & Goetz, T. (2007). Achievement Emotions in Germany and China: A Cross-Cultural Validation of the Academic Emotions Questionnaire—Mathematics. *Journal of Cross-Cultural Psychology*, 38(3), 302–309.
- Horwitz, E. K. (2001). Language anxiety and achievement. Annual Review of Applied Linguistics, 21, 112.
- Izard, C. E. (2010). The many meanings/aspects of emotion: Definitions, functions, activation, and regulation. *Emotion Review*, 2(4), 363–370.
- Kim, T. & Kim, Y. (2016). The impact of resilience on L2 learners' motivated behaviour and proficiency in L2 learning. *Educational Studies*, 43, 1–15. 10.1080/03055698.2016.1237866.

- Martinez, L. (2017). Got SEL? Teaching Students to Describe Emotions. Retrieved from https://www.edutopia.org/discussion/got-sel-teaching-students-describe-emo-tions
- MacIntyre, P. D., & Gregresen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, *2*(2), 193–213.
- Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, *106*(1), 121.
- Mendez Lopez, M. (2011). The motivational properties of emotions in Foreign Language Learning. Columbian Journal of Applied Linguistics, 13(2), 43–59.
- Mexicanos Primero. (2015). Sorry. El aprendizaje de Ingles en Mexico. [Learning English in Mexico]. Retrieved from http://www.mexicanosprimero.org/index.php/educacion-en-mexico/como-esta-la-educacion/estado-de-la-educacion-en-mexico/sorry-2015
- Organisation for Economic Cooperation and Development (OECD). (2012). *Education indicators in focus*. *November (9)*. Retrieved from http://www.oecd.org/edu/skills-beyond-school/EDIF%202012--N9%20FI-NAL.pdf
- OECD. (2015). Programme for international student assessment (PISA): Results from PISA 2015. Retrieved from http://www.oecd.org/pisa/PISA-2015-Mexico.pdf
- OECD. (2018). Youth not in employment, education or training (NEET). Retrieved from doi: 10.1787/72d1033a-en
- Oxford, R. L. (1990). Language learning strategies: What every teacher should know. Boston: Heinle & Heinle.
- Pavelescu, L. M. & Petrić, B. (2018). Love and enjoyment in context: Four case studies of adolescent EFL learners. *Studies in Second Language Learning and Teaching*, 8(1), 73–101. doi: 10.14746/ssllt.2018.8.1.4. Retrieved from http://pressto.amu.edu.pl/index.php/ssllt
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, *18*, 315–341.
- Pekrun, R. (2014). Emotions and learning (Educational Practices Series, Vol. 24). Geneva: International Academy of Education (IAE) and International Bureau of Education (IBE) of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Retrieved from unesdoc.unesco.org/images/0022/002276/ 227679e.pdf
- Pekrun, R., Frenzel, A., Goetz, T., & Perry, R. P. (2007). The control-value theory of achievement emotions: An integrative approach to emotions in education. In P. A. Schutz & R. Pekrun (Eds.), *Emotions in education* (pp. 13–36). San Diego: Academic Press.
- Pekrun, R., Goetz, T., Frenzel, A. C, Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, 36(1), 36–48.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37, 91–106.
- Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass*, 4(4), 238–255.
- Piniel, K., & Albert, A. (2018). Advanced learners' foreign language-related emotions across the four skills. Studies in Second Language Learning and Teaching, 8(1). 127–147. doi: 10.14746/ssllt.2018.8.1.6
- Pishghadam, R., Zabetipour, M., & Aminzadeh, A. (2016). Examining emotions in English language learning classes: A case of EFL emotions. *Issues in Educational Research*, 26(3), 508–527.
- Posten, H. O. (1984). Robustness of the two-sample t-test. In D. Rasch & M. L. Tiku (Eds.), *Robustness of statistical methods and nonparametric statistics* (pp. 92–99). Dordrecht: Reidel.
- Ramírez-Romero, J. L. (2013). La Enseñanza del Inglés en las Primarias Públicas de México: Las problemáticas de los Sujetos. [Teaching English in Public Primary Schools in Mexico: Problems of participants.] Mex-TESOL Journal, 37(3). Retrieved from http://www.mextesol.net/journal/index.php?page=journal&id_article=489
- Ramírez-Romero, J. L., & Sayer, P. (2016). The teaching of English in public primary schools in Mexico: More heat than light? *Education Policy Analysis Archives*, 24(84). http://dx.doi.org/10.14507/epaa.24.2502
- Ross, A., & Rivers, D. (2018). Emotional experiences beyond the classroom: Interactions with the social world. *Studies in Second Language Learning and Teaching*, 8(1), 103–126. doi: 10.14746/ssllt.2018.8.1.5
- Sánchez-Rosas, J. (2015). The Achievement Emotions Questionnaire-Argentine (AEQ-AR): Internal and external validity, reliability, gender differences and norm-referenced interpretation of test scores. *Evaluar*, 15, 41–74.
- Schunk, D. H. (2008). Learning theories: An educational perspective (5th ed.). Boston: Pearson.

Peter Reilly and Javier Sánchez Rosas

Stevick, E. W. (1980). Teaching languages: A way and ways. Rowley, MA: Newbury House.

- Tan, J. (2017). Relationships between achievement emotions, motivation and language learning strategies of high, mid and low English language achievers. Journal of Literature and Art Studies, 7(6), 770-778. doi: 10.17265/2159-5836/2017.06.014
- Yükselir, C., & Harputlu, L. (2014). An investigation into EFL prep-class students' academic emotions. Journal of Language and Linguistics Studies, 10(2), 100–119.

Zeidner, M. (1998). Test anxiety: The state of the art. New York, NY: Springer Science & Business Media.

Appendix A

The Achievement Emotions Questionnaire-Argentine (AEQ-AR): Sample items for each achievement emotion in Spanish and translated to English.

INSTRUCTIONS

Taking exams can produce different feelings. This section of the questionnaire refers to the emotions you may experience when taking exams at the university Before answering the items on the following pages, try to remember some typical situations that you have experienced in the course of your career, read carefully and respond indicating how often you experience what each item describes on a scale of 1 (never) to 5 (always).

	Scale	DISFRUTE (Enjoyment)
1	Me entusiasma ir	a clases. (I am enthusiastic about going to class)
2	Disfruto de estar	en clase. (I enjoy being in class)
	Scale	ESPERANZA (HOPE)
9	Me siento seguro	de mí mismo cuando voy a clase. (I feel sure of myself in class)
10		e esperanzas. (I feel full of hope)
	Scale	ORGULLO (PRIDE)
16	Estoy orgulloso d	e mí mismo. (I am proud of myself)
17	Me enorgullece p	oder llevar al día el material. (I am proud that I can keep up with the class)
	Scale	ENOJO (ANGER)
24	Me siento frustrae	to en clase. (I feel frustrated in class)
25	Estoy enojado. (I	feel angry)
	Scale	ANSIEDAD (ANXIETY)
31	Pensar sobre la cl	ase me hace sentir preocupado. (Thinking about the class makes me worry)
32	Tengo miedo. (I a	m afraid)
	Scale	VERGÜENZA (SHAME)
42	Me siento avergo	nzado. (I feel ashamed)
43	Me daría vergüen	za que los demás supieran que no entiendo el material. (I would feel ashamed if the
	others knew that	don't understand the topics)
	Scale	DESESPERANZA (HOPELESSNESS)
52	Pensar en esta cla	se me hace sentir desesperanzado. (Thinking about the class makes me feel hopeless)

- 53 Me siento desesperanzado. (I feel hopeless) ABURRIMIENTO (BOREDOM) Scale
- 60 Me aburro. (I am bored)
- Como me aburro mi imaginación vuela. (Because I am bored, I daydream) 61