

Does the effect of enjoyment outweigh that of anxiety in foreign language performance?

Jean-Marc Dewaele

Birkbeck College, University of London, UK

j.dewaele@bbk.ac.uk

Mateb Alfawzan

University of Birmingham, UK

matebalfawzan@hotmail.com

Abstract

Interest in the effect of positive and negative emotions in foreign language acquisition has soared recently because of the positive psychology movement (Dewaele & MacIntyre, 2014, 2016; MacIntyre, Gregersen & Mercer, 2016). No work so far has been carried out on the differential effect of positive and negative emotions on foreign language performance. The current study investigates the effect of foreign language enjoyment (FLE) and foreign language classroom anxiety (FLCA) on foreign language performance in a group of 189 foreign language pupils in two London secondary schools and a group of 152 Saudi English as a foreign language learners and users of English in Saudi Arabia. Correlation analyses showed that the positive effect of FLE on performance was stronger than the negative effect of FLCA. In other words, FLE seems to matter slightly more than FLCA in foreign language (FL) performance. Qualitative material collected from the Saudi participants shed light on the causes of FLCA and FLE and how these shaped participants' decisions to pursue or abandon the study of the FL.

Keywords: foreign language anxiety; foreign language enjoyment; individual differences; learner-internal variables; teacher-centered variables

1. Introduction

While the negative role of foreign language anxiety (FLA) on learners' progress and performance in a foreign language (FL) is well established (Gkonou, Daubney, & Dewaele, 2017; Horwitz, 2010; Liu & Jackson, 2008; MacIntyre, 1999; MacIntyre & Gregersen, 2012a, 2012b; Saito, Garza, & Horwitz, 1999), no research so far has compared its effect with that of positive emotions such as foreign language enjoyment (FLE) (Dewaele & MacIntyre, 2014, 2016; MacIntyre, Gregersen, & Mercer, 2016). Early research did acknowledge the role of both negative and positive emotions in FL learning (Krashen, 1982) but it was buried in complex models, which made a direct comparison of their effect on FL acquisition and performance impossible.

The introduction of *positive psychology* in applied linguistics, and the work of educational psychologists such as Schutz and Pekrun (2007) have caused a reconsideration of the importance of both positive and negative emotions in the learners' journey. The main argument of positive psychologists is that general psychology has been too exclusively focused on the negative and not enough on the positive. Rather than combatting the negative, they argue to try and boost the positive by fostering greater engagement, increasing the appreciation of meaning in life and its activities (MacIntyre & Mercer, 2014). This has been interpreted in applied linguistics as a call for a more holistic view on the range of emotions that learners experience in the classroom (Dewaele, 2017; Dewaele, & Dewaele, 2017; Dewaele & MacIntyre, 2014, 2016; Dewaele, Witney, Saito, & Dewaele, 2017; MacIntyre & Gregersen, 2012a, 2012b; Oxford, 2015; Pishghadam, Zabetipour, & Aminzadeh, 2016). Just as the interlanguage paradigm swept away the deficit view of language learners, the positive psychology movement in applied linguistics wants to consider the combined effect of both negative and positive emotions on FL acquisition and performance (Dewaele et al., 2017). It might be a relatively new perspective to researchers, but it is not so among FL teachers who have always known that neutralizing negative emotions is insufficient to stimulate FL learners. MacIntyre and Mercer (2014) express this view convincingly:

Many language educators are aware of the importance of improving individual learners' experiences of language learning by helping them to develop and maintain their motivation, perseverance, and resiliency, as well as positive emotions necessary for the long-term undertaking of learning a foreign language. In addition, teachers also widely recognise the vital role played by positive classroom dynamics amongst learners and teachers, especially in settings in which communication and personally meaningful interactions are foregrounded. (p. 156)

This research proposes to extend the inquiry into the effect of emotions on performance in the foreign language by considering the combined effect of FLE and FLCA in two different contexts: two British secondary schools and Saudi universities. After the literature review we will present our two research questions. This will be followed by the presentation of the methodology employed in the two studies. The results of the two sets of quantitative analyses will be presented and discussed in the following section. We will finally present some tentative conclusions.

2. Literature review

2.1. The origins of FL anxiety research

The earliest studies into the relationship between anxiety and FL achievement produced mixed, confusing, ambiguous, and contradictory results (Horwitz, 2010; MacIntyre, 1999, 2017). The confusion arose from a variety of definitions or misunderstanding of the concept of *anxiety* and anxiety measure inconsistencies. MacIntyre (2017) described this first phase of research into FLA as the “Confounded Approach,” “because the ideas about anxiety and their effect on language learning were adopted from a mixture of various sources without detailed consideration of the meaning of the anxiety concept for language learners” (p. 32). The publication of Horwitz (1986) and Horwitz, Horwitz, and Cope (1986) heralded a new phase of anxiety research in SLA, labelled by MacIntyre (2017) as the “Specialized Approach.” Horwitz had been influenced by Gardner’s suggestion (1985, p. 34) that “the conclusion seems warranted that a construct of anxiety which is not general but instead is specific to the language acquisition context is related to second language achievement.”

Horwitz, Horwitz and Cope (1986) felt that since anxiety can have a significant negative impact on the learning of a FL, teachers need to be able to identify particularly anxious learners in the FL class. They defined foreign language (classroom) anxiety as: “a distinct complex of self-perceptions, beliefs, feelings and behaviours related to classroom learning arising from the uniqueness of the language learning process” (p. 128). By “distinct” the authors meant that it was a unique form of *state* anxiety (rather than *trait* anxiety).¹ FL learners who experience FLCA “have the *trait* of feeling *state* anxiety when participating in language learning and/or use” (Horwitz, 2017, p. 68). The differentiation between general

¹ Trait anxiety is a stable personality trait reflecting the tendency to respond with state anxiety when faced with threatening situations. State anxiety is defined as an unpleasant emotional arousal in face of threatening demands or dangers (Spielberger, 1983).

anxiety and FLCA was confirmed in MacIntyre and Gardner (1989, 1991). Horwitz (1986) described the development and the validation process of the 33-item *Foreign Language Classroom Anxiety Scale* (FLCAS). The items came from a number of sources and included the experiences of her own anxious language learners. Internal consistency for the FLCAS, measured by Cronbach's alpha, was high (.93).

The idea that negative emotions interfere with L2 development emerged during the "Confounded Approach." Krashen (1982) argued that every learner has an affective filter that determines "the degree to which the acquirer is "open"" (p. 9). Negative emotions push learners to bring the filter "up," reducing their understanding and processing of language input. To bring filters down, teachers are encouraged to try and spark interest, provide low-anxiety environments, and bolster learners' self-esteem (Krashen, 1982, p. 10).

MacIntyre and Gardner (1994) investigated the effects of anxiety on performance in the first language (L1) and second language (L2) of Canadian students across three stages of cognitive processing: (1) language input stage, (2) processing and interpreting the language, and (3) the output stage at which knowledge of the language can be demonstrated. They concluded that: "The potential effects of language anxiety on cognitive processing in the second language appear pervasive and may be quite subtle. Performance measures that examine only behavior at the output stage may be neglecting the influence of anxiety at earlier stages as well as ignoring the links among stages" (p. 301).

2.2. The dynamic approach in FL anxiety research

MacIntyre (2017) argues that around 2010 anxiety research had reached a third phase, the "Dynamic Approach," which has as principal aim to situate anxiety among a range of interacting factors that affect acquisition of the FL and performance in the FL. Anxiety is defined as an emotion that is constantly fluctuating over different timescales and that negatively affects motivation, perceptions of competence and willingness to communicate. In an overview of FL anxiety research, Dewaele (2017) argued that "the effects of various psychological variables on levels of FLA/FLCA are not constant but dynamic and often language specific. On top of these complex interactions come other layers of sociobiographical, situational, and social variables, which could interact among themselves but also with a wide range of psychological variables" (p. 444).

Şimşek and Dörnyei (2017) proposed capturing the dynamic character of FLCA by reframing it within a self-concept framework. The authors interviewed 20 highly anxious Turkish university learners of English at an intermediate level about their perceived anxiety, its causes and their awareness of anxiety. Exploratory qualitative data analysis revealed that "several learners talked about the

way in which they were affected by anxiety in a somewhat detached manner, referring to an anxious persona that they were not fully in control of" (p. 100). This "anxious self" was "a side of themselves that was fairly distinct from other aspects of their existence, having a life of its own" (p. 114). The analysis of the learners' narratives foregrounded three typical approaches when faced with anxiety, representing three reaction styles: "fighter, quitter and safe player" (p. 111). The fighters tried to deal with their FLCA in a combative and constructive manner. The quitters – whose anxiety levels were as high as that of the fighters – were convinced that their FLCA was unsurmountable and chose flight rather than fight. Finally, the safe players tried to avoid potentially negative events by remaining silent and/or invisible.

Personality traits of individual learners are associated with increased FLA. These include neuroticism, extraversion, and psychoticism, perfectionism, trait emotional intelligence and second language tolerance of ambiguity (for an overview, see Dewaele, 2017). A range of other characteristics of learners has been linked with FLA/FLCA. Dewaele (2013) found lower FLA in adult FL users who were younger during the learning phase, who were older at the time of the study, who used the FL in authentic situations (rather than just in the classroom), who used the FL frequently, socialized regularly in a FL and had a large network of FL users. The climate in the classroom also plays a crucial role, as poor relationships between teachers and learners can increase the latter's FLA (Gregersen & MacIntyre, 2014).

While the majority of work carried out on FLCA has been conducted in western cultures, it has been picked up by researchers around the globe, including in Saudi Arabia (Al-Saraj, 2011, 2014; Al Asmari, 2015; Alrabai, 2014; Dewaele & Al-Saraj, 2015). In Saudi Arabia, English is used in businesses and hospitals among many other sectors and is the only foreign language taught in government schools. Within English classes, levels of anxiety tend to be high with low overall mastery of English (Alrabai, 2014). In this context, students have been described as being passive learners, with overreliance on the teacher, who tends to dominate the learning process (Alrabai, 2014). In a series of 10 qualitative interviews with female English as a foreign language (EFL) learners in Saudi Arabia, teacher actions and interactions between students and teachers were identified as sources of anxiety by all participants (Al-Saraj, 2011). Saudi students have reported competitiveness and fear of failure as important sources of anxiety (Al-Saraj, 2011). Low level of English proficiency common among Saudi students was found to be a major contributing factor to FLCA levels in a quantitative study of 1389 Saudi EFL learners (Alrabai, 2014). Ismail (2015) reported that emotions (i.e., anger, anxiety, enjoyment, hope, hopelessness, pride, boredom and shame) explained two thirds of variance of 315 Saudi EFL university students' English achievement.

2.3. Positive psychology and a more holistic view on classroom emotions

Positive psychologist Barbara Fredrickson argued that there is a natural tendency to study what afflicts humanity, which may in part explain the neglect of the role of positive emotions in life (Fredrickson, 2003). Positive emotions differ in some crucial aspects from negative emotions in human behavior. In her broaden-and-build theory, Fredrickson (2013) argued that the role of positive emotions has been shaped over time and generations through the process of natural selection to build survival resources. While negative emotions are important at the time they are experienced, for example, causing a fight or flight reaction and important for survival, positive emotions broaden the mind-set over time. Fredrickson described the role of positive emotion in building resources as follows:

Certain discrete positive emotions – including joy, interest, contentment, pride, and love – although phenomenologically distinct, all share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources. (2003, p. 219)

While a positive emotion may not save lives in specific circumstances, the broadening of the mind over time was described by Fredrickson (2013) as being key for the discovery of new knowledge which over time may improve chances of survival.

MacIntyre and Gregersen (2012a, 2012b) introduced the concept of *positive psychology* into SLA, pointing out that positive emotions are much more than pleasant feelings. Learners in the grip of positive emotions are better able to notice things in their classroom environment and become more aware of language input, which allows them to absorb more of the FL. Positive emotions can also drive out negative arousal, which is crucial because negative emotions cause a narrowing of focus and limit the potential language input. Positive emotions also have longer-term effects outside the classroom as they can make students more resilient and hardy during difficult times. Experiencing positive emotions also allows learners to take some measured risks, to explore and play, which can boost social cohesion. The researchers have further explored this avenue in a special journal issue (MacIntyre & Mercer, 2014) and an edited book (MacIntyre, Gregersen, & Mercer, 2016).

Dewaele and MacIntyre (2014) argued that “there is good reason to believe that studying positive emotion in greater detail will produce a novel understanding of the process involved” (p. 240). They developed a FLE scale consisting of 21 items with Likert scale ratings reflecting positive emotions towards the learning experience, peers and teacher, which they combined with 8 items reflecting FLCA. A moderate negative correlation was found to exist between FLE

and FLCA of 1740 FL learners (of all ages and from all over the world), suggesting that they are essentially separate dimensions. Further statistical analysis revealed that a high level of multilingualism, more advanced students, who felt that they did better than their peers in the FL class, who were at university rather than secondary school and who were older, reported significantly higher levels of FLE and significantly less FLCA. The analysis of feedback on an open-ended question concerning enjoyable episodes from 1076 out of the 1746 participants in the FL class showed that specific positive classroom activities could boost FL learners' levels of FLE. These included debates, making a film or preparing group presentations. In other words, these were activities that empowered students, giving them a choice in shaping an activity so that it matched their immediate concerns and interests. The narratives also pointed to the crucial role of the classroom environment in the experience of FLE and FLCA. Participants reported episodes where teachers had been funny and encouraging, using humor judiciously and praising students for good performance. Sympathetic laughter was particularly appreciated when used to defuse a potential embarrassment. Teachers were found to directly contribute to their students' FLE. Peers could also boost – or destroy – FLE. A follow-up study by Dewaele and MacIntyre (2016) used a Principal Components Analysis of the same dataset, and revealed three dimensions explaining nearly half of the variance, and showing the independence of two dimensions of FLE, namely *social* and *private* FLE. The former accounted for 13% of the variance and the latter explained an additional 6% of variance. A final study on the same database focused on the gender differences at item-level (Dewaele, MacIntyre, Boudreau, & Dewaele, 2016). Female participants reported having significantly more fun in the FL class, agreed more strongly that they learned interesting things, and were prouder than the male peers of their FL performance. The female learners also tended to experience more enjoyment and excitement in a positive FL classroom environment that allowed them to be creative, and tended to agree more that knowing a FL was “cool.” However, they worried significantly more than their male peers about mistakes and lacked in confidence in using the FL. The authors speculated that the females' heightened emotionality might boost the acquisition and use of the FL and that both emotions fluctuated quite rapidly.

Dewaele, Witney, Saito and Dewaele (2017) explored the effect of learner-internal and learner-external variables on levels of FLCA and FLE of 189 secondary school pupils in London (the same corpus on which the present study is based) who were mostly studying French, German or Spanish as a FL. Participants reported significantly higher levels of FLE than FLCA, with a weak negative relationship between both ($r = -.194, p < .007$), confirming the finding in Dewaele and MacIntyre (2014). Pupils' age was not linked to FLCA but was positively linked

to FLE (despite a dip among the 15-year olds). Female pupils scored higher on both FLE and FLCA. Higher levels of FLE were further linked to more positive attitudes towards the FL, the FL teacher, frequent use of the FL by the teacher in class, a strong proportion of time spent by pupils on speaking, a higher relative standing among peers in the FL class and being more advanced in the FL. Lower levels of FLCA were linked to positive attitudes towards the FL, higher relative standing among peers in the FL being more advanced in the FL. It was striking that FLCA is much less related to teacher and teacher practices than FLE, which suggests that an effective teacher needs to fuel learners' enthusiasm and enjoyment and not worry overly about their FLCA – while creating a friendly low-anxiety environment. A second study on the same database (Dewaele & Dewaele, 2017) used a pseudo-longitudinal design to investigate how FLE and FLCA evolved over time. A comparison of the mean values of 12-13 year olds (age group 1), 14-15 year olds (age group 2) and 16-18 year olds (age group 3) showed little variation in FLCA and a slight increase in FLE. Multiple linear regression analyses showed that fewer learner-internal and teacher-centered variables predicted FLE and FLCA in age groups 1 and 3 compared to age group 2. It thus seems that the sources of positive and negative emotions are dynamic and ever-evolving. Saito, Dewaele, Abe and In'nami (to appear) carried out a cross-sectional and longitudinal analysis of the comprehensibility of 108 Japanese EFL high school students. Learning patterns were found to be associated with FLE and FLCA and also with their motivational dispositions (clear vision of ideal future selves). FLCA and a weaker Ideal L2 Self were negatively linked to performance at the beginning of the data collection (when learners had had several years of EFL instruction). FLE and a stronger Ideal L2 Self predicted the amount of English practice and the rate of development over a period of three months. It thus seems that more regular/frequent FL use with positive emotions boosts acquisition, which may dampen negative emotions and lead to better FL proficiency in the long run.

3. Research questions

The overall research question is whether positive emotions (FLE) are better predictors of FL performance than negative ones (FLCA) in two completely different contexts, that is, British secondary school students in the UK and adult university students in Saudi Arabia.² More specifically, we will investigate the following two research questions:

1. To what extent are FLE and FLCA in two British secondary schools linked with self-reported FL test results (Study 1)?

² Finding similar patterns in the two contexts would allow us to claim that the relationship between the in/dependent variables could be universal rather than a random effect of the local context.

2. To what extent are FLE and FLCA in undergraduate EFL classes in Saudi universities linked with general English proficiency (Study 2)?

4. Methodology

4.1. Study 1

4.1.1. Foreign languages in the UK: Background, data collection and ethics

The study of an FL is compulsory in British schools for pupils aged 11-14. Pupils aged 14-18 have the option of studying a FL. Pupils in British secondary schools face two national tests which are high stakes for themselves and for their schools. Pupils' admission into Sixth Form colleges or universities depends on their results and constitute the basis for the calculation of national league tables which play a crucial part in the prestige of the schools. The first hurdle is the General Certificate of Secondary Education (GCSE). Pupils who sit their GCSE exams in the UK are typically 16 years old but some schools encourage their students to sit their IGCSE³ French a year early at 15. FLs are optional also after GCSE, when pupils choose three or four subjects to study during the last two years of school (Sixth Form colleges), and which they usually sit at the end of their schooling, aged 18 (A-level). Teachers and pupils are under relentless pressure as universities typically make conditional offers to Sixth Form pupils who are in their final year, based on pupils' personal statement, GCSE results, predicted A-level results (Oxford and Cambridge typically expect top scores for the three subjects, in addition to good university entrance test results and a convincing interview performance).

Data were collected in 2015 through an anonymous online questionnaire: no names of participants or their teachers were collected. Once the research design and questionnaire had obtained ethical approval from the School of Social Sciences, History and Philosophy at Birkbeck, the headmasters of Westminster School and Dame Alice Owen's School gave their approval after consultation with the teachers. Consent was obtained in two stages. First, the school contacted parents to explain that their children would be invited to participate in a survey on affective variables in the FL classroom offering them a chance to ask for extra information and/or opt out of the survey. Next, the parents received an email in which they were asked to invite their child to participate in the study. Pupils' individual consent was obtained at the start of the survey. The questionnaire was posted online using GoogleDocs and remained online for one month in 2015.

³The International General Certificate of Secondary Education (IGCSE) is an English language curriculum offered to students to prepare them for International Baccalaureate, A Level and BTEC Level 3 (which is recommended for higher tier students).

4.1.2. Participants

Study 1 is based on the feedback from 189 secondary school pupils (49 females, 140 males) from two schools in Greater London: 63 pupils from Dame Alice Owen's, a semi-selective state school in Potters Bar, and 126 pupils from Westminster School, an independent boarding and day school within the precincts of Westminster Abbey, which is selective and fee-paying. The schools are amongst the best performing schools in the UK.⁴ Dame Alice Owen's employed 16 full-time and part-time FL teachers, while Westminster School employed 22 full-time and part-time FL teachers at the time of data collection. All participants were studying FLs and 85 pupils from Westminster School were also enrolled in courses of Latin and/or Ancient Greek. Participants' age ranged from 12 to 18. Three age groups were created: those aged 12-13 ($N = 34$), aged 14-15 ($N = 108$) and aged 16-18 ($N = 47$). Gender distribution was quite different across groups: those aged 12-13 (12 females, 22 males), aged 14-15 (12 females, 96 males), and aged 16-18 (25 females, 22 males).

Most participants were British ($N = 156$), often with double nationalities. Other nationalities included American, Argentinian, Australian, Belgian, Brazilian, Canadian, Chinese, German, Greek Cypriot, Hungarian, Indian, Iranian, Irish, Israeli, Italian, Korean, Lebanese, New Zealand, Nigerian, Portuguese, Spanish, Russian, Singaporean, Swiss and Turkish. A majority of pupils reported English ($N = 169$) as a first language (L1) which was often combined with other L1s, such as Afrikaans, Arabic, Bengali, Bulgarian, Cantonese, Dutch, Farsi, French, German, Greek, Gujarati, Hindi, Hungarian, Italian, Kannada, Korean, Macedonian, Mandarin, Portuguese, Punjabi, Polish, Russian, Sinhalese, Spanish, Swahili, Tamil, Telugu, Tulu, Turkish and Urdu. Close to a third of participants ($N = 57$) grew up with two or three languages from birth. French was the most popular FL ($N = 144$, 68%), fewer pupils studied Spanish ($N = 21$), German ($N = 15$), with smaller numbers studying Arabic, Dutch, English, Farsi, Hindi, Greek, Italian, Japanese, Mandarin, Polish, Portuguese, and Russian.⁵

⁴ Dame Alice Owen's School reported that 81% of all grades were awarded A* - B at A-level in 2015 (with 205 students participating in the exams). (http://www.damealiceowens.herts.sch.uk/sixth_form/results.html).

Westminster School reported that 97% of all grades were awarded A* - B at A-level in 2015 (with 583 students participating in the exams).

⁵ The rank order corresponds to national figures for the 23,031 A-level entries in the UK in 2015, with 45% of students choosing French, followed by Spanish (38%) and German (17%) (<http://www.all-languages.org.uk>).

4.1.3. The independent variables

Students completed 10 items extracted from the *Foreign Language Enjoyment Questionnaire* (Dewaele & MacIntyre, 2014). They were chosen to reflect the dimensions of the original scale without sacrificing the reliability of the measurement. They included items reflecting the two FLE dimensions: *social FLE* ("The peers are nice," "There is a good atmosphere," "We laugh a lot," "It's a positive environment") and *private FLE* ("I enjoy it," "I'm a worthy member of the FL class," "In class, I feel proud of my accomplishments," "It's a positive environment," "It's cool to know a FL," "It's fun") (Dewaele & MacIntyre, 2016). They were based on standard 5-point Likert scales with the anchors "absolutely disagree" = 1, "disagree" = 2, "neither agree nor disagree" = 3, "agree" = 4, "strongly agree" = 5. All items were positively phrased. A scale analysis revealed high internal consistency (Cronbach alpha = .88). The mean score for FLE was 3.9 ($SD = 0.6$).

Eight items which reflected physical symptoms of anxiety, nervousness and lack of confidence were extracted from the FLCAS (Horwitz, et al. 1986). They also captured the reliability of the original scale (Dewaele & MacIntyre, 2014). Two FLCA items were phrased to indicate low anxiety ("I don't worry about making mistakes in FL class," "I feel confident when I speak in foreign language class") and six were phrased to indicate high anxiety ("Even if I am well prepared for FL class, I feel anxious about it," "I always feel that the other students speak the FL better than I do," "I can feel my heart pounding when I'm going to be called on in FL class," "I get nervous and confused when I am speaking in my FL class," "I start to panic when I have to speak without preparation in FL class," "It embarrasses me to volunteer answers in my FL class"). The low anxiety items were reverse-coded so that high scores reflect high anxiety for all items on this measure. A scale analysis revealed high internal consistency (Cronbach alpha = .85). The mean score for FLCA was 2.4 ($SD = 0.8$).

4.1.4. The dependent variable

Participants were asked about the result on their last major FL test. These tests were different for pupils in different year groups but followed the same standard format within the school. Test scores ranged from 49% to 100%, with the mean of 87.7% ($SD = 10$). In other words, these were excellent FL students. A Kolmogorov-Smirnov test revealed that the distribution of scores was not normal ($KS = 0.30$, $p < .001$) (see Figure 1). As a result, we opted for non-parametric statistics, namely Spearman correlation analyses.

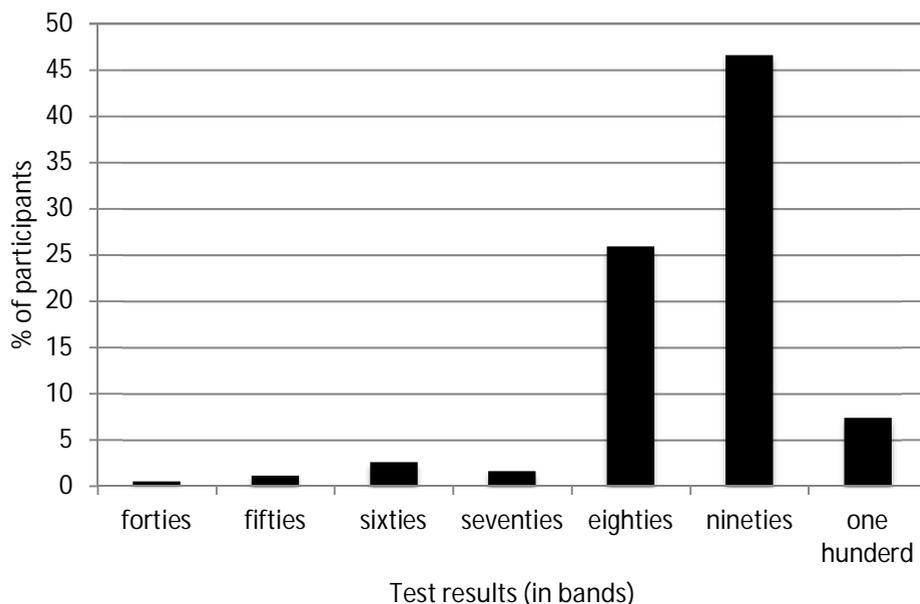


Figure 1 Distribution of test scores in the UK sample

4.2. Study 2

4.2.1. English as a FL in Saudi Arabia: Background, data collection and ethics

English education in the Kingdom of Saudi Arabia starts in 4th grade of elementary school, when students are 10 years old, and continues through secondary education. Primary school students have two 45-minute English classes a week. This increases to four classes per week in intermediate and secondary schools. Most Saudi universities use English as the language of instruction in medicine and engineering. In courses where Arabic is the language of instruction, students need to take an English class as an additional compulsory unit (Alrashidi & Phan, 2015).

Convenience sampling was used to recruit participants. A link was sent in 2016 to the online questionnaire using Twitter, WhatsApp and e-mail to acquaintances of the second author and to Saudi residents in Saudi Arabia who indicated in their profile on social media that they recently obtained an undergraduate degree in English language or were pursuing one. There was no time limit to fill out the questionnaire. Participants who agreed to be cited left their first name. The research design and questionnaire obtained approval from the Ethics Committee of the School of Social Sciences, History and Philosophy at Birkbeck, University of London.

4.2.2. Participants

A total of 152 Saudi learners and users of English participated in the data collection (82 males, 70 females). Their age ranged from 18 to 40 ($M = 26$, $SD = 6$). The majority of participants had recently completed their undergraduate education (60%), with the remaining participants being English students at the time of the data collection. About a quarter of participants reported using English regularly in daily life. The remaining participants used English "sometimes" (42%), "rarely" (29%) or "never" (5%). Over half of participants had travelled outside of Saudi Arabia where they had studied or used English (59%), though a substantial number had not been abroad (41%).

4.2.3. Independent variables

Participants filled out the same instruments to determine their levels of FLE and FLCA as in Study 1. The mean score for FLE was 3.4 ($SD = 0.9$), and the mean score for FLCA was slightly lower: 2.6 ($SD = 0.6$). Cronbach's alpha was .92 for the FLE scale, suggesting excellent internal consistency. An identical value emerged for the FLCA scale: Cronbach's alpha = .92.

Participants also filled out two open-ended questions on FLE and FLCA which were formulated as follows: (1) "In as much detail as possible, write about an enjoyable learning experience in your English class and how you felt about it," and (2) "In as much detail as possible, write about an anxious learning experience in your English class and how you felt about it." We will focus on the answers where participants linked FLE and FLCA with their English proficiency.

4.2.4. Dependent variable

Participants filled out the English version of the LexTALE (Lemhöfer & Broersma, 2012). This lexical decision test consists of 60 items, some of which are existing (British) English words while other are English-looking non-words. Participants are asked to distinguish the real words from the non-words. Research has demonstrated that this test provides a reliable measure of the lexical proficiency of learners with different cultural and linguistic backgrounds and is a good indicator of overall English proficiency, at least for learners with intermediate and advanced proficiency levels (Lemhöfer & Broersma, 2012).

Students' LexTALE scores ranged from 37.5 to 98.7. The mean score was 57.4 ($SD = 10.4$), just within the lower intermediate level according to Lemhöfer and Broersma's (2012) classification of general proficiency levels: upper and lower advanced/proficient users (80-100), upper intermediate users (60-79) and

lower intermediate and lower (below 59). A Kolmogorov-Smirnov test revealed that the distribution was not quite normal ($KS = 0.13, p < .01$). Although the distribution shows the distinctive bell curve, it is slightly skewed towards the lower end of the continuum (see Figure 2). As a consequence, the data were analyzed with non-parametric statistics.

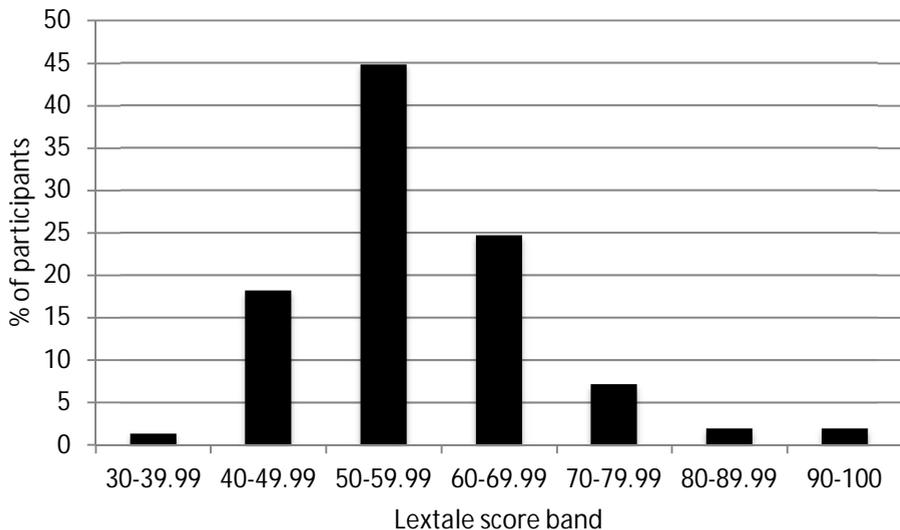


Figure 2 Distribution of English proficiency scores in Saudi sample

5. Results

5.1. Study 1: The relationship between FLE, FLCA and test results

A Spearman correlation analysis revealed a positive relationship between FLE and test results ($Rho = .34, p < .0001, r^2 = 11.6$) and a negative relationship between FLCA and test results ($Rho = -.30, p < .0001, r^2 = 9.0$). In other words, higher levels of enjoyment and lower levels of anxiety in the FL class were linked with better test results (see Figures 3 and 4). The effect size was slightly greater for FLE (12%) than for FLCA (9%) but both fall somewhere between “small” and “medium.”⁶

⁶ Plonsky and Oswald (2014, p. 889) describe correlation coefficients of .25 as small, and .40 as medium.

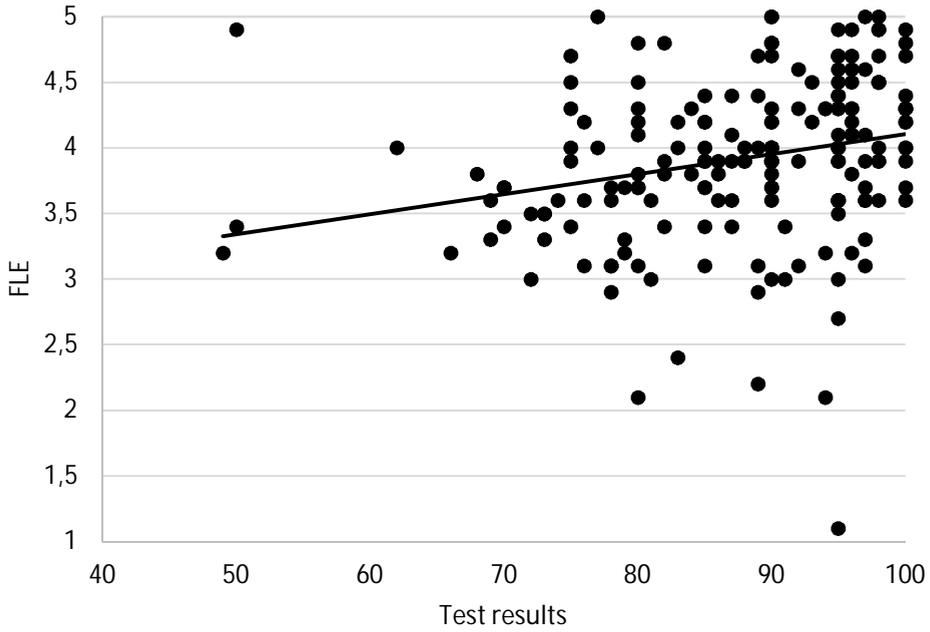


Figure 3 The relationship between FLE and test results

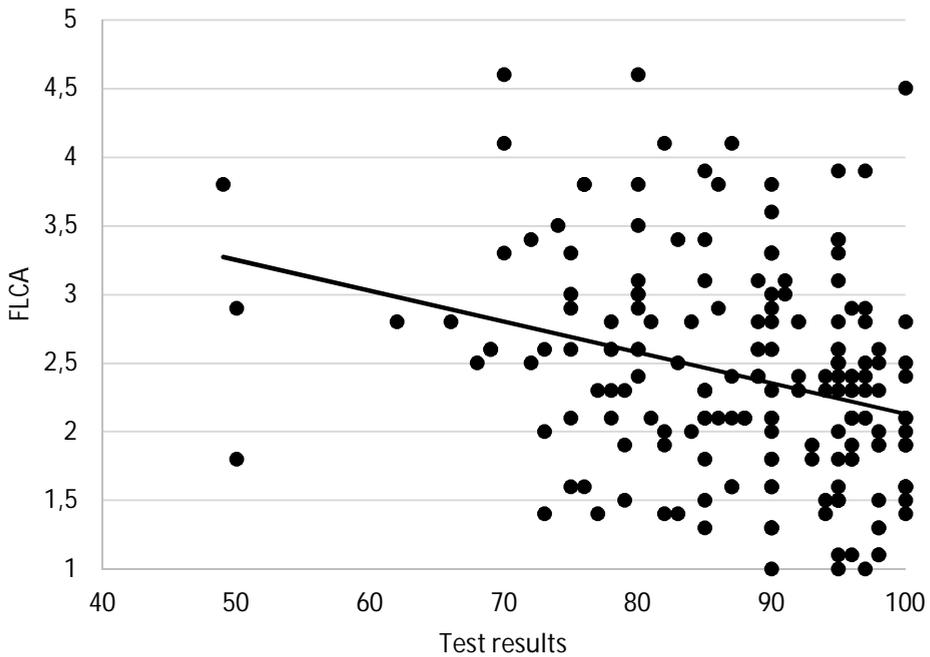


Figure 4 The relationship between FLCA and test results

5.2. Study 2 The relationship between FLE, FLCA and test results

Spearman Rho correlation analyses revealed that FLE and FLCA were both associated with proficiency in English as a FL, though only the relationship with FLE was significant ($Rho = 0.242$, $p < 0.003$, $r^2 = 5.8$) (see Figure 5). The effect size for FLE (5.8%) can thus be described as “small.”

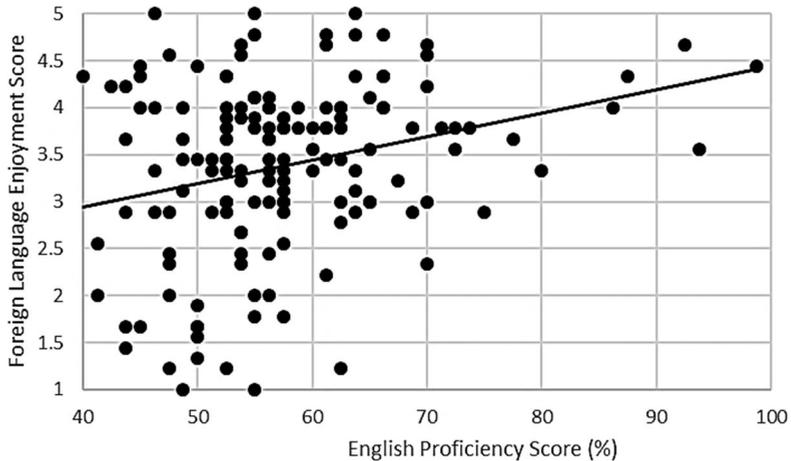


Figure 5 The relationship between FLE and English proficiency scores

The negative relationship between FLCA and proficiency scores showed the expected pattern but failed to reach significance ($Rho = -0.145$, $p = 0.075$, $r^2 = 2.1\%$) (see Figure 6).

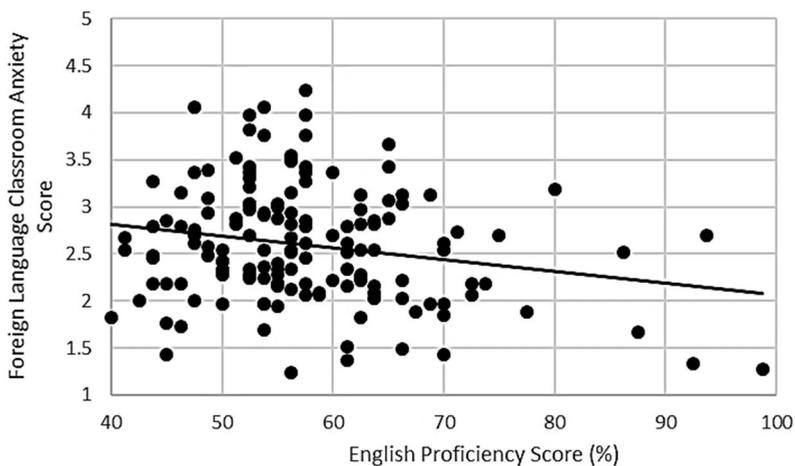


Figure 6 The relationship between FLCA and English proficiency scores

Many participants linked their classroom emotions with their English proficiency in the feedback on the two open questions. Some responded in English and some in Arabic. Widad described how the teacher's character not only made the class enjoyable but how this, in turn, led to good attendance and test results:

ي احدى الأعوام الدراسيه كانت معلمتي في احدى المواد برازيليه لغتها جميله وبسيطه واستمتع في محاضراتها جداً كانت تحب المزاح والمرح معنا ومتواضعه اجزت الماده بامتياز ولم اتغيب ابدأ عن محاضراتها كنت انتظر بفارغ الصبر قدومها حبيتنا في الماده بروحها الجميله وعادة مايمضي الوقت سريعاً دون ملل"

[In one of my undergraduate years my teacher for one module was Brazilian. Her English was good and simple, I enjoyed her class. She was humble, joked with us and had great sense of humor. I passed her class with excellent grades and I have never been absent from her class. I always looked forward to her lecture. It is thanks to her great character that we liked the class and that time goes by so quick]. (Widad, female, 29)

The successful execution of a well-prepared presentation could boost the enjoyment level of the learner and reduce anxiety in the long term, as Safana explained:

"قدمت عرض رائع باللغة الانجليزية عن كيفية صناعه العطور ابدت المعلمه اعجابها الشديد في ادائي ونلت الدرجة الكامله بعد التقييم شعرت بالفخر تجاه نفسي وقل عندي الخوف والتوتر عند عمل اي عرض باللغة الانجليزية"

[I did an excellent presentation on how perfumes are made which received high praise from my teacher on my performance. I got a full mark on that presentation and levels of fear and anxiety have decreased when I do any presentation in English]. (Safana, female, 26)

Some participants reported strong positive emotions when addressing their peers in fluent English, as Safaa explained:

خلال عرض برزنتيشن امام الطلبة كان شعور جميل وانا اتحدث اللغة الأجنبية رغم قصر المده الزمنية

[In spite of the short time, I had such a beautiful feeling when I gave a presentation in the foreign language before students]. (Safaa, female, 23)

However, many participants reported high levels of anxiety in public speaking which negatively affected their English fluency and accuracy. This typically occurred early on in the course, as Nourah observed:

توترت عند أول مرة قدمت عرض لدرجة خلصته كله بأقل من ربع دقيقة ومحد فهم شي من سرعتي بالكلام

[I got anxious the first time I gave a presentation to the extent that I finished the whole presentation in less than 25 seconds. No one could understand anything as I was speaking so fast]. (Nourah, female, 22)

Public speaking anxiety can even cripple those who feel competent in English, as is depicted in the following extract from Ahmad:

في العمل قدمت عرض باللغة الانجليزية وتوترت لدرجة فقدت ثقتي بنفسي بالرغم من قدرتي على التحدث باللغة الانجليزية

[At work, I gave a presentation in English and I got anxious to the point that I lost my self-confidence despite my competency in the English language]. (Ahmad, male, 24)

Bad pedagogical practices were highlighted as having a negative effect on students' emotions, which had repercussions on their ultimate attainment in English:

What really irritates me is that schools in the educational system in Saudi Arabia used to recruit unqualified teachers who do not exhibit fair knowledge of English. Moreover, they dealt with us on the basis of reducing marks. For that we felt a sense of horror and difficulty and eventually we ended up graduating from secondary school with low attainment in English and a psychological complex that English is boring and impossible to learn when the reality is the opposite. (Sami, male, 34).

Belittling learners and ignoring their efforts has been a source of anxiety for several participants like Reem:

طلبت مني أستاذة اللغة الإنجليزية ان اكتب بعض السطور امام الزميلات وقد أخفقت في إملاء إحدى الكلمات فسخرت مني أمام الجميع ومسحت جميع السطور الصحيحة بسبب إخفاقي بحرف واحد

[My English language teacher requested that I write a few lines on the board in front my classmates. I misspelled one word. Therefore, she ridiculed me in front of everyone and wiped out all correct lines for failing in spelling just one word]. (Reem, female, 22)

Physical abuse (which was officially banned in the educational system in the Kingdom of Saudi Arabia in October 2013) did make Khalid anxious about the English language course:

After I was beaten by my English language teacher, I have become afraid of it even though I like it. (Khalid, male, 32)

Negative emotions linked to a perceived lack of English proficiency might create a vicious circle for some learners who might be tempted to give up. Some managed to overcome this obstacle thanks to teacher support, as Naif's explained:

في السنه الاولى لم تكن هناك اي خبره للغه الانجليزيه فكان من الصعب معرفة بعض الكلمات او القواعد المتعلقة بترتيب الجمل فشعرت بشيء من التوتر وعدم رغبه في اكمال العمل على تعلم اللغه ولكن بمساعدة الاساتذه المشرفين على تلك المواد استطعت اجتياز هذه المرحله الصعبه"

[In my first year there I had no experience in English so it was difficult knowing some words or sentence structure rules. I experienced some degree of anxiety and unwillingness to pursue learning the language, but thanks to the teachers of those modules I managed to overcome this tough phase]. (Naif, male, 29)

6. Discussion

The research questions focused on the effect of positive and negative emotions on FL performance in two very different contexts: two London-based secondary schools with pupils studying various FLs and current and former Saudi students of English as a FL in Saudi Arabia. Correlation analyses in Study 1 revealed a positive relationship between FLE and self-reported test results in the FL among the London pupils. A slightly weaker negative relationship emerged between FLCA and their test results. In other words, pupils with higher levels of FLE and lower levels of FLCA were more likely to perform well on FL tests.

Correlation analyses in Study 2 on Saudi university EFL students revealed a similar picture. Higher levels of FLE were linked to significantly higher English proficiency scores and higher levels of FLCA were linked to marginally lower English proficiency scores. The qualitative material collected in Study 2 allowed us to get a glimpse of the complex interactions between participants' enjoyment and anxiety in their EFL classes. These were generally linked to the perception of the teacher and teachers' pedagogical practices. Participants remembered how anxiety had negatively affected their performance in English. Negative practices and comments by teachers – sometimes even physical abuse – weighed on the participants' mood and caused shame (Galmiche, 2017). Some reported little enjoyment, increased anxiety and a growing lack of self-confidence in English, which could lead to abandonment of the English course. Yet, participants in the current study managed to overcome these hurdles thanks to good teachers, resilience and a strong desire to master English.

The results are in line with Brantmeier (2005), who showed that enjoyment was associated with higher self-assessed FL ability and scores on a reading comprehension test. Our results also show that more enjoyment is typically linked with less anxiety but that both can co-occur (Dewaele & MacIntyre, 2014, 2016; Dewaele et al., 2016). Finally, some Saudi participants confirmed that their levels of enjoyment typically increased over time while they learned to better control their anxiety (Dewaele & Dewaele, 2017). These were typically the "fighters," to use Şimşek and Dörnyei's (2017) terminology.

The present study provided further confirmation of the negative relationship between anxiety and FL achievement (Horwitz, 2010; Krashen, 1982; Liu & Jackson, 2008; MacIntyre, 1999, 2017; MacIntyre & Gardner, 1994; Tran,

2012). The relationship between level of mastery in the FL and higher levels of enjoyment, combined with lower levels of anxiety (cf. Dewaele & MacIntyre, 2014) seems also to exist among the Saudi participants. Several Saudi participants described anxiety arising from their low proficiency level and having toyed with the idea of giving up the study of English rather than actively combatting their anxiety (i.e. potential “quitters,” cf. Şimşek & Dörnyei, 2017). In other words, only those who actively rejected the crippling effects of anxiety and were resilient enough to overcome their negative emotions managed to progress to higher levels of proficiency – and to higher levels of FL enjoyment. Dewaele and MacIntyre (2014) also found that at higher levels of proficiency FLE levels increased while FLCA levels dropped. The gap between both was smallest among beginners and widest among advanced FL learners. It suggests that there is a process of attrition among FL learners in the education system (cf. Dewaele & Thirtle, 2009), with the “fighters” surviving and the “quitters” and “safe players” dropping off along the way. Research into FL learning is inevitably hampered by a self-selection bias, which means it is close to impossible to have a “representative sample” of the FL population (Dewaele, to appear). This is also an inherent limitation in the present research design. It is likely that the sample contains a larger proportion of successful learners with even the anxious ones being “fighters” rather than “quitters.” The successful learners are more likely to be willing to share the story of their success in an anonymous online questionnaire than the unsuccessful ones who may still experience guilt and shame about their decision to quit before reaching the end of the English course or realizing that having played it safe in the classroom, they ended up with more limited English proficiency compared to their more daring peers.

The context of acquisition of the FL continues to affect students’ perception and use of the FL for many years after graduation (cf. Dewaele, 2013). This pattern was confirmed in the current study with Saudi EFL students having vivid memories of the emotions they had experienced in English FL classes and how these shaped their self-perceptions at the time and in the years that followed.

Because we opted for a correlational design, we cannot establish causality between the emotions and FL performance. Although it is very likely that the classroom emotions affected FL performance, it is not unlikely that FL performance also affected classroom emotions. Such a bi-directional causal pathway could explain the reinforcement of FLE and the relative weakening of FLCA and its debilitating effects over time.

Finally, since pedagogical practices have been found to be linked to FLE and FLCA (Dewaele & MacIntyre, 2014; Dewaele et al., 2016) and were often reported to be the main causes of anxiety and enjoyment in Study 2, it is imperative that teacher training courses pay attention to these crucial emotional dimensions in order to allow teachers to create a positive climate in their classrooms.

7. Conclusion

The present study investigated the effect of foreign language enjoyment (FLE) and foreign language classroom anxiety (FLCA) on self-reported results in an FL test among 189 foreign language pupils in two London schools and actual performance in a group of 152 current and former Saudi EFL undergraduate students. Correlation analyses revealed that the relationship between FLE and performance was significant, positive and slightly bigger in both studies than the significant negative relationship between FLCA and performance in Study 1 and the marginal negative effect in Study 2. In other words, positive emotions seem to be more strongly linked to performance in the FL than negative emotions. Overall the effect sizes hovered between small and medium. Qualitative material collected from the Saudi participants revealed that pedagogical practices were often reported to be the main causes of anxiety and enjoyment, which, in turn, weighed on decisions to pursue or abandon the study of English and which ultimately contributed to the level of proficiency they had reached in English. Further research could focus on the effect of specific target languages on FLE, FLCA and FL performance.

Acknowledgment

In relation to Study 1, we thank Dr. Davison, the Headteacher, the Head of Languages, Ms. Davies and the teachers of Dame Alice Owen's as well as the Head Master of Westminster School, Mr. Derham, the Head of Languages, Dr. Witney and the language teachers for allowing us to contact their FL students. Thanks also to the students' parents and the students themselves for their collaboration in this project. In relation to Study 2, we would like to thank the participants for sharing their current and past EFL experiences with us. Finally, we would like to thank the reviewers for their excellent feedback.

References

- Alrashidi, O. & Phan, H. (2015). Education context and English teaching and learning in the kingdom of Saudi Arabia: An overview. *English Language Teaching*, 8(5), 33-44. doi: 10.5539/elt.v8n5p33
- Al-Saraj, T. M. (2011). Exploring foreign language anxiety in Saudi Arabia: A study of female English as foreign language college students. Unpublished PhD thesis, Institute of Education, University of London.
- Al-Saraj, T. M. (2014). Foreign language anxiety in female Arab learners of English in Saudi Arabia: Case studies. *Innovation in Language Learning and Teaching*, 8(3), 1-22. doi: 10.1080/17501229.2013.837911
- Al-Asmari, A. (2015). A comparative analysis of preparatory year students' FL anxiety. *International Journal of English Linguistics*, 5(4), 50-62. doi: 10.5539/ijel.v5n4p50
- Alrabai, F. (2014). A model of foreign language anxiety in the Saudi EFL context. *English Language Teaching*, 7(7), 82-101. doi: 10.5539/elt.v7n7p82
- Alrabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, 9(2), 163-190. doi: 10.1080/17501229.2014.890203
- Brantmeier, C. (2005). Nonlinguistic variables in advanced second language reading: Learners' self-assessment and enjoyment. *Foreign Language Annals*, 38(4), 494-504.
- Dewaele, J.-M. (2013). *Emotions in multiple languages*. Basingstoke: Palgrave Macmillan.
- Dewaele, J.-M. (2017). Psychological dimensions and foreign language anxiety. In S. Loewen & M. Sato (Eds.), *The Routledge handbook of instructed second language acquisition* (pp. 433-450). London: Routledge.
- Dewaele, J.-M. (to appear). Online questionnaires in applied linguistics research. In A. Phakiti, P. De Costa, L. Plonsky, & S. Starfield (Eds.), *Palgrave handbook of applied linguistics research methodology*. Basingstoke: Palgrave Macmillan.
- Dewaele, J.-M., & Al-Saraj, T. (2015). Foreign Language Classroom Anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching*, 5(2), 205-230. doi: 10.14746/ssllt.2015.5.2.2
- Dewaele, J.-M., & Dewaele, L. (2017). The dynamic interactions in Foreign Language Classroom Anxiety and Foreign Language Enjoyment of pupils aged 12 to 18: A pseudo-longitudinal investigation. *Journal of the European Second Language Association*, 1, 11-22. doi: 10.22599/jesla.6
- 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, 237-274. doi: 10.14746/ssllt.2014.4.2.5

- Dewaele, J.-M., & MacIntyre, P. D. (2016). Foreign Language Enjoyment and Foreign Language Classroom Anxiety: The right and left feet of FL learning? In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215-236). Bristol: Multilingual Matters.
- Dewaele, J.-M., MacIntyre, P. D., Boudreau, C., & Dewaele, L. (2016). Do girls have all the fun? Anxiety and enjoyment in the foreign language classroom. *Theory and Practice of Second Language Acquisition*, 2(1), 41-63.
- Dewaele, J.-M., & Thirtle, H. (2009). Why do some young learners drop foreign languages? A focus on learner-internal variables. *International Journal of Bilingual Education and Bilingualism*, 12(6), 635-649. doi: 10.1080/13670050802549656
- Dewaele, J.-M., Witney, J., Saito, K., & Dewaele, L. (2017). Foreign language enjoyment and anxiety in the FL classroom: The effect of teacher and learner variables. *Language Teaching Research*. doi: 10.1177/1362168817692161
- Fredrickson, B. L. (2003). The value of positive emotions. *American Scientist*, 91, 330-335. doi: 10.1511/ 2003.4.330
- Fredrickson, B. L. (2013). Updated thinking on positivity ratios. *American Psychologist*, 68(9), 814-822. doi: 10.1037/a0033584
- Galmiche, D. (2017). Shame and SLA. *Apples – Journal of Applied Language Studies*, 11(2), 25-53. doi: 10.17011/apples/urn.201708233538
- Gardner, R.C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
- Gkonou, C., Daubney, M., & Dewaele, J.-M. (Eds.) (2017). *New insights into language anxiety: Theory, research and rducational implications*. Bristol: Multilingual Matters.
- Gregersen, T., & MacIntyre, P. D. (2014). *Capitalizing on individual differences: From premise to practice*. Bristol: Multilingual Matters.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559-562. doi: 10.2307/3586302
- Horwitz, E. K. (2010). Foreign and second language anxiety. *Language Teaching*, 43, 154-167. doi: 10.1017/ S026144480999036X
- Horwitz, E. K. (2017). On the misreading of Horwitz, Horwitz, and Cope (1986) and the need to balance anxiety research and the experiences of anxious language learners. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 31-47). Bristol: Multilingual Matters.
- Horwitz, E., Horwitz, M., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 70, 125-132. doi: 10.1111/j.1540-4781.1986.tb05256.x
- Ismail, N. M. (2015). EFL Saudi students' class emotions and their contributions to their English achievement at Taif University. *International Journal of Psychological Studies*, 7, 19-42. doi: 10.5539/ijps.v7n4p19

- Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
- Lemhöfer, K., & Broersma, M. (2012). Introducing LexTALE: A quick and valid lexical test for advanced learners of English. *Behavior Research Methods*, 44, 325-343. doi: 10.3758/s13428-011-0146-0
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *Modern Language Journal*, 92(1), 71-86.
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere* (pp. 24-45). Boston: McGraw Hill.
- MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 11-30). Bristol: Multilingual Matters.
- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, 39(2), 251-275. doi: 10.1111/j.1467-1770.1989.tb00423.x
- MacIntyre, P. D., & Gardner, R. C. (1991). Language anxiety: Its relationship to other anxieties and to processing in native and second languages. *Language Learning*, 41(4), 513-534. doi: 10.1111/j.1467-1770.1991.tb00691.x
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44, 283- 305. doi: 10.1111/j.1467-1770.1994.tb01103.x
- MacIntyre P. D., Gregersen T., & Mercer S. (Eds.) (2016). *Positive psychology in SLA*. Bristol: Multilingual Matters.
- MacIntyre, P. D., & Gregersen, T. (2012a). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2, 193-213. doi: 10.14746/sslIt.2012.2.2.4
- MacIntyre, P. D. & Gregersen, T. (2012b). Affect: The role of language anxiety and other emotions in language learning. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Language learning psychology: Research, theory and pedagogy* (pp. 103-118). Basingstoke: Palgrave.
- MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, 4, 153-172. doi: 10.14746/sslIt.2014.4.2.2
- Oxford, R. (2015). Emotion as the amplifier and the primary motive: Some theories of emotion with relevance to language learning. *Studies in Second Language Learning and Teaching*, 3, 371-393. doi: 10.14746/sslIt.2015.5.3.2

- Pishghadam R., Zabetipour, M., & Aminzadeh, A. (2016). Examining emotions in English language learning classes: A case of EFL emotions. *Issues in Educational Research, 26*, 508-527.
- Plonsky, L., & Oswald, F. L. (2014). How big is "big"? Interpreting effect sizes in L2 research. *Language Learning, 64*, 878-912. doi: 10.1111/lang.12079
- Saito, K., Dewaele, J.-M., Abe, M., & In'nami, Y. (to appear). Motivation, emotion, learning experience and second language comprehensibility development in classroom settings. *Language Learning*.
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety. *The Modern Language Journal, 83*(2), 202-218. doi: 10.1111/0026-7902.00016
- Şimşek, E., & Dörnyei, Z. (2017). Anxiety and L2 self-images: The 'anxious self'. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 51-69). Bristol: Multilingual Matters.
- Schutz, P. A., & Pekrun, R. (Eds.). (2007). *Emotion in education*. San Diego, CA: Academic Press.
- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory (STAI)*. Palo Alto, CA: Consulting Psychologists Press.
- Tran, T. T. T. (2012). A review of Horwitz, Horwitz and Cope's theory of foreign language anxiety and the challenges to the theory. *English Language Teaching, 5*(1), 69-75. doi: 10.5539/elt.v5n1p69