The predictive power of multicultural personality traits, learner and teacher variables on foreign language enjoyment and anxiety[1]

Jean-Marc Dewaele, Birkbeck, University of London
Peter D. MacIntyre, Cape Breton University

HIGHLIGHTS
- This study confirmed that Foreign Language Enjoyment (FLE) and Foreign Language Classroom Anxiety (FLCA) are negatively correlated but separate dimensions.
- The independence of the dimensions was confirmed by the fact that FLE and FLCA scores are most often predicted by different independent variables.
- FLE was mostly predicted by teacher-related variables such as attitude towards the teacher and his/her friendliness, while FLCA was mostly predicted by learners' levels of Emotional Stability.
- Qualitative analysis of episodes of FLE and FLCA revealed that the teacher was mentioned more frequently in FLE than in FLCA episodes.

ABSTRACT

Background and purpose: Previous research showed that Foreign Language Enjoyment (FLE) and Foreign Language Classroom Anxiety (FLCA) were negatively correlated but essentially independent dimensions. The current study confirms this finding with new additional empirical evidence.

Methods: This mixed-methods study is based on feedback from 750 FL learners around the world obtained via an online questionnaire. Quantitative data were Likert scale responses. Qualitative data (descriptions of classroom episodes in which participants experienced intense FLE and FLCA) was coded according to the source(s) of the emotion.

Findings: Correlation analyses confirmed that FLE and FLCA are separate dimensions. Multiple regression analyses revealed that FLE was mostly predicted by teacher-centred variables while FLCA was mostly predicted by the personality trait Emotional Stability. This finding was confirmed in the analysis of participants' words. The most frequent cause of the FLE experience was the teacher while FLCA experiences were mostly frequently linked to the self.

Conclusion: FLCA is less context-dependent than FLE.

Pedagogical suggestions: Teachers may rather focus on boosting FLE in a positive classroom environment rather than worry over FLCA.

BACKGROUND

With expanding interest in the role of emotions in language learning, it is important to know what drives different experiences for different learners. Recent developments in emotion theory suggest that positive emotions (such as enjoyment) and negative emotions (such as anxiety) have different functions and arise from different types of experiences (Fredrickson,

---

2013; MacIntyre & Gregersen, 2012a, b). In this study, we investigate foreign language students' experience of anxiety and enjoyment in their classes. In particular, we examine individual difference correlates of those two emotions to consider whether the courses of enjoyment and anxiety are primarily learner-internal (e.g., personality, linguistic profile, sociobiographical history), or whether they are more strongly associated with influences external to the learner (e.g., teachers, peers, or target language and its speakers). This question is one of relative degree of influence rather than an 'either-or' proposition. We have argued elsewhere that all these factors can interact dynamically (Dewaele, 2013; Dewaele & MacIntyre, 2014) and hence shape the emotions of learners like the sea breeze reconfigures sand dunes. One crucial difference between sand dunes and learners is obviously that the latter have volition (MacIntyre, 2007) and have awareness about their emotions.

The methodology of the present study is a convergent parallel design (cf. Creswell & Plano Clark, 2011, p. 70). Therefore, in addition to the quantitative results, we will provide a sample of learner voices describing their emotional experiences. Learners may love and hate things in the FL class—so long as they are not bored or indifferent, the teacher potentially can harness these emotions to help them progress in FL learning (Dewaele, 2005, 2015; Oxford, 2016).

LITERATURE REVIEW

Research on individual differences in Foreign Language (Classroom) Anxiety (FLCA) has flourished in the past decades (for overviews see Dewaele, 2017; Gkonou, Daubney, & Dewaele, 2017; Horwitz, 2010; MacIntyre, 2017). In contrast, investigations into other emotions, such as enjoyment, are more recent (Dewaele & MacIntyre, 2014; Dewaele, Witney, Saito, & Dewaele, 2017; Dewaele & Dewaele, 2017). FL learners and teachers alike often describe FL classes in terms such as enjoyable and/or anxiety-provoking. Although the emotional atmosphere of the classroom is an important consideration in the learners' success, how do we explain the variety of emotions experienced within the same classroom by the different pupils? In theory, on the one hand, positive emotions broaden the learner's attention so some might notice more, explore more, and play with the language. Negative emotions, on the other hand, tend to restrict learners' thoughts and actions to focus on dealing with whatever is causing the emotional reaction (MacIntyre & Gregersen, 2012a, b). As the literature stands now, we know much more about negative emotions than we do about positive ones.

The recent expansion of knowledge concerning positive emotions has been driven by the introduction of positive psychology in applied linguistics (Dewaele & MacIntyre, 2014; MacIntyre & Gregersen, 2012a, b; MacIntyre & Mercer, 2014). Positive Psychologists argue that psychology has been too focused on disorders, pathologies, and deficits—the things that go wrong, rather than on strengths, well-being, and growth—things that go right. Oxford (2016), inspired by Positive Psychology, produced an overview of the factors that play a role in successful FL learning and teaching, interacting in complex and dynamic ways. She proposed the acronym EMPATHICS:

(a) emotion and empathy, (b) meaning and motivation, (c) perseverance, (d) agency and autonomy, (e) time, (f) hardiness and habits of mind, (g) intelligences, (h) character strengths, and (i) the self factors of self-efficacy, self-concept, self-esteem and self-verification (p. 71).

Positive Psychologists such as Oxford do not deny the existence or impact of the negative; but rather than focusing on defining problems and overcoming learner deficiencies, they try and boost the positive by fostering greater engagement, as well as increasing the appreciation of meaning in life and its activities (MacIntyre & Mercer, 2014). This new perspective is

particularly welcome in applied linguistics as the long-standing strong focus on what's wrong has led to the relative neglect of the role of positive emotions in language learning. A more holistic view is needed on the full gamut of emotions that learners experience in the classroom (Dewaele, 2017; Dewaele & Dewaele, 2017; Dewaele & MacIntyre, 2014, 2016; Dewaele et al., 2017; Galmiche, 2017; Pavelescu & Petrić, 2018; Piniel & Albert, 2018). MacIntyre and Mercer (2014) explained:

> 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).

Sources of FLCA and FLE

In a highly influential article, Horwitz, Horwitz, and Cope (1986) described FLCA as a unique form of state anxiety aroused in language learning situations—a tendency to respond with feelings of anxiety when faced with FL demands. FL learners that suffer from FLCA "have the trait of feeling state anxiety when participating in language learning and/or use" (Horwitz, 2017, p. 33). Moreover, FLCA is an umbrella term for "a suite of anxieties" (Horwitz, 2016, p. 72). Horwitz (2017) argued that FL learners experience FLCA "because of distress at their inability to be themselves and to connect authentically with other people through the limitation of the new language" (p. 41).

MacIntyre (2017) argued that FLCA is linked to a range of interacting factors that affect acquisition and performance in the FL. FLCA is an emotion that is constantly fluctuating over different timescales, and that negatively interacts with motivation, perceptions of competence, and willingness to communicate. Looking back at FLCA research, Dewaele (2017) underlined the dynamic character of FLCA:

> 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).

MacIntyre (2017, p. 28) added that "(a)nxiety has both internal and social dimensions" suggesting that both learner-internal characteristics and features of the learning situation, in particular the people involved, are relevant to anxiety. Yet it is an open question how these same characteristics and attributes might predict an emotion such as enjoyment.

Learner-internal variables

Discussions of learner-internal variables usually include stable personality traits, though overviews of the effects of personality on FL acquisition have shown small or inconclusive effects (Dewaele, 2013). Yet, results show that some personality traits tend to be associated with FLCA. The strongest link exists with Neuroticism and to a lesser extent Introversion and Psychoticism (Dewaele, 2013, Dewaele & Al Saraj, 2015). Higher levels of FLCA have also been associated with more specific traits such as high levels of perfectionism, and low levels of trait emotional intelligence (also called 'trait emotional self-efficacy'), second language tolerance of ambiguity and general self-esteem (for an overview, see Dewaele, 2017; Jin, de Bot, & Keijzer, 2015). In the present study, we will employ a measure of personality that has not be

used in the SLA emotions literature, yet might be especially appropriate for this context—the Multicultural Personality Questionnaire (MPQ). The MPQ consists of 40 items measuring five dimensions shown to be relevant to multicultural success: *Cultural Empathy, Open-mindedness, Social Initiative, Emotional Stability,* and *Flexibility.* (van der Zee, van Oudenhoven, Ponterotto, & Fietzer, 2013).

In addition to learner personality, a range of sociobiographical and situational characteristics has been linked with FLA. Dewaele (2013) found lower FLA in adult FL users who started learning the FL at a younger age, who learned and used the FL both inside and outside of the classroom, were strongly socialised in the FL and who used it frequently with many people. The knowledge of more languages was linked with lower FLA across all languages. Using a FL with friends was found to be less anxiety-provoking than using it with colleagues, or using it on the phone or in public. Participants displayed similar patterns of communicative anxiety across situations in their L1 but the mean value for speaking in public was only 1.7 on a 5-point Likert scale compared to 3.5 for speaking in public in their L5 (Dewaele, 2013, p. 176).

Less information is available with respect to FLE because it has only recently emerged in the SLA literature. Dewaele and MacIntyre (2014) developed a FLE scale consisting of 21 items reflecting positive emotions towards the learning experience, peers and teacher. Overall, a moderate negative correlation ($r = -.34$) was found between FLE and FLCA in a sample of 1740 FL learners from all over the world. Such results suggest that the two emotions are not in a strict seesaw relationship, but appear to operate as two separate but related dimensions of experience. Further quantitative analysis revealed that higher levels of FLE and lower levels of FLCA were linked with being older, a high level of multilingualism, mastery in the FL, matching the perceived competence of peers in the FL class, and being in university rather than secondary school settings (Dewaele & MacIntyre, 2014). Gender differences were especially interesting, showing that females experienced *both* higher levels of anxiety *and* enjoyment (Dewaele, MacIntyre, Boudreau, & Dewaele, 2016). Dewaele et al. (2016) speculated that the females' heightened emotionality might boost the acquisition and use of the FL, given the motivational qualities of emotion (MacIntyre, 2002). Dewaele and MacIntyre (2016) examined the dimension of enjoyment in more detail using a factor analysis. Two sub-dimensions of FLE emerged: firstly social FLE, reflected in shared legends, classroom laughter, and pleasant relationships with teachers and peers, and secondly private FLE, reflected in internal feelings such as pride, having fun, and a sense of accomplishment (Dewaele & MacIntyre, 2016). Social and private dimensions of enjoyment are inter-correlated and work together to form a cohesive feeling. Dewaele and MacIntyre (2016) cautioned about risks in focusing on only the pleasant, internal feelings associated with enjoyment in contrast to the a more complete sense of accomplishment, growth in relationships, and progress in shared learning. The importance of social versus private dimensions of emotion helps focus our presentation of the learners' descriptions of the sources of their classroom emotions.

Contextual variables

Dewaele and MacIntyre (2014) showed that specific positive classroom activities that empowered students and gave them a choice in shaping an activity to match their concerns and interests boosted levels of FLE. Funny and encouraging teachers who praised students for good performance and deflected potential embarrassment with sympathetic laughter also boosted learners' FLE. In general, having close relationships with peers also increased the potential for FLE. The importance of climate created by people in the classroom is underscored by results

showing high levels of student engagement and teacher support are linked with lower levels of FLCA (Palacios, 1998; Piechurska-Kuciel, 2011) and more FLE. Relationships play a crucial role in the emotions that learners experience (Gregersen & MacIntyre, 2014). The crucial role of classroom climate in shaping the experience of FLE and FLCA is emerging from both quantitative (e.g., De Smet, Mettewie, Galand, Hiligsmann, & Van Mensel, 2018; Piniel & Albert, to appear) and qualitative studies (Pavelescu & Petrić, 2018).

However, data are beginning to suggest classroom climate might affect FLE and FLA in different ways. Results of a study of 189 British learners suggest that, compared to FLE, FLCA may be less related to the teacher and teaching practices (Dewaele et al., 2017). Using a pseudo-longitudinal design, Dewaele and Dewaele (2017) found FLE and FLCA evolved over time differently and were influenced by different learner and teacher variables. The authors emphasize that sources of positive and negative emotions change as learners become older. Novel methodologies, using an individual-level, dynamic (idiodynamic) approach to examine relationships between FLE and FLA are showing sharp, short term fluctuation in both FLE and FLCA, and a relationship that appears to be highly complex (Boudreau, MacIntyre, & Dewaele, 2018). At times, FLA and FLE appear to be coordinated and at other times they appear to operate independently; there is a wide range of correlations observed between anxiety and enjoyment on a moment-by-moment basis, suggesting that research is needed to better understand why learners can tell us that "even when I'm feeling a little anxious about it, I still found it fun." Although such a statement might seem internally inconsistent, it nevertheless matches learners' conflicted and ambivalent emotional experiences (Boudreau et al., 2018; MacIntyre, 2007).

The nascent literature is suggesting that contrasting positive and negative emotions in the same study provides an interesting avenue for better understanding both commonalities and differences between emotions. In the present study, we will examine that relationship and the predictive value offered by learner-internal and contextual variables for both emotions. Specifically, we examine a collection of 19 variables, including demographic, language-related, teacher-related factors, and learner personality as they correlate with FLE and FLCA. The following research questions were explored in the study:

RQ1: What is the relationship between FLE and FLCA?
RQ2: Is there a difference in FLE and FLCA of female and male participants?
RQ3: Do FLE and FLCA vary in function of the geographical area where the FL is studied?
RQ4: What are the cumulated effects of age, number of languages known, learner-internal and teacher-related variables and multicultural personality traits on learners' FLE & FLCA?
RQ5: What sources of FLE and FLCA can be identified in participants' accounts of enjoyable and anxiety-provoking episodes in their FL classes?

METHODS

Participants

The study attracted 750 participants (533 females, 207 males[1], mean age: 26, $SD = 10$). A large majority were university students (n = 688). Americans represented the largest nationality group ($n = 116$), followed by Spanish ($n = 85$), Belgian ($n = 67$), Japanese ($n = 50$), Austrian ($n = 36$), Turkish ($n = 36$), Algerian ($n = 34$), French ($n = 34$) and Australian ($n = 31$), with the remaining participants sharing another 64 nationalities. A majority of participants studied in the US ($n = 128$), followed by Belgium ($n = 86$), Spain ($n = 85$), Japan ($n = 49$), United Kingdom ($n = 47$), Austria ($n = 36$), Turkey ($n = 35$), Algeria ($n = 34$) and France ($n = 30$), with the

remaining participants studying in another 42 countries. For the sake of the statistical analysis this variable was recoded as geographic area (i.e. continent). The sample consisted of 161 bilinguals, 268 trilinguals, 152 quadrilinguals, 99 pentalinguals, with the remaining 70 participants reporting the knowledge of 6 or more languages. Close to half of participants reported studying English as a FL ($n = 354$), followed by French, Spanish, German, and Japanese. Participants ($n = 630$) reported the result on their last FL test: ranging from 30% to 100%, with a mean of 81.5% ($SD = 12.3$). Asked about the frequency of use of the FL outside school (ranging from 'very rarely' = 1 to 'very frequently' = 5), participants reported occasional general use outside school ($M = 2.8$, $SD = 1.0$) and more frequent use of the FL for reading ($M = 3.3$, $SD = 1.1$).

Participants also reported how positive their attitude was toward the FL they were studying, ranging from 'very unfavourable' to 'very favourable' ($M = 4.4$, $SD = 0.8$). They were also asked to indicate on a 5-point Likert scale what their attitude was toward their FL teacher (ranging from 'very negative' to 'very positive') which yielded a mean score of 4.1, $SD = 1.0$. A further number of items with 5-point Likert scales ranging from 'not at all' to 'very much so' enquired about various aspects of the teacher, including how strict the teacher was ($M = 2.4$, $SD = 1.0$), how friendly ($M = 4.2$, $SD = 0.9$), how much FL the teacher used in class ($M = 4.4$, $SD = 0.9$), how much the teacher joked ($M = 3.2$, $SD = 0.9$), and how predictable the teacher was ($M = 3.5$, $SD = 0.8$). Other demographic information can be found in the Appendix.

Instruments

In addition to the sociobiographical and language-related items reported earlier (see also Appendix A), participants completed the following measures:

1. FLE: Ten items were extracted from the Foreign Language Enjoyment (FLE) questionnaire (Dewaele & MacIntyre, 2014). Items reflect both the social and private dimensions of FLE and all items were positively phrased. Internal reliability was good (Cronbach α = .89; $M = 3.9$, $SD = 0.6$).
2. FLA: Eight items which reflected physical symptoms of anxiety, nervousness, and lack of confidence were extracted from the FLCAS (Horwitz et al., 1986). Two FLCA items were phrased to indicate low anxiety (reverse scored) and six were phrased to indicate high anxiety. Internal reliability was good (Cronbach α = .87, $M = 2.4$, $SD = 0.8$).
3. Multicultural Personality Questionnaire (MPQ, short form): The MPQ (van der Zee et al., 2013) has forty items that measure five personality dimensions relevant to multicultural success.
   - Cultural Empathy: this measures the ability to empathize with the feelings, thoughts of individuals from a different cultural background. Items include 'Sympathizes with others' and 'Sets others at ease'. Cronbach's α = .81.
   - Open-mindedness: this refers to an open and unprejudiced attitude towards outgroup members and towards different cultural norms and values. Items include 'Likes to imagine solutions for problems' and 'Has a broad range of interests'. Cronbach's α = .76.
   - Social Initiative: this is defined as a tendency to approach social situations in an active way and to take initiative. Items include 'Leaves the initiative to others to make contacts' and 'Takes the lead'. Cronbach's α = .80.
   - Emotional Stability: this dimension refers to a tendency to remain calm in stressful situations versus a tendency to show strong emotional reactions under stressful circumstances. Items include 'Is nervous' and 'Keeps calm when things don't go

well'. Cronbach's α = .76.

- Flexibility: the final dimension is described as the ability to learn from experiences. Elements of flexibility, such as the ability to learn from mistakes and adjustment of behavior, whenever it is required, are associated with the ability to learn from new experiences in particular. Items include 'Works according to plan' and 'Looks for regularity in life'. Cronbach's α = .81.

4. Open-ended questions: The questionnaire finished with two open questions. The first question asked to "describe one specific event or episode in your foreign language class that you really enjoyed, and describe your feeling in as much detail as you can" (444 participants responded, 26,309 words). The second asked: "describe one specific event or episode in your foreign language class that made you really anxious, and describe your feeling in as much detail as you can" (463 participants, 26,384 words). Emotion-related episodes were coded according to the persons involved. We created four categories labelled 'self,' 'self-peer,' 'self-teacher,' and finally 'self-peers-teacher'. These four broad and sometimes overlapping categories helped to explicate reasons why the participant experienced FLE or FLCA. For reporting purposes, we chose data extracts that were most representative of the category, most poignant, and we found most interesting.

Following the principles of convergent parallel design (cf. Creswell & Plano Clark, 2011, pp. 70-71), we collected the quantitative and qualitative data at the same time, prioritized both methods equally, kept the strands separate during analysis before mixing the results during discussion and interpretation of the findings. This approach allowed us to triangulate the methods "by directly comparing and contrasting quantitative results with qualitative findings for corroboration and validation purposes" (p. 77).

The research design and questionnaire obtained approval from the Ethics Committee of the school of Social Sciences, History and Politics at Birkbeck.

RESULTS

A look at the distribution of FLCA and FLE scores, and the calculation of Q-Q plots (Figures 1 and 2) suggests that they follow a normal distribution reasonably well except for the extreme tail for FLCA (values below 1.5) and the region below 2.5 for FLE. We thus opted for the more powerful parametric statistics to address RQ1 through RQ4.
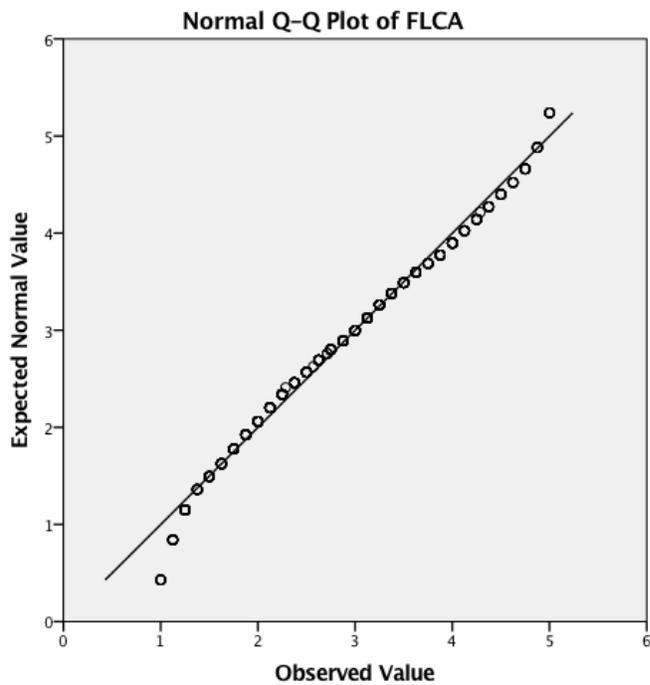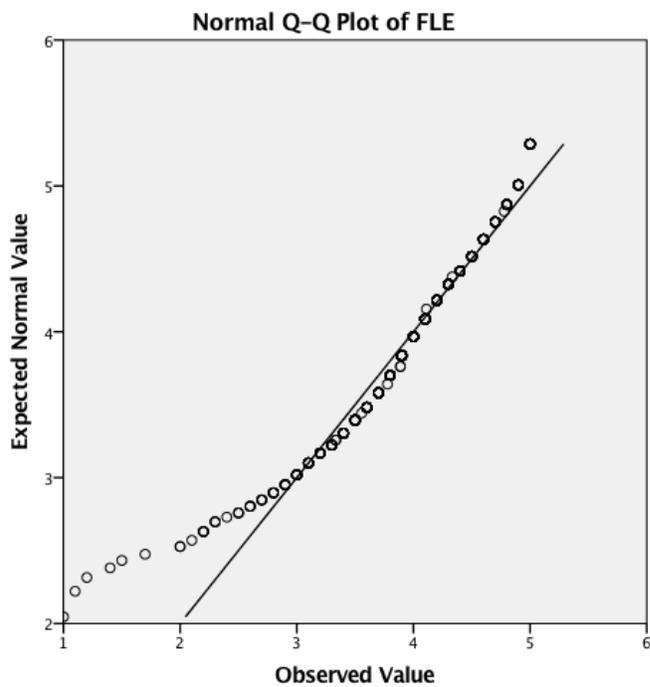
Figure 1: Normal Q-Q plot of FLCA

Figure 2: Normal Q-Q plot of FLE

RQ1 tests the correlation between FLE and FLCA. A significant negative correlation was

obtained ($r = -.28$, $p < .0001$). With only 7.8% overlapping variance, we found only a slight tendency for participants with higher scores on FLE to have lower scores on FLCA, but the correlation is not strong.

To answer RQ2 (gender differences in FLE and FLCA), we ran an independent t-test. The results show no difference in mean FLE scores (*Mean* Females = 3.93, *SD* = .63, *Mean* Males = 3.97, *SD* = .55, $t(738) = -.87$, $p = .42$). However, a highly significant difference emerged for FLCA. Female participants showed higher mean anxiety ratings (*Mean* Females = 2.90, *SD* = .92) than males (*Mean* Males = 2.58, *SD* = .86, $t(738) = 4.25$, $p < .0001$.

For RQ3, a one-way ANOVA showed a significant effect of geographic area on FLE ($F(5, 744) = 4.86$, $p < .0001$, $eta^2 = .032$. The 29 participants studying in Australia ($M = 4.2$, $SD = .46$) and the 131 participants in North America ($M = 4.1$, $SD = .58$) reported the highest mean levels of FLE, significantly higher than the 53 participants in Africa ($M = 3.7$, $SD = .77$). The other regions were in-between, with the 13 participants in South America ($M = 4.0$, $SD = .53$), the 454 participants in Europe ($M = 3.9$, $SD = .57$), and the 70 participants in Asia ($M = 3.8$, $SD = .66$) not significantly different from each other or from the other regions. For FLCA, no significant effect for geographic area was found ($F(5, 744) = 2.03$, $p = .072$).

RQ4 dealt with the relationship between the sociodemographic variables and FLE and FLCA. As a first step, we ran Pearson correlation analyses, to reveal significant relationships (see Table 1). Following-up on the correlations, independent variables that were linked significantly ($p < .01$) with the dependent variables were included in a stepwise linear regression analysis in order to identify the strongest predictors of FLE and FLCA.

[TABLE 1 HERE]

Inter-correlations among the independent variables are presented in Table 2.

[TABLE 2 HERE]

Stepwise multiple regression analysis was calculated in order to identify the best predictors of FLE. Only independent variables that showed significant correlations with FLE were entered in the regression analysis, including learner-centered and teacher-related variables as well as multicultural personality traits (see Table 1). Values for the variance inflation factor (VIF), which quantifies the severity of multicollinearity, hover around 1, which suggest there is not a multicollinearity problem (Kutner, Nachtsheim, Neter, & Li, 2004). A significant regression equation was found ($F(8, 593) = 49.7$, $p < .0001$, with a R^2 of .401, $R^2_{Adjusted} = .393$). Eight variables emerged as significant predictors, as indicated in Table 1. The strongest predictor of FLE was attitude towards the teacher, followed by Cultural Empathy, FL test result, friendliness of the teacher, Social Initiative, attitude towards the FL, joking by the teacher, and relative standing in the group.

The second stepwise multiple regression analysis was calculated to predict FLCA based on 14 variables showing significant correlations with it. VIF values hover above 1, suggesting there is no multicollinearity problem. A significant regression equation was found ($F(6, 595) = 76.6$, $p < .0001$, with a R^2 of .436, $R^2_{Adjusted} = .430$). The stepwise analysis identified six predictor variables. The strongest predictor was Emotional Stability, followed by Relative standing, Social Initiative, number of languages known, FL level, and attitude towards the teacher.

To answer the final research question, RQ5, we carried out a qualitative analysis of the material generated through the open question on a memorable enjoyable episode (463 responses) and on a memorable anxiety-provoking episode in the FL class (444 responses). Consistent with Dewaele and MacIntyre's (2016) differentiating social and private dimensions of enjoyment, our specific focus in this analysis was on the notion of social versus private dimensions of both

anxiety and enjoyment. The first category was "Self", meaning that no other person was mentioned as the cause of the emotion. There were 108 examples of this category for FLE experiences and 170 for FLCA experiences. Describing her FLE experience, Participant 35 (female, aged 20, studying in the USA, Chinese L1, English L2, Japanese L3, Spanish L4, Korean L5) reported experiencing a state of flow when doing challenging things in her FL class:

> FLE: I like juggling in my foreign language class. When I started practicing it, it was difficult for me to throw three balls in the air. But now, I can control them and throw them continuously.

Participant 72 (female, aged 20, studying in Austria, German L1, English L2) explained how she experienced FLCA in an examination:

> FLCA: I was really nervous before and during my exam in pronunciation because I didn't know if I was prepared enough and I find it quite difficult to practice my pronunciation because I seldom hear my own mistakes.

The second category was "Self-peer", meaning that the feeling was partly caused by the actions or presence of a peer in the FL class. This category had 50 tokens for FLE experiences and 45 tokens for FLCA experiences. Participant 197 (male, aged 19, studying in Chile, Spanish L1, English L2) reported how enjoyable interaction with peers was:

> FLE: I really enjoy speaking with my classmates; I believe that's the best way to show our skills, answer our questions and fix our mistakes.

Participant 320 (male, aged 39, studying in Japan, German L1a, English L1b, French L1c, Swedish L2, Turkish L3, Japanese L4, Norwegian L5) remembered how a talkative classmate had caused his FLCA:

> FLCA: Learning Turkish in Istanbul, there were many moments when I simply didn't dare to communicate. Something made a little bit worse by a fellow student with whom I spent a fair bit of time being the type who'd just try to communicate with whatever little language knowledge and/or competency he actually had.

The third category was "Self-teacher", where the teacher was mentioned as a direct source of enjoyment or anxiety. This category had 118 tokens for FLE experiences and 213 tokens for FLCA experiences. Participant 364 (male, aged 20, studying in Lithuania, Polish L1a, Lithuanian L1b, English L3, Russian L4, Spanish L5) remembers the pride and joy at receiving praise from his FL teacher:

> FLE: The teacher once mentioned that our group is very passive and has no scientific curiosity. It felt quite bad but then she mentioned me and said: "'You are a role model in this group. I like the way you are constantly interested in things and you do your best to improve'". It was special.

Participant 404 (female, aged 20, studying in Bosnia, Serbian L1a, Bosnian L1b, English L2, Turkish L3, Arabic L4) complained about her teacher making her both anxious and angry with a comment unrelated to the FL:

> FLCA: When we had an oral exam from Modern English, I got really nervous, I was anxious, I was scared, and because I was last, they asked me the toughest questions, and the attention was on me. My professor gave a bad comment about my attitude towards my religion, and I blushed and I got really mad because of that.

The fourth and final category related to feelings emerging from interaction with both teacher and peers in the FL classroom: "Self-teacher-peers". This category contained 92 tokens linked to FLE experiences and 111 tokens linked to FLCA experiences. Participant 618 (female, aged 22, studying in Scotland, English L1a, French L1b, Spanish L2, Russian L3) reported

enjoying the classroom atmosphere at the end of the week:

> FLE: Generally enjoy when there's a good, light-hearted atmosphere at the end of the week and people really open up. Also when I've done the material/homework, particularly vocab, and know what's going on in class very clearly. Our lecturer's quite funny too.

Participant 146 (female, aged 21, studying in Belgium, Dutch L1, English L2, French L3) was slightly unusual in mentioning anxiety in her most enjoyable FL class experience:

> FLCA: I love doing presentations, but only when I've had enough time to prepare and structure them. I'm nervous in front of a class room full of people, so I need a structure to stick to, otherwise, my thoughts and arguments are all over the place.

Participant 680 (female, aged 25, studying in the USA, English L1, Russian L2) reported the anxiety of having to speak in front of everyone:

> FLCA: We had to get up in front of the class and do a short skit in Russian. I was not very comfortable with getting in front of classes that time and speaking in English, let alone speaking in Russian. It was awful! My partner and I mumbled over our words. Both of us did not want to be up there, so we said everything as quickly as we could and were trying to sit back down. But we said something wrong and had to stay up there and fix it in front of the class! It was super embarrassing and I hated every moment of it.

Participant 702 (male, aged 27, studying in the USA, English L1, Romanian L2, Russian L3) pointed out that after a spike of anxiety during a public presentation, and after having been corrected (presumably by the teacher), he felt not only relieved but also more confident.

> FLCA: We have an oral presentation that we're supposed to give twice a semester. I prepared a lot. I was very nervous about my grammar because when I speak I seem to forget basic case endings. And also when I recite poetry (which was supposed to be part of the presentation) I'll forget the words even if I know the poem very well. I was kind of shaky and nervous. I definitely made some mistakes. Common ones were pointed out to me. When I was done I felt relieved and amped from the adrenaline. But I also felt more confident.

A Pearson Chi-square analysis revealed that the frequency of the above categories is significantly different for FLCA and FLE ($Chi^2 = 464$, $df = 16$, $p < .0001$). The category "Self-peer" occurred around 10% of the time in reference to both FLCA and FLE. The category "Self-teacher-peer" appears slightly more frequently for FLCA (25%) than for FLE (20%). The category "Self" showed a larger difference between the two emotions, it occurred more often in comments about FLCA (38%) than about FLE (23%). However, the biggest difference between FLE and FLCA emerged for the category "Self-teacher" which occurred in almost half (46%) of the FLE comments compared to only 27% of the comments on FLCA (see Figure 3).
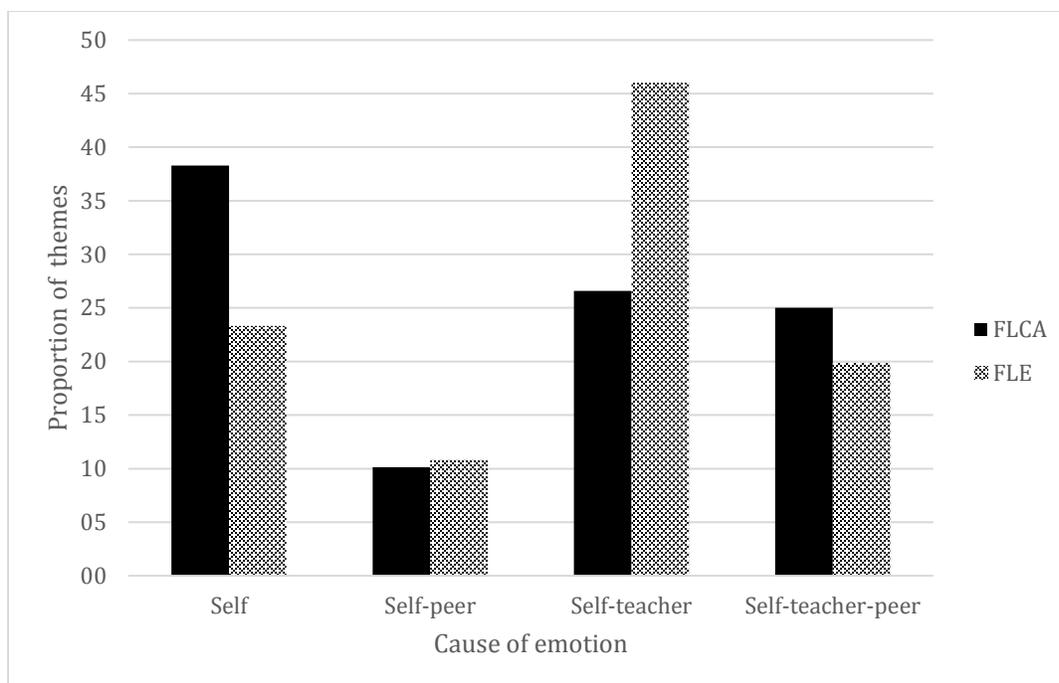
Figure 3. Proportion of categories in feedback about experiences of FLE and FLCA in class

DISCUSSION

The finding of a significant, but modest negative correlation between FLE and FLCA confirms earlier research (Dewaele & MacIntyre, 2014; Dewaele et al., 2016, Dewaele & Alfwazan, 2018). The two emotions are fairly independent, with a limited amount of shared variance, although there is some tendency for learners who experience more FLE to suffer less FLCA. On the one hand, the trends in the data suggest that enjoyment rises and anxiety falls with greater experience and mastery of the language. Perhaps this is not surprising especially for enjoyment as gains in proficiency enable more complex and satisfying interactions with speakers of the language. Previous research showed that as learners develop their mastery of the FL, their FLCA drops while their FLE blooms (Dewaele & MacIntyre, 2014). It is impossible from the present data to know whether this development is the result of a weakening of anxiety or a strengthening of enjoyment over time, or a combination of both. If we examine the possible patterns of scores that might produce a low correlation, we would expect to find all possible combinations of high, medium and low scores for FLE paired up with high, medium and low FLA scores. Pairing high FLE and low FLA is an expected pattern during enjoyable episodes, and the reverse pattern (high FLA and low FLE) certainly can be understood during anxiety-prone activities. However, data from other studies (e.g., Dewaele & MacIntyre, 2016), as well as the qualitative data in the present research, show that high FLE and FLA can both be present within a learner, at least for a limited amount of time (Boudreau et al., 2018). Apathy, de-motivation, or a lack of emotional investment in language learning likely would produce low scores on both FLE and FLA. Thus, we see potential for all possible patterns for pairs of scores on these two emotions. Together, these patterns help to explain the modest correlation between FLE and FLCA observed in the data set, and why the correlation is not especially strong.

The finding that gender had an effect on FLCA but not on FLE partially confirms earlier research where gender was found to have an effect on both (Dewaele & MacIntyre, 2014; Dewaele et al., 2016). It is not clear why our female participants did not experience more FLE than the male participants, and non-significant findings are difficult to explain in any event. The

data do support the conclusion that females tend to report significantly higher levels of FLA. Further research is required to clarify the influence of gender on FLE.

The continent where participants were studying had a significant but small effect on levels of FLE, but not on FLCA. Given the small effect size and the large differences in group size, we avoid over-interpreting this finding. We can note that Dewaele and MacIntyre (2014) also found that North American learners in the US seemed to enjoy their FL classes more than their peers in Asia, which the authors linked to differences in teaching methods, expectations of teachers and learners, and the ways in which language examinations are used in teaching.

The multiple regression analyses allowed us to identify the best predictors of FLE and FLCA. One striking finding is that different independent variables emerge as predictors of FLE and FLCA, which is further evidence that these two dimensions are not mirror images of each other. For FLCA, Emotional Stability turned out to be the strongest predictor with a smaller contribution from Social Initiative. In personality theory, Emotional Stability is the opposite of anxious Neuroticism, and Social Initiative is a defining feature of Extraversion. These results for FLCA confirm earlier research that found that high levels of Neuroticism, and to a lesser extent Introversion-Extraversion, were linked to higher levels of FLCA (Dewaele, 2013; Dewaele & Al-Saraj, 2015). For FLE, Cultural Empathy was the strongest psychological predictor, again with a smaller contribution from Social Initiative. The finding for Social Initiative is consistent with literature showing that extraverts tend to be happier than introverts (Lucas, Diener, Grob, Suh, & Shao, 2000). However, the prediction offered by Cultural Empathy is novel.

Considering both FLE and FLCA together, the finding that personality traits predict over 30% of the variance in FLCA but only 10% in FLE may be quite noteworthy. The relatively lower contribution of personality traits on FLE has not been reported previously, but fits with previous studies that showed that FLE seems to be much more dependent on the teacher than FLCA (Dewaele & Dewaele, 2017; Dewaele et al., 2017). It is thus not surprising that more than a quarter of the variance in FLE was predicted by teacher-related variables with only 4.5% of variance predicted by learner-centered variables. By comparison, if we add the 10% of variance in FLE explained by personality traits to the 4.5% prediction attributed to learner-internal variables, their combined contribution to the variance still falls well short of the teacher effect. One social dimension, relative standing in the group, did predict some variance in both FLCA and FLE but it explained no more than 1% of variance. In other words, feeling that one is not the "weakest" member of the group lowers anxiety and boosts enjoyment, but only to a very modest degree.

The identification of the strongest predictors of FLE and FLCA was supported in qualitative analysis of the feedback from participants describing enjoyable and anxiety-provoking FL experiences. The distribution of categories was significantly different for FLE and FLCA. The teacher was mentioned as cause of the FLE experience in almost half of the cases compared to only a quarter who mentioned the teacher as cause of a FLCA experience. In contrast, the "self" category was used more often to describe FLCA, appearing in 38% of cases for FLCA compared to only 23% for FLE. This strengthens the view that FLCA is more likely to originate relatively independently of the context while FLE is more context dependent, as when the participants are in harmony with teacher and peers.

CONCLUSION

The present study confirmed that FLE and FLCA are relatively separate dimensions, not just because of a modest negative correlation but because multiple regression analyses revealed that they are predicted by different independent variables. Both the statistical and the qualitative

analyses showed that learners' FLE depended mostly on their teacher and to a lesser extent on their level of Cultural Empathy. In contrast, FLCA was mostly predicted by the personality trait Emotional Stability and the participant's relative standing among the peers. The social context with teacher and peers affect participants' emotions in unique ways. Overall, social context seems to have a stronger effect on FLE, as positive classroom environments can boost a sense of community, of common purpose and of flow. The same social context can occasionally become a source of acute anxiety when participants feel their performance was judged negatively by teacher and peers. Some participants reported sharp fluctuations in FLE and FLCA. The main pedagogical implication is that teachers might be better placed to boost learners' FLE rather than trying to reduce their FLCA because anxiety seems to be a mainly learner-internal factor while FLE seems susceptible to environmental factors.

RESEARCH AND PEDAGOGICAL PROPOSALS

- The teacher as an orchestra conductor

We suggest that good teachers can be more effective in stimulating the FLE of learners than in lowering their FLCA. A good teacher in this context means somebody who can create a positive climate in the classroom, where learners are gently encouraged to participate, play, and experiment with the FL with little fear of stinging ridicule (Dewaele et al., 2016, 2017; Gregersen & MacIntyre, 2014). Several participants did point out that harsh correction or mockery by the teacher in front of peers boosted their FLCA and silenced them, lowering both their self-confidence and self-esteem (see Oxford, 2016). Encouragement by teacher and peers, typically during a challenging task such as public presentation, helped participants deal with their anxiety.

- Anxiety is not intrinsically bad (as long as the environment remains positive)

For some participants, the experience of anxiety in front of the class was gripping but also transitory, with relief of having gone through the experience had actually boosted his longer-term confidence. We also found further evidence that participants can experience both anxiety and enjoyment simultaneously in public speaking, which confirms earlier findings on the dynamic characters of FLE and FLCA, sometimes the emotions are converging, sometimes diverging (Boudreau et al., 2018; Dewaele, 2017).

- What can teachers do to boost FLE?

Further research could include intervention studies to investigate what actions of teachers (Oxford, 2016) during a single class are linked to spikes in FLE and/or FLCA. Another intriguing but ethically challenging question is to know to what extent levels FLE and FLCA vary according to the uniqueness of individual teachers. This would require a design where learners are taught the same language, using the same method and following the same curriculum, by two teachers. Would learners' levels of FLE and FLCA be identical in the classes of both teachers, and what reasons might there be for differences? Could teachers adapt their classroom behavior in order to boost their learners' FLE? This might be particularly relevant in teacher training courses.

REFERENCES

Boudreau, C., MacIntyre, P. D., & Dewaele, J.-M. (2018). Enjoyment and anxiety in second language communication: An idiodynamic approach. *Studies in Second Language Learning and Teaching*, *8* (1), 149-170.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Los Angeles, CA: Sage Publications.

De Smet, A., Mettewie, L., Galand, B., Hiligsmann, Ph., & Van Mensel, L. (2018). Classroom anxiety and enjoyment in CLIL and non-CLIL: Does the target language matter? *Studies in Second Language Learning and Teaching, 8* (1), 47-71.

Dewaele, J.-M. (2005). Investigating the psychological and the emotional dimensions in instructed language learning: Obstacles and possibilities. *The Modern Language Journal, 89*, 367-380.

Dewaele, J.-M. (2013). Learner internal psychological factors. In J. Herschensohn & M. Young-Scholten (Eds.), *The Cambridge handbook of second language acquisition* (pp. 159-179). Cambridge: Cambridge University Press.

Dewaele, J.-M. (2015). On emotions in foreign language learning and use. *The Language Teacher, 39*, 13-15.

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., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching, 8* (1), 21-45.

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*, 205-230.

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.

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.

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. MacIntyre, T. Gregersen & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215-236). Bristol: Multilingual Matters.

Dewaele, J.-M., MacIntyre, P., 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*, 41–63.

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. (2013). Positive Emotions Broaden and Build. In P. Devine & A. Plant (Eds.), *Advances in Experimental Social Psychology* (pp. 1-53). Burlington: Academic Press.

Galmiche, D. (2017). Shame and SLA. *Apples – Journal of Applied Language Studies, 11*, 25–53.

Gkonou, C., Daubney, M., & Dewaele, J.-M. (Eds.). (2017). *New insights into language anxiety: Theory, research and educational implications*. Bristol: Multilingual Matters.

Gregersen, T., & MacIntyre, P. D. (2014). C*apitalizing on individual differences: From premise to practice.* Bristol: Multilingual Matters.

Horwitz, E. K. (2010). Foreign and second language anxiety. *Language Teaching*, *43*, 154-167.

Horwitz, E. K. (2016). Factor structure of the foreign language classroom anxiety scale. Comment on Park (2014). *Psychological Reports, 119*, 71-76.

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.

Jin, Y. X., de Bot, K., & Keijzer, M. (2015). Factors associated with foreign language anxiety: A study of Chinese university learners of Japanese and English. *Dutch Journal of Applied Linguistics*, *4*, 67-85.

Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2004). *Applied linear regression models* (4th ed.). Boston: McGraw-Hill Irwin.

Lucas, R. E., Diener, E., Grob, A., Suh, E. M., & Shao, L. (2000). Cross-cultural evidence for the fundamental features of extraversion. *Journal of Personality and Social Psychology, 79*(3), 452-468.

MacIntyre, P. D. (2002). Motivation, anxiety and emotion in second language acquisition. In P. Robinson (Ed.), *Individual Differences and Instructed Language Learning* (pp. 45-68). Amsterdam: John Benjamins.

MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *Modern Language Journal*, *91*, 564-576.

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., & 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.

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.), *Psychology for language learning: Insights from research, theory & Practice* (pp. 103–118). Basingstoke: Palgrave Macmillan.

MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, *4*, 153-172.

Oxford, R. L. (2016). Toward a psychology of well-being for language learners: The 'EMPATHICS' vision. In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 10-87). Bristol: Multilingual Matters.

Palacios, L. M. (1998). *Foreign language anxiety and classroom environment: A study of Spanish university students* (Unpublished doctoral dissertation). University of Texas, USA.

Pavelescu, L. & 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.

Piechurska-Kuciel, E. (2011). Perceived teacher support and language anxiety in Polish secondary school EFL learners. *Studies in Second Language Learning and Teaching, 1*, 83-100.

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.

van der Zee K. I., van Oudenhoven J. P., Ponterotto J. G. & Fietzer A. W. (2013). Multicultural personality questionnaire: Development of a short form. *Journal of Personality Assessment 95*, 118-124.

FOOTNOTES

[1] Ten participants did not disclose their gender.

Table 1.
Independent variables correlations with, and regressions predicting, FLE and FLCA.

Variable	r with FLCA	r with FLE	Beta FLCA	Beta FLE
Age	-.089*	.073*		
Number of languages	-.194**	.039	-.13	
Attitude towards FL	-.189**	.338**		.10
FL test result	-.183**	.266**		.11
Attitude FL teacher	-.196**	.478**	-.07	.30
Strictness of teacher	.066	-.140**		
Friendliness teacher	-.098**	.337**		.14
Teacher FL use	-.018	.155**		
Teacher's predictability	-.008	-.03		
Teacher's joking	-.111**	.334**		.10
Relative Standing	-.391**	.244**	-.23	.08
FL level	-.262**	.119**	-.10	
Frequency of Use out of school	-.257**	.188**		
Frequency of Reading out of school	-.144**	.127**		
Cultural Empathy	-.086*	.344**		.20
Flexibility	-.167**	-.059		
Social Initiative	-.407**	.311**	-.14	-.09
Openmindedness	-.287**	.316**		
Emotional Stability	-.528**	.190**	-.42	

* $p < .05$, ** $p < .01$ (2-tailed)

Table 2. Inter-correlations between the predictor variables.

	NrLs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1) AttituFL	.02															
2) Testresult	.05	.24*														
3) Attituteach	.01	.39*	.18*													
4) Strict	-.01	.02	-.06	-.11*												
5) Friendly	.00	.08*	.06	.35*	-.32*											
6) FLuse	-.10*	.10*	-.02	.09*	.08*	.02										
7) Joking	-.04	.09*	.12*	.32*	-.17*	.43*	.12*									
8) RelStand	.09*	.25*	.40*	.15*	.00	.01	.01	.10*								
9) FLlevel	-.01	.26*	.14*	.11*	.13*	-.02	.25*	.11*	.31*							
10) FreqUse	.09*	.20*	.08*	.13*	.06	.01	.16*	.09*	.26*	.49*						
11) FreqRead	.02	.23*	.14*	.12*	.13*	.03	.18*	.11 *	.26*	.50*	.48*					
12) CE	.04	.23*	.16*	.14*	-.06	.10*	.08*	.11*	.13*	.13*	.08*	.00				
13) FL	.16*	-.06	-.03	-.01	-.01	.03	-.05	.04	-.02	-.02	.00	.01	-.14*			
14) SI	.14*	.19*	.14*	.18*	-.07*	.10*	.08*	.13*	.23*	.14*	.17*	.05	.30*	.07		
15) OP	.18*	.22*	.21*	.17*	-.02	.05	-.05	.09*	.25*	.16*	.20*	.09*	.51*	-.03	.54*	
16) ES	.06	.10*	.10*	.14*	-.01	.06	.01	.03	.19*	.14*	.13*	.04	.05	.25*	.37*	.25*

$* p < .05$

APPENDIX

Variable		*n*
Institution	University	688
	High school	57
Number of languages	2	161
	3	168
	4	152
	5	99
	6	40
	7+	30
Geographic area of study	Europe	454
	North America	131
	Asia	70
	Africa	53
	Australia	29
	South America	13
Nationality	American	128
	Belgian	86
	Spaniard	85
	Japanese	49
	British	47
	Austrian	36
	Turkish	36
	French	34
	Algerian	34
	Australian	31
	Other	184
First language	English	88
	German	61
	Arabic	53
	French	53
	Japanese	46
	Other (48 languages)	449
Level of FL	Beginner	104
	Low intermediate	102
	Intermediate	234
	High intermediate	185
	Advanced	122
Relative standing in FL class	Far below average	2
	Below average	47
	Average	323
	Above average	317
	Far above average	55

Biographical note

Jean-Marc Dewaele is Professor of Applied Linguistics and Multilingualism. He is author of *Emotions in Multiple Languages* and co-editor of *New Insights into Language Anxiety: Theory, Research and Educational Implications* with Christine Gkonou and Mark Daubney. He is President of the *International Association of Multilingualism* and former president of the *European Second Language Association*. He received the *Robert Gardner Award for Excellence in Second Language and Bilingualism Research* (2016).

Peter D. MacIntyre is Professor of Psychology. He has published numerous articles on motivation and emotion, and co-authored *Capitalizing on Language Learners' Individuality* (with Tammy Gregersen), *Motivational Dynamics in Language Learning* (with Zoltán Dörnyei and Alastair Henry), and *Positive Psychology in SLA* (with Tammy Gregersen and Sarah Mercer).