The Telecollaborative Foreign Language Anxiety Scale: detecting students' affective barriers in Virtual Exchanges

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Abstract

Globalisation and mobility have created new cultural, social and working scenarios which demand wider academic and professional skills. Taking advantage of the synergy of technology and pedagogy, Virtual Exchanges (VEs) provide learners with an adequate context for real-world intercultural learning. In VEs mediated by videoconference, students interact synchronously, close to face-to-face experiences, boosting communicative, interpersonal and intercultural skills development. However, foreign language and intercultural communication can also turn into negative forces for some learners and become a source of discomfort. In this regard, Foreign Language Anxiety (FLA), has been one of the most studied and damaging emotions in multilingual and multicultural contexts. This dysphoric anxiety is suffered by at least two-thirds of foreign language learners and users (Horwitz, Horwitz and Cope, 1986; Trang, Baldauf and Moni, 2013). However, there was no available tool to detect the sources and explore the effects of FLA in VE interactions. As a result, the Telecollaborative Foreign Language Anxiety scale, the T-FLAS - A 21-item questionnaire - was developed and validated, showing a high internal consistency (Cronbach’s alpha of 0.96). In this article, the foundation, development and validation of the T-FLAS is explained, as well as the results obtained with the tool in three subsequent VE projects. The aim is to share with researchers and practitioners the first insights on FLA in VE settings using the scale.

Keywords: Virtual Exchange, Intercultural Communication, Foreign Language Anxiety, Anxiety Measurement Tool

Introduction

Virtual exchanges (VEs): between learning and social interaction

VEs allow authentic intercultural experiences for students who do not have the opportunity of travelling (O'Dowd, 2016) and promotes 21st-century or transversal skills development (Jager, Kuker & O'Rourke, 2016). Among the different types of VEs the ones based on synchronous communication are especially beneficial. Online video and audio conferencing tools increase students' contact with diverse learners to enhance Foreign Language (FL) skills beyond cultural and geographical boundaries,
offering the learner an experience close to face-to-face communication (Satar, 2016). Moreover, recent studies have investigated the benefits of the webcam in videoconferencing environments and the use of image supporting non-verbal communication such as body language or facial expression that may contribute to more active communication and better mutual understanding (Cohen & Wigham, 2019). However, little attention has been given to the emotional dimension in these interactional settings.

What is FLA?

Foreign Language Anxiety, a term coined by Horwitz, Horwitz, and Cope in 1986, is a dysphoric and situational anxiety with inhibiting and debilitating effects on the learners. FLA is very significant because of its potential negative impact at a cognitive, social, and personal level (Tallon, 2006). For instance, subjects suffering from FLA show communication avoidance, problems with performance, achievement and learning, and high levels of self-consciousness (Luo, 2014).

Factors provoking FLA are many and stem from different sources, but predominantly from the difficulty of students presenting themselves and establishing authentic social interaction in the FL. As Horwitz, Horwitz, and Cope (1991) state, "probably no other field of study implicates self-concept and self-expression to the degree that language study does" (p. 31).

FLA is context-dependent (Kim, 2010), and it might vary in different cultural groups or instructional contexts (Kunt, 1997; Moor, 2007). Indeed, FLA can also be technology-dependent when online communication tools and their affordances shape the interaction. In this regard, McNeil’s (2014) study explored the anxiety created by oral asynchronous computer-mediated communication and found that the fact of communicating asynchronously does not eliminate FLA, highlighting the importance of including learners' abilities, the environment and tasks in the study of FLA. On the other hand, Di Gennaro and Di Villarroel's (2019) learners in their telecollaboration project felt concerned in relation to the "psychological compulsion created by the immediacy of the synchronous video communication" (p. 171).

Methods

Design and Validation of the T-FLAS

The T-FLAS is a 21-item scale with a one to five Likert scale developed in English and Spanish. The questionnaire addresses problems with technology (7 items) and FLA (14 items) in VE contexts. The 14 items about FLA are based on the original Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986) and its version by Al-Saraj (2014), which highlights social aspects of the FLA. In the adaptation made for the T-FLAS, some items were discharged because they were not relevant for the VE
context as they refer to in-class contexts. The decision to reduce the number of items also aimed to avoid a lengthy questionnaire what can result in missing data lower response rates and random answer associated with subject's fatigue or boredom" (Maloney, Grawitch, & Barber, 2011, p. 162).

The first pilot study delivered the questionnaire online as a Google Form sent by email to a total sample of 243 people among personal and professional contacts of the researchers. The response was 36 out to 243, a 14% response rate. For the second piloting round (Fondo & Erdoccia, 2018), the questionnaire items were revised by a group of eight experts to refine the items' wording and adequacy. As a result, three items were added regarding online interaction and the partner's proficiency effect (see items 6, 12, and 16 in the appendix).

In this study, the T-FLAS was administered online as part of the project evaluation questionnaire after all the students had completed their participation in the VE projects. Students used a participant code to anonymise their data during the data gathering process.

The context

The final version of the T-FLAS was implemented in 2018 for its validation in a nine-week VE project for one-to-one interaction using Zoom. All the students participated in the project on a voluntary basis but were rewarded with 10% of the final grade.

Project 1 was a one-to-one bilingual exchange project (English/Spanish) for international management students within the business degree at Universitat Oberta de Catalunya (UOC) in (Spain). The English speakers were undergraduate students studying Spanish for professional purposes at the University of Minnesota (UMN), University of Maryland (UMBC) and the University of Limerick (UL). Due to the unbalanced number of Spanish speakers versus English speakers, undergraduate students at Benemérita Universidad Autónoma de Puebla (BUAP) in Mexico joined the project. Students in BUAP, UMN, UMBC, and UL were 19 to 21 years old with an intermediate (B1/B2 CEFR) level of English/Spanish, whereas at UOC the students had 25 to 50 age range and an upper-intermediate/advanced (B2/C1 CEFR) level of English.

Project 2 and 3 correspond to subsequent editions of the project (2019 and 2020). In these editions students could choose the videoconferencing tools and the number of online meetings was reduced to 4. The participation in the project was 15% of the final grade. UOC students had the opportunity to interact with students from Poland, the Czech Republic and the US in either bi-lingual and English as lingua franca interactions.
Results

FLA dimensions and sample clustering

The final version of the T-FLAS with 21-item obtained positive internal consistency reliability with a 0.96 Cronbach’s alpha coefficient. In order to explore the principal components of the T-FLAS a factor analysis followed by a clustering of the sample was carried out. The data gathered in project 1 was used for this purpose. The principal component analysis resulted in four components: Communicative Apprehension, Anxiety in the learning processes and situations, Online Interaction anxiety, and Technophobia. From those dimensions, the clustering process resulted in four learners' profiles Apprehensive communicators (17%), Technophobes (28%), Confident communicators and learners (28%), and Anxious learners (26%). For further information about the dimensions, clustering, and a comparative example of previous studies and their resulting dimensions, see (Fondo & Jacobetty, 2020).

Students levels of T-FLAS

In order to explore FLA in a VE setting, the data gathered in the 3 editions of the project (2018, 2019 and 2020) was analysed. Students’ means of FLA were grouped by Spanish, English and non-native speakers and analysed separately, obtaining the general means by group and by group/item. From the analysis, results showed higher levels of anxiety for English and non-native speakers (between 2.5 and 2.7). Among all the groups, the higher levels of FLA was reported by Czech students (B1-B2 CEFR) who enrolled in a monolingual project (English as a lingua project). The means of the Spanish speakers were significantly lower, and only mild levels of anxiety were reported in items 13 and 14 (see appendix) related to grammar and pronunciation. The analysis by items indicated higher levels of anxiety in Items 8, 9 and 21 (see appendix), in all the groups from the three editions, all related to difficulties in expressing oneself in the foreign language.

Discussion

Results in the first implementation of the scale seem to show that the main problems stemmed from the anxiety related to self-consciousness when communicating in and using the FL. Although technophobia does not appear as a relevant barrier for learners, all the studies showed that experiencing technical problems is a source of anxiety for students. Indeed these levels were lower in subsequent editions in which students were free to choose the videoconferencing tool. It should be noted that only 28% of students in the study belonged to the group of confident communicators and learners, highlighting the importance of deepening into FLA in VE environments.
The fact that Czech students showed the highest levels of FLA points to the difficulties to express oneself in a foreign language when partners do not know each other's mother tongue as a source of FLA. This result is supported by the aforementioned T-FLAS items with higher levels of anxiety. However, despite the different levels of FLA among students, all reported a similar level of enjoyment regarding social interaction (between 4.3 and 4.8 on a 1 to 5 Likert scale) what directly supports the claim by Dewaele and Macintyre (2014) regarding the negative correlation between FLA and enjoyment. Hence, social aspects of VEs could be students' antidote to overcome anxiety.

Conclusions

The study has shown that the T-FLAS is a reliable measuring tool. However, the specificity of the tool also presents a limitation as it cannot be administered if the subjects have not been involved in a VE before. It should be taken into account that special care was put into students' wellbeing during the projects. This caring environment could have contributed to lower levels of T-FLAS as most of the students did not have any negative experience. Future studies with larger samples will help to shed light on different factors increasing/decreasing anxiety levels in VEs. Exploring the effect of different VE typologies, tasks and students' profiles could be of much help for practitioners and researchers to optimise VE designs.

References


THE TELECOLLABORATIVE FOREIGN LANGUAGE ANXIETY SCALE: DETECTING STUDENTS’ AFFECTIVE BARRIERS IN VIRTUAL EXCHANGES


Appendix

The T-FLAS

[1] "I don't like using technological devices"
[2] "I feel uncomfortable learning online"
[3] "I don't like to talk online to new people"
[4] "I feel uncomfortable in video conferences"
[5] "I get very nervous when I have problems with technology during video conferences"
[6] "I feel uncomfortable interacting online"
[7] "I don't enjoy talking about my private life online"
[8] "During e-tandem language exchange I feel nervous when I can't express myself in the foreign language"
[9] "I am nervous speaking the foreign language in front of native speakers during e-tandem practice"
[10] "I feel uncomfortable in speaking a foreign language with my e-tandem partner"
[11] "I feel nervous when talking in the foreign language to someone I just met for e-tandem practice"
[12] "I feel nervous talking to an e-tandem partner who has a lower level of proficiency in the foreign language than me"
[13] "I feel overwhelmed by the number of grammatical rules I have to learn in the foreign language"
[14] "I fear pronouncing words incorrectly in my e-tandem speaking practice"
[15] "I feel low self-confidence about speaking the foreign language during e-tandem sessions"
[16] "I feel nervous talking to an e-tandem partner who has a higher level of proficiency in the foreign language than me"
[17] "I feel nervous when I am around more experienced foreign language users in e-tandem practices"
[18] "I feel anxious when learning a foreign language"
[19] "In e-tandem language practice I can get so nervous I forget things I know"
[20] "I feel anxious when I don't understand what my e-tandem partner is saying in the foreign language"
[21] "I feel anxious when I want to say something but can't find the proper words to say it in the foreign language during the e-tandem speaking practice"

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