



Foreign Language Anxiety in e-Tandem Learners: An Idiodynamic Case Study

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Abstract

E-tandem is a foreign language (FL) learning practice with a vast potential to foster FL learners' speaking skills. However, while participating in an e-tandem session, some learners may experience foreign language anxiety (FLA), a negative emotional reaction often related to the oral practice in a FL. Due to its changing nature, the fluctuations of this variable are better understood if studied from a dynamic perspective [1], which, to our knowledge, has never been applied before in the context of e-tandem. In this study we use the idiodynamic method [2] to analyze the fluctuations of FLA in e-tandem learners. The research is conducted with one case study participant, a female student of English as a FL (EFL) who participated in a Skype-based e-tandem session with a native speaker of English. Immediately after the e-tandem session, the case study participant rated, moment-by-moment, the FLA she felt during the activity as she watched its video recording. Finally, a stimulated recall interview was carried out in order to discuss the fluctuations in her FLA. Results show that this method allows us to study, in depth, the dynamics of e-tandem learners' FLA.

Keywords: *e-tandem, foreign language anxiety, foreign language learning, idiodynamic;*

Introduction

When taking part of a communicative event in a FL, even the calmest student can feel nervous and vice versa [3]. In fact, FLA is a dynamic, in-the-moment experience of anxiety (state), which tends to change over time. In this study, we want to assess the changes of this variable in e-tandem learners. For this reason, our study will adopt a dynamic perspective, using a novel research approach: the idiodynamic method.

E-tandem in FL learning

E-tandem is a language learning practice that consists of a mutual exchange between two conversational partners who want to learn each other's native language (NL) and who are physically distant. Through this practice, communication is produced 50% in the NL and 50% in the target language (TL) of each participant.

The research context of this study is a Skype-based task-based e-tandem, where participants interact synchronously via videoconference and fulfill together four language learning short tasks (two in Spanish and two in English).

Foreign Language Anxiety

FLA is described by Horwitz, Horwitz & Cope (1986) [4, p.128] as "a complex of self-perceptions, beliefs, feelings, and behaviours arising from the uniqueness of the language learning process". Literature considers it a debilitating and negative emotion [5], which is related, most of all, to the oral use of a FL [6].

In fact, some scholars suggest that e-tandem learners might tend to feel nervous since speaking interaction in a FL can be anxiety provoking itself [7]. Paradoxically, e-tandem is believed to be, at the same time, an anxiety reducing and confidence-increasing practice over time [8], [9].

Some of the negative reactions unleashed by FLA are, amongst others, interference with learners' communication [10] and a discouraging influence over learners from pursuing their FL studies [11]. These reactions are reflected in some of the problems that e-tandem faces nowadays regarding its long-term sustainability, such as learners' abandonment, lack of engagement with the project and uncomfortable silences between peers' interactions [12], [13].

The idiodynamic method

Over the last decade, there has been a rise in the number of scholars who are conducting their research in FL learning from a complex dynamic systems framework [14], which is based on the idea

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that dynamic systems change over time, are interconnected, self-organize into preferred states or non-preferred states, and are nonlinear [1].

The idiodynamic method is a research approach developed by MacIntyre (2012) [2], which permits to study, from a dynamic perspective, the affective and cognitive states arisen from human communication. The general procedure to carry out this method consists of four steps [15]:

1. A communication activity is recorded on video.
2. After the communication task is done, the participant watches the video and does the moment-by-moment self-ratings of the variable that is being assessed through a specific software. The software produces a graph of the idiodynamic ratings and an Excel sheet.
3. A stimulated recall interview is conducted using the graph, in order to discuss with the participant the reasons of the fluctuations in the self-ratings of the studied variable.
4. The session is transcribed.

The present study

This study presents an embedded case study research [16] design that integrates a qualitative data set into a quantitative one. The research questions are:

RQ1: Which are the patterns of the self-ratings of FLA of our case study participant? Do we observe fluctuations in FLA over time, and is there evidence that this method can be used to report the dynamics of FLA in e-tandem learners?

RQ2: Which are the accounts of our case study participant on the fluctuations of her FLA levels?

Method

Participants

Since this is the first time we apply the idiodynamic method to an e-tandem context, the scope of the study is modest, and only one case study is presented here. The selected case study participant is a 50-year-old female we will call Nieves. She is a PhD student, her mother tongue is Spanish, and her level of English as a foreign language (EFL) is high intermediate.

Nieves' conversational partner is a 25-year-old male teacher we will call Rob. He is a native speaker of English with a high intermediate level of Spanish as a FL. This is the first time they meet each other and participate in an e-tandem exchange.

Instruments and procedure

After having signed a data consent sheet, we proceeded to fulfill the four steps of the idiodynamic method, which were adapted to the e-tandem context:

1. *E-tandem session:* Interaction took place in a *Speakapps* classroom [17], where the two participants could see, synchronously, the four tandem tasks as they were fulfilling the e-tandem session. Tasks were *problem-solving* and *opinion exchange* [18]. Participants were suggested to spend no more than five minutes doing each task. Communication was held by *Skype*.
2. *Video recording:* *Screencast-O-matic*, a screen-recorder.
3. *Idiodynamic ratings:* Immediately after the e-tandem session, the video recording was uploaded to *Anion Variable Tester V2* software. As Nieves watched the video, she self-rated her FLA on a per-second timescale. The software allowed her to range her FLA from -5 to +5 by clicking the computer mouse. If she did not click the mouse, the rating moved automatically to zero within each second.
4. *Accounts on FLA dynamics:* Stimulated recall interview and its transcription.

Results

RQ1

Table 1 presents the quantitative data gathered from our case study participant, Nieves, organized regarding the four tasks of the e-tandem session.



	Duration of the Task (In Seconds)	Mean Dynamic FLA Rating	Ratio of Spikes and Dips	Seconds in High Anxiety Zone (Above 0)	Seconds in Low Anxiety Zone (At 0 or Below)
Task 1 (ENG)	221	0.4	47:37	83	138
Task 2 (ENG)	397	0.04	111:104	54	343
Task 3 (SP)	166	0.3	28:27	3	163
Task 4 (SP)	318	0.1	33:33	3	315

Table 1. Quantitative data of the case study participant.

The third column of the table shows that the mean idiodynamic self-ratings of FLA are quite similar for all the tasks. Also, the data in the fourth column shows that the ratio between spikes and dips is rather stable in all the e-tandem session. This is, indeed, an indicator that the reaction of FLA is dynamic over time [3].

The fifth and the sixth columns present the time spent in the high anxiety zone and in the low anxiety zone respectively. We must highlight the fact that time spent in the high anxiety zone decreases dramatically from tasks 1 and 2 (English tasks) to tasks 3 and 4 (Spanish tasks). If we calculate the proportion of time spent in this zone, it is 22% for the English speaking tasks and 0,1% for the Spanish speaking tasks.

Concerning the dynamics of FLA, by observing the graphic produced by the software we can easily see how, even if this variable remains stable for some seconds, it tends to be in constant change.

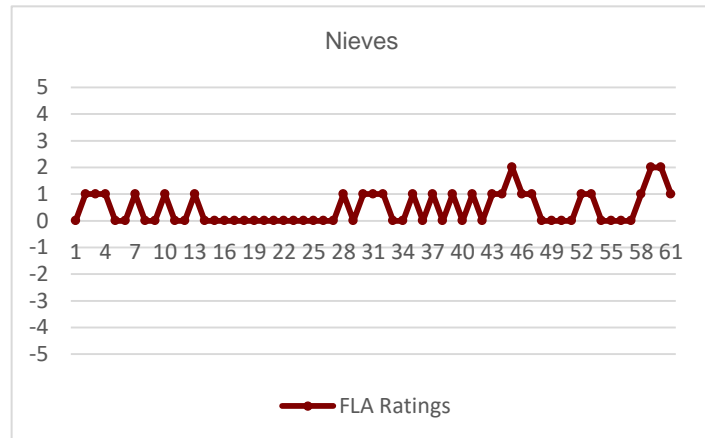


Figure 1. Self-ratings of FLA of our case study participant during the first minute of the e-tandem session (Task 1).

RQ2

The interview with our case study participant allowed us to interpret the set of quantitative data obtained in the previous steps. The following table presents a summary of the causes of the spikes and dips in her self-ratings of FLA.

Spikes	Dips
<ul style="list-style-type: none"> • Use of the FL • Fear of communication misunderstandings in English or Spanish • Uncertainty related to the newness of the activity • Use of technology • Turn-taking • Task complexity 	<ul style="list-style-type: none"> • Absence of communication misunderstandings in English or Spanish • Fluency of the conversation • Personal interest in the topic of the task • Perceived partner's interest in the topic of the task

Table 2. Causes of the spikes and dips in the case study participants' self-ratings of FLA.

Some of the causes of the spikes and dips in Nieves' FLA were only present at certain moments of the e-tandem session. For instance, the source of anxiety 'Uncertainty related to the newness of the

activity' faded away after the first task. Other sources of anxiety, such as the 'Use of technology' and 'Turn-taking', disappeared in the last two tasks of the e-tandem session.

Also, some causes which were related directly to the task, such as 'Personal interest in the topic of the task', 'Task complexity' or 'Use of the FL', were only present in certain tasks.

Only one source of anxiety, 'Fear of communication misunderstandings in English or Spanish' and one source of emotional stability, 'Absence of communication misunderstandings in English or Spanish', were present in all the tasks of the e-tandem session.

Finally, it is worth mentioning that some of the spikes or dips were caused by the presence of more than one source at a time. For example, in task 3, where participants discussed about Frida Khalo's paintings, Nieves referred to the cause(s) of a series of continuous dips like this: "The topic was nice and interesting, and it looks like he [Rob] was interested in it as well. I could follow like in a fluent conversation despite the task and that made me feel relaxed. At the end, we were at ease".

Conclusion

The results obtained in this study reflect the value of the idiodynamic method to analyze dynamic variables in e-tandem contexts. In fact, this method allows us to understand, in depth, how and why e-tandem learners experience FLA while participating in this type of computer-assisted language learning (CALL) exchange.

Despite the fact that this methodology provides us with a wide range of information, it is difficult to make generalizations from it. In fact, each communication event is unique and each individual is different. Nevertheless, we believe that conducting more research on FLA from a dynamic perspective in e-tandem contexts is necessary, since it conforms a research topic which, until now, has been very little researched.

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