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Potential sources of foreign language learning boredom: A Q methodology study

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Abstract

The present study employed an interpretive approach to investigate individual learners' viewpoints on foreign language learning boredom (FLLB). To this aim,

a Q method, which shares features of both qualitative and quantitative research approaches, was used to explore 37 Iranian English as a foreign language (EFL) learners' perceptions of potential sources of boredom in the classroom. Nonprobability purposeful sampling was used to select participants from two private language institutes in Mashhad, Iran. A hybrid-type Q sampling was employed to produce 40 statements related to the sources of FLLB. Using PQ Method, an exclusive statistical package for Q methodology, the Q sorts were intercorrelated and factor-analyzed. Three factors were extracted and rotated using varimax rotation and hand adjustment. Factor arrays and qualitative analyses were utilized to find and interpret three different accounts of FLLB. The three factors showed that the students held three divergent prototypical points of view about the sources of boredom experienced in EFL learning in class: (a) teacher-induced boredom, (b) student-induced boredom, and (c) activity-induced boredom. The findings also showed that different learner prototypes experience FLLB distinctly. Thus teachers should consider using different strategies to prevent or reduce this negative emotion in the context of L2 learning since otherwise this process could be impeded.

Keywords: foreign language learning boredom (FLLB); Q methodology; teacher-induced boredom; student-induced boredom; activity-induced boredom

1. Introduction

Boredom is known as an unpleasant and distressing experience that adversely affects the quality of an individual's work (Thackray, 1981). Teachers mostly view student boredom as a regular, commonplace event that is not worthy of attention or they simply attribute it to laziness, depression, anxiety or personality factors (Macklem, 2015). In practice, teachers neglect boredom and dislike talking about it with learners, which has made this emotion a formidable obstacle in the learning environment (Suárez-Orozco & Suárez-Orozco, 2013; Weinerman & Kenner, 2016). More specifically, boredom refers to a negative emotion characterized by disengagement, dissatisfaction, distraction, change of time perception and lower vitality (Fahlman, 2009) and it has been reported as one of the most commonly occurring emotions in educational contexts (Goetz & Hall, 2014). However, thus far this aversive emotion has attracted conspicuously less empirical attention than other emotional conditions including anxiety, joy or interest (Goldberg et al., 2011; Pekrun et al., 2010), particularly in second or foreign language (L2) acquisition (cf. Chapman 2013; Kruk & Zawodniak, 2017, Pawlak et al., 2020c).

Thus, the present research used Q methodology to reveal foreign language learners' emic perspectives regarding sources of their boredom in the classroom. It sought to categorize situations that may cause boredom as well as

to determine which situations represent the strongest antecedents of boredom in language learning. This study offers insights into different reactions to events peculiar to the classroom context. In addition, by employing Q methodology, it expands the methodological instruments commonly employed in research on foreign language learning boredom (FLLB). Although this methodology has been formerly employed in the domain of second language acquisition (SLA) (e.g., Fraschini & Park, 2021; Irie & Ryan, 2014; Irie et al., 2018; Jodaei et al., 2021), its potential remains unexplored, and it has not yet been used to explore boredom in L2 learning (Fraschini & Park, 2021). The results can provide an important point of reference for the management of negative emotions in L2 instruction.

2. Literature review

Recently SLA researchers have oriented themselves towards a more situated, context-dependent perception of individual difference (ID) variables (cf. Dörnyei & Ryan, 2015; Dörnyei et al., 2015; Gkonou et al., 2017; Pawlak, 2020). This context-specific view maintains that IDs are experienced by an individual learner in the immediate setting (Toth, 2010), and emphasizes the situated nature of L2 learners' emotions such as boredom. Influenced by this approach to emotions in learning, the main focus of this study is on a situated, context-specific view of FLLB. It addresses boredom that learners experience in specific L2 learning situations, which can be influenced by subjective and environmental factors. Before reviewing the existing literature on FLLB, it is warranted to overview the theoretical foundations of boredom.

2.1. Theoretical foundations of boredom

Several theoretical explanations of boredom have been proposed in educational psychology. One of them is the *forced-effort model* (Hill & Perkins, 1985), where boredom is described as resulting from imposing on students tasks which require much cognitive effort, although they view these tasks as dull and uninteresting. In the *under-stimulation model* (Larson & Richards, 1991), boredom results from the lack of stimulating motives to learn, which discourages students from enthusiastic participation in classroom activities. According to the *attentional theory of boredom proneness* (Harris, 2000), the main cause of boredom is one's failure to self-regulate attention. Problems with attention are associated with individual differences among learners and can occur due to the cognitive difficulty of a task but can as well be linked with interests, obsessions and values (Mercer-Lynn et al., 2014). According to the *emotion theory* (Eastwood et al., 2007, 2012), boredom can originate from problems with recognizing, accessing

and communicating one's own feelings, a condition that is known as alexithymia. The *control-value theory of achievement emotions* (Pekrun, 2006; Pekrun et al., 2010) attributes the occurrence of boredom to students' evaluation of control over the task and the value they assign to it. Finally, the *dimensional model* (Pekrun et al., 2010) perceives boredom as both a limiting and stimulating emotion. In the latter case, in specific conditions, the negative state of emotional ennui may trigger arousal behavior in search of change. Therefore, boredom acts as a practical negative emotion that can encourage learners to set new goals or rethink those that they currently pursue (cf. Komorowska, 2016). Explaining boredom through the lens of the aforementioned theories helps better understand the different shared responses occurring in the same L2 learning context.

2.2. Empirical studies of FLLB

The number of studies on FLLB is distinctly limited and largely related to the Polish and Asian contexts. The antecedents of boredom in these studies are mostly explainable in the light of the theories of boredom overviewed above. The studies in which the causes of boredom were the primary or secondary focus of investigation are presented and briefly synthesized in Table 1.

Table 1 Empirical studies of FLLB

| Author (year) | Participants/context | Method | Cause(s) and source(s) of boredom |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chapman (2013) | 4 weeks, 57 students in the second semester studying German as a foreign language | Mixed-methods | Students' perception of the teacher, textbook activities, uninterested classmates, feeling unchallenged |
| Kruk (2016) | Changes in the boredom of 16 students majoring in English, motivation and anxiety in their visits to Second Life (SL) over one semester | Mixed-methods | Reluctance to communicate, unfriendly and impolite interlocutors |
| Zawodniak et al. (2017) | 30 Polish MA students with an English teacher's position in prospect | Qualitative analysis of participants' diaries | Language tasks (e.g., easy/difficult), tasks seen as irrelevant or unnecessary, lacking diversity, language classes (e.g., no choice of material), teacher behavior (e.g., indifferent and unsupportive role), class preparation and management |
| Zawodniak & Kruk (2018) | Impact of 4 EFL learners' visits to SL on changes in boredom, motivation and anxiety | Qualitative | Learners' expectations, grit, belief in their abilities, desire for stimulation, interlocutors' attitude, topics, time of visiting SL |
| Kruk & Zawodniak (2018) | 15 Polish university students majoring in English | Qualitative analysis of semi-structured interviews held with participants | Lacking inherent challenge, teacher control, teacher personality, teaching methods/strategies, recurrent dull tasks, difficult/uninteresting tasks, insufficient perceived purpose for tasks |

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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kruk & Zawodniak (2020) | 30 Polish university students learning English (L2) and German (L3) | Content analysis of FLLB in retrospect boredom questionnaire | Lesson-related (e.g., too much use of the same content, uselessness of lessons, mismatched difficulty level), teacher-related (e.g., no involvement/engagement, teaching methods/strategies, personal/physical qualities), other variables (e.g., class time, weather, excessive work) |
| Pawlak et al. (2020a) | 107 Polish-speaking students majoring in English | Exploratory factor analysis of BPELC-R questionnaire | Lack of involvement, monotony and repetitiveness, lack of satisfaction and stimulating nature |
| Pawlak et al. (2020b) | 11 English majors | Mixed-methods | Repetitive nature of activities, poor match between the learning challenge and proficiency level, topics and/or their implementation |
| Li (2021) | EFL learning among Chinese university students ($N = 2,002$) | Mixed-methods | Extremely high and low control, students feeling highly challenged or underchallenged, students' low proficiency, unchallenging or meaningless activities or tasks, students' lack of interest in subject matter |
| Li et al. (2021) | Chinese EFL students and teachers. Study 1: students and teachers were interviewed and 659 students completed a questionnaire, experiences and evaluations of FLLB. Study 2: the FLLB scale was developed. | Mixed-methods | Teacher dislike, boring peers, understimulating tasks or content, unchallenging materials and assignments |
| Derakhshan et al. (2021) | 208 Iranian English majors | Qualitative, open-ended questionnaire and semi-structured interviews | Teachers' lengthy, monotonous monologues, inadequate student participation, logistical problems, and improper repetitive tasks |
| Nakamura et al. (2021) | Thai university students in English oral communication course for 15 weeks | Triangulating data from whole-class surveys, focus group interviews, and the toolkits | Inappropriate activity, lack of comprehension, inadequate L2 skills, task difficulty, excessive input, lack of innovative ideas |
| Kruk et al. (2021) | To investigate the trajectories of boredom, 13 English majors | Mixed-methods | Different constellations of factors, repetitiveness, monotony and predictability of what transpires during lessons |

Even a cursory look at this synthesis shows the need for further exploration of FLLB from an emic, internal subjective perspective, with insights into individual variation in different contexts of L2 learning as the bulk of studies on the construct are limited to the Polish context. Kruk and Zawodniak (2020, p. 432) pointed out that “interestingly, the respondents made no comments on their own contribution” to the sense of boredom and they called for further investigation of this emotion in learners from different countries. Thus, the present study was motivated to look for sources of boredom in EFL classes in the Iranian context, yet through an innovative methodology, the Q methodology, which has not yet been employed to explore FLLB.

2.3. Q methodology and SLA studies

Q methodology, which is a method of investigating individuals' viewpoints, has been embraced in many disciplines in social sciences, including psychology, education or policy research. This method has been employed so far to delve into teachers' and learners' perceptions (Rimm-Kaufman et al., 2006). Its use in SLA body of research has been limited but there are signs of a growing interest (Collins & Angelova, 2015; Irie, 2014; Irie & Ryan, 2014). Q methodology stands in contrast to the use of multivariate factor analysis in studies of psychological processes, which explore human behavior from an external viewpoint. Rather, it opts for addressing human behavior from the internal subjects' perspective (Brown, 1980) and takes advantage of social categorization.

In recent years, a number of researchers have begun to recognize the potential of this methodology (Irie & Ryan, 2014; Pemberton & Cooker, 2012; Rodriguez & Shepard, 2013) in disentangling the role of individual variation in L2 learning. Since ID research aims "to understand the general principles of the human mind and to explore the uniqueness of the individual mind" (Dörnyei, 2005, p. 1), it would seem that it can considerably benefit from Q methodology. This is because, instead of attempting to present universal models and offer holistic understanding of the role of IDs, it favors providing insights into individual variation in specific learning contexts.

Q methodology is most often employed in investigating very complicated and socially challenging constructs from the participants' viewpoints (Stainton Rogers, 1995; Watts & Stenner, 2003). A relative newcomer to research in applied linguistics, Q methodology has been viewed as a truly innovative approach that has the potential to portray the emotional and cognitive complexity of a certain instructional setting by considering individuals' thoughts about a specific issue (Irie, 2014). FLLB can be seen as a complex, dynamic, and socially constructed state and thus the Q methodology lends itself well to exploring this aversive emotion. Rather than relying on a passive response dimension, Q methodology acts as a dynamic means of expressing subjectivity (Watts & Stenner, 2003). It focuses on the particular context from a situated and subjective perspective rather than an objective one (Jodaei et al., 2021). Thomas and Baas (1992) posited that, since a limited number of attitudes exist on a particular issue, similar but different Q sorts given to different participants identify factors underlying the same perceptions. In light of the above considerations, the purpose of this study was to explore the variety of perceptions among Iranian learners of English as a foreign language (EFL) about the potential sources of FLLB. With this aim in mind, we developed the following research question:

What are the different types of individual responses to the potential sources of boredom in the context of foreign language learning?

3. Method

3.1. Participants and setting

Thirty-seven English language learners (26 females, 11 males) were purposefully selected from two private online language learning institutes during the COVID-19 pandemic in Mashhad, the second largest city of Iran. They were asked to sort the Q statements. In Q methodology research, the number of participants is typically set between a minimum of one-third of the statements and a maximum equal to the total number of statements (Slaughter et al., 2019), which for the present study was 40. Q methodology does not require a large number of participants because the aim is not to generalize the findings but, rather, to emphasize the significance of each point of view (Slaughter et al., 2019). Participation in the study was voluntary and the data were collected online. Table 2 shows the demographic information for the participants. The mean age was 26.8 years ($SD = 3.76$), ranging between 17 and 33 years. Their level of language proficiency ranged between lower-intermediate to upper-intermediate as measured by Oxford Placement Test (OPT). All the language learners' L1 was Persian.

Table 2 Participants' demographic information

| | |
|----------------------|-----------------------------------------------------------------|
| Gender | 11 males, 26 females |
| Mean age | 26.8 ($SD = 3.76$) |
| Language proficiency | Lower-intermediate: 16; intermediate:13, upper-intermediated: 8 |
| Total number | 37 |

3.2. Data collection and analysis

In accordance with the principles of Q methodology, the following steps were taken with the purpose of collecting and analyzing the data: defining a research question, developing a Q set, distributing Q sorts (among participants), doing statistical analyses, and interpreting the results (Watts & Stenner, 2003). These stages are elaborated upon below.

Step 1: Defining a research question

Formulating a proper research question is extremely important in Q methodology research. This is because the nature and overall design of a Q set are influenced

by the nature of what we wish to investigate. In light of the literature reviewed above and recent attention to FLLB in SLA, the study aimed to explore various shared experiences of L2 learners relating to their perceptions of potential sources of boredom in the language learning context.

Step 2: Developing a Q set

A Q set is used in Q methodology to collect requisite data. It consists of a number of heterogeneous statements with the aim of evaluating participants' views about a particular topic. For the Q set in this study, the statements were collected from the literature on boredom and the already existing questionnaires employed in previous L2 boredom studies (e.g., Li et al., 2021; Pawlak et al., 2020a). The aim of this stage was to cover the relevant discourse about FLLB. At first, a set of 87 items was collected and this pool was then checked for repetition, relevance and total coverage by a panel of five field specialists, all of whom were experts in SLA. The result was the reduction of the initial set to 43 items, which were then used in an extensive pilot study of a purposive sample of L2 learners who were perceived as likely to offer extensive comments. As a result of the piloting stage, three ambiguous statements, were discarded, leading to the final total of 40 statements.

Step 3: Administering the Q sorts

At the core of a Q study is the collection of data in a sorting activity. Thus, first, the language learners were supposed to sort the statements relating to FLLB, from those representing the least important (-4) to the most important (+4) causes and sources of boredom. In this Q study, participants were asked to sort these statements based on a set pattern determined by a sorting grid, the forced distribution pattern indicated in Figure 1.

| -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
|----|----|----|----|---|----|----|----|----|
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Figure 1 The final Q sort grid

Also, to gather further subjective data and gain a better understanding of the responses given by the participants an interview was conducted with the

most representative members of each factorial group based on the findings of the Q analysis. In this way, the participants were offered a chance to give their ideas and reasons for ranking the items as they actually did. Holding interviews with participants who rank items (in a Q study) is essential for Q methodology research because interviews can provide researchers with a more comprehensive, rich, and detailed understanding of various points of view (Watts & Stenner, 2012).

Step 4: Doing statistical analysis

In Q methodology, statistical analysis involves an inverted factor analysis. In the present study, PQ Method (Schmolck, 2002) was employed to produce the initial by-person correlation matrix. Through the analysis, the categorization of the constructs is based on the ranking of all items relative to each other and not on the similarity of independent responses to each item, which is often the case for Likert-scale-type questionnaires (Dörnyei & Ryan, 2015). Following factor extraction, varimax rotation, and by-hand adjustment, the results were judged upon according to the factor arrays. The last stage involved using a factor arrays table and the configurations of statements. The main aim was to identify the highest and the lowest scores in terms of factor loading.

Step 5: Interpreting the results

The results of factor analysis, demographic description, and the interview content were utilized to arrive at conclusions. We used a narrative mode to report the interpretation of the factors. In the narrative mode, the related items of a factor are ordered and linked together to generate a holistic and single account of the perceptions the factors (Watts & Stenner, 2012). Besides, the interview content from the significantly loaded participants was incorporated to generate a more detailed understanding of the learners' subjective viewpoints.

The factor analysis allowed extraction of three main factors. These were rotated and accounted for 51% of the variance, with 39 out of the 41 sorts loading significantly on at least one of the factors at $p < .01$ level, with loadings in excess of $\pm .41$. We selected the three-factor solution not only according to the eigen values (above 1.00), the volume of the variance, but also the number of the sorts covered.

A distinctive identification code was used for each Q sort. PQ permits eight characters to be used to name the Q sorts. Thus, to summarize the demographic data, we used the information about the participants' gender (male as M, female as F), their age and proficiency level (lower-intermediate as L, intermediate as I and upper-intermediate as U). Therefore, a participant ID of F20U indicates that the Q sort represents a female, 20-year-old, upper-intermediate English language learner.

4. Results

Results of analyzing the Q sorts are presented here in a narrative format (Watts & Stenner, 2012). In choosing the statements representative of each factor, we checked, firstly, if the statement had been rated significantly higher (or lower) in a factor relative to other factors. Secondly, we considered if the statement was rated higher (or lower) than other statements for the same factor. The illustration of each factor is followed by examples from interviews and answers to open-ended questions. The three factors were labeled as follows: (F1) *teacher-induced boredom*, (F2) *student-induced boredom*, and (F3) *activity-induced boredom*.

Table 3 shows the z-scores estimated for each statement via the average of all the individual Q sorts that loaded significantly and only on that factor. Because not all these Q sorts contributed to the same extent to the identification of the factor, the technique of weighted average was used (Brown, 1980). This score allowed us to compare how each statement was valued across the factors. For example, z-scores of Statement 2 are 1.39 for Factor 1, -.36 for Factor 2, and .84 for Factor 3. This shows that participants who loaded significantly on Factor 1 felt that having an unsupportive teacher was a much more important source of boredom than others who shared the views that emerged in Factors 2 and 3.

Table 3 Z-scores for each statement

| No. Statement | F1 | F2 | F3 |
|--------------------------------------------------------------------------------------------------------|------|-------|-------|
| 1 Seeing no progress in my foreign language class makes me bored. | -.27 | 1.24 | .4 |
| 2 An unsupportive teacher makes me bored in the foreign language class. | 1.39 | -.36 | .84 |
| 3 Memorizing activities makes me bored. | .58 | -.47 | 1.33 |
| 4 The teacher who does not pay attention to my learning progress makes me bored. | 2.04 | -1.23 | 1.48 |
| 5 Unchallenging activities in the class makes me bored. | .64 | -.73 | .96 |
| 6 An unfriendly teacher makes me bored. | 1.64 | -1.17 | .77 |
| 7 Lack of aim in learning a language makes me bored. | -.44 | 2.18 | .59 |
| 8 Comprehension difficulty in materials or teacher talk makes me bored. | 1.25 | 1.64 | 1.02 |
| 9 The teacher who does not make me believe in the value of learning a foreign language makes me bored. | 1.38 | .87 | -.35 |
| 10 Experiencing anxiety in the language class leads to my experiencing boredom in the class. | .56 | 1.74 | -.43 |
| 11 The teacher who does not let me share my opinion in the class makes me bored. | 1.51 | .58 | .38 |
| 12 When I cannot find meaning in learning a language, I get bored. | -.16 | .87 | -1.13 |
| 13 When I feel the task or material is useless, I get bored. | -.84 | -.29 | 1.47 |
| 14 When the teacher does not have clear objectives for each lesson, I get bored. | .44 | -1.12 | -.97 |
| 15 Too fast or too slow pace of teacher talk makes me bored. | .24 | -1.71 | -.94 |
| 16 Activities that do not have clear purpose make me bored. | -1.5 | -1.08 | .44 |
| 17 Feeling like doing nothing in English classes makes me bored. | 1.08 | 1.97 | .57 |
| 18 The teacher with unchanging routine in his/her instruction makes me bored. | .74 | -1.27 | -.32 |
| 19 The teacher who does not care for my concerns and feelings makes me bored. | .21 | -1.53 | -.14 |
| 20 Being passive in language class makes me bored. | .95 | 2.01 | .32 |
| 21 Activities that are not interesting make me bored. | -.18 | -.56 | .99 |
| 22 Limited ability in language skills makes me experience more boredom in the class. | -1.7 | .48 | -.81 |
| 23 The teacher who has excessive control makes me bored. | 1.94 | .38 | .69 |
| 24 Repetitive or monotonous tasks make me bored. | .18 | .68 | 1.01 |

| | | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|
| 25 | If I am taught by being told what to do and/or by memorizing rather than by being given problems to solve in my own trial-and-error way, I am likely to switch off. | .45 | -.78 | .36 |
| 26 | Lack of interest in the subject matter makes me bored. | .66 | .98 | .57 |
| 27 | The teacher who does not provide challenge in the class makes me bored. | 1.84 | .32 | .41 |
| 28 | The teacher who uses old-fashioned teaching techniques makes me bored. | .69 | -1.45 | -.34 |
| 29 | Low level of mental energy in the class makes me bored. | .24 | .93 | .48 |
| 30 | When the teacher overloads me with language input, I get bored. | .84 | .59 | -.31 |
| 31 | The teacher who decreases my self-satisfaction during his/her evaluation makes me bored. | .73 | -.15 | -.89 |
| 32 | Mismatch in the aims of an activity and my proficiency level makes me bored. | -.12 | .38 | .94 |
| 33 | When the teacher does not pay attention to my needs, I feel bored. | .56 | -.44 | -1.28 |
| 34 | The teacher who does not let me correct my mistakes makes me bored. | .44 | -1.84 | -.81 |
| 35 | Finding myself at loose ends in a language class makes me bored. | .58 | 1.35 | .48 |
| 36 | Meaningless activities make me bored. | .44 | -.59 | .88 |
| 37 | The teacher who does not provide variety in language learning makes me bored. | .96 | -1.41 | -.28 |
| 38 | Activities that do not make me cooperate with my classmates in the class make me bored. | -1.33 | -.79 | .67 |
| 39 | The threatening environment of the class makes me bored. | .69 | -.23 | -1.35 |
| 40 | A strict teacher makes me bored. | .47 | -1.89 | -1.25 |

The three factors are described below together with tables showing statement clusters for meaningful interpretation of the patterns identified. The related statements, their numbers, and their Q sort rankings are included in each table. This allows reporting important items for each factor consistently and indicating the polarization of perceptions in a data-oriented way.

Factor 1: Teacher-induced boredom

Factor 1 explained 21% of the whole variance and 15 participants were significantly affiliated with this factor. We named this factor *teacher-induced boredom* as the teacher is regarded as a direct source of boredom in the class. Table 4 summarizes the top (i.e., 27, 6, 37, 23, 2 and 11) and bottom (i.e., 31, 39, 15, 4, 34 and 18) ranking statements included in this factor.

Table 4 Factor 1: The top and bottom ranking statements

| Item # | Statement | Ranking |
|----------|------------------------------------------------------------------------------------------|---------|
| Top 6 | | |
| 27 | The teacher who does not provide challenge in the class makes me bored. | +4 |
| 6 | An unfriendly teacher makes me bored. | +4 |
| 37 | The teacher who does not provide variety in language learning makes me bored. | +3 |
| 23 | The teacher who has excessive control makes me bored. | +3 |
| 2 | An unsupportive teacher makes me bored in the foreign language class. | +3 |
| 11 | The teacher who does not let me share my opinion in the class makes me bored. | +3 |
| Bottom 6 | | |
| 31 | The teacher who decreases my self-satisfaction during his/her evaluation makes me bored. | -3 |
| 39 | The threatening environment of the class makes me bored. | -3 |
| 15 | Too fast or too slow pace of teacher talk makes me bored. | -3 |
| 4 | The teacher who does not pay attention to my learning progress makes me bored. | -3 |
| 34 | The teacher who does not let me correct my mistakes makes me bored. | -4 |
| 18 | The teacher with unchanging routine in his/her instruction makes me bored. | -4 |

The label *teacher-induced boredom* refers to concepts such as having an unsupportive teacher (2: +3), not providing learners with challenges (27: +4) or variety (37: +3), excessive teacher control (23: +3), lack of clear teaching objectives (14: +2), lack of teachers' attention to learners' progress (4: -3) and teachers' unsuitable use of correction strategies (34: -4). It is intriguing to observe that particular interpersonal qualities such as not creating good relationships with students, being unfriendly (6: +4), unsupportiveness (2: +3), lack of care (19: +2) and acting as a mentor with excessive control over students (23: +3) are seen as factors which are the most likely to induce boredom. Here is an extract from an interview with a representative participant (F23I) affiliated with Factor 1 concerning the effect of an unsupportive teacher on students' boredom (2: +3):

Sometimes I don't feel like answering questions that occur to me because the teacher either refers me back to my dictionary or online encyclopedia to find the answers. I feel abandoned and would rather keep my obsessions to me. I keep silent most of the time and wish the class is over soon.

Moreover, also prevalent in the first factor were pedagogical aspects, such as not providing challenge (27: +4), variety (37: +3) and clear objectives (14: +2); excessive use of repetition and memorization (25: +2); using old-fashioned teaching techniques (28: +2), not providing opportunities for sharing opinions (11: +3), and not identifying the value of learning a language (25: +2). However, there are other aspects of Factor 1, those related to evaluation, such as not allowing self-correction and peer correction (34: -4) as well as not paying attention to the learners' progress (4: -3), that are seen as the least boredom-arousing. One participant provided an example of a situation of not being given the chance of self-correction in the classroom:

When she [the teacher] picks on me to hinder and correct my speech or interrupts me to correct what I say, I feel the time is lengthened; it is wasted somehow. We can do more different things rather than stick to one mistake or two at a time. It really gets on nerves.

Factor 2: Student-induced boredom

Factor 2 explained 18% of the variance and 16 participants were significantly related to it. We named this factor *student-induced boredom* as the learner herself/himself was the center of his/her boredom. Table 5 summarizes the top (i.e., 20, 17, 35 and 1) and bottom (i.e., 8, 26, 7 and 10) ranking statements included in this factor.

Table 5 Factor 2: The top and bottom ranking statements

| Item # | Statement | Ranking |
|----------|-------------------------------------------------------------------------------------------|---------|
| Top 4 | | |
| 20 | Being passive in language class makes me bored. | +4 |
| 17 | Feeling like doing nothing in English classes makes me bored. | +4 |
| 35 | Finding myself at loose ends in a language class makes me bored. | +3 |
| 1 | Seeing no progress in my foreign language class makes me bored. | +3 |
| Bottom 4 | | |
| 8 | Comprehension difficulty in materials or teacher talk makes me bored. | -1 |
| 26 | Lack of interest in the subject matter makes me bored. | -2 |
| 7 | Lack of aim in learning a language makes me bored. | -4 |
| 10 | Experiencing anxiety in the language class leads to my experiencing boredom in the class. | -4 |

Participants in this factorial group acknowledged a rather less significant role for language teachers and attributed boredom to self-related factors. Most of the boredom-inducing situations related to this factor are associated with learners' disengagement from what transpires in the classroom. For instance, being passive (20: +4), feeling like doing nothing (17: +4), feeling at the loose end (35: +3), and seeing no progress in foreign language classes (1: +3) are some of the items reflecting sources of the learners' boredom as represented in the top ranking statements of this factor. Below is an excerpt from an interview with a typical participant (M28U) affiliated with Factor 2 concerning the passive role (20: +4) and feeling at a loose end (35: +3):

We are many in number in class and not all are equally active. I, by nature, do not initiate talks unless I am asked or encouraged to. What's worse is that sometimes I see no point in what we do in class or just don't like it and can't say it freely. So, I just tolerate it until the class is over.

The extract shows that the boredom that the participant (M28U) experienced is more internally originated. Yet, it by no means implies that nothing can be done externally to ameliorate the occurrence of this negative emotion. For example, the issue of over-populated classes was mentioned, which could have caused some students to be left to their own devices and to feel less capable of overcoming boredom. This is certainly an issue that can be externally tackled at least to some extent.

Factor 3: Activity-induced boredom

Factor 3 explained 12% of the variance and nine participants were significantly associated with it. Table 6 summarizes the top (i.e., 5, 21, 13 and 32) and bottom (i.e., 38, 24, 16 and 3) ranking statements included in this factor. The learners in this factorial group believed that boredom was partly caused by tasks and activities used in the FL class; thus, the factor was labeled *activity-induced boredom*.

This means that learners related to this factor might experience boredom when they are doing tasks that are unchallenging (5: +4), uninteresting (21: +4), repetitive (24: -2), and need memorization (3: -4). Additionally, learners can succumb to boredom when they cannot grasp the purpose of the task (16: -4) or when the task is not matched to their proficiency level (too hard or too easy) (32: +3).

Table 6 Factor 3: The top and bottom ranking statements

| Item # | Statement | Ranking |
|----------|-----------------------------------------------------------------------------------------|---------|
| Top 4 | | |
| 5 | Unchallenging activities in the class make me bored. | +4 |
| 21 | Activities that are not interesting make me bored. | +4 |
| 13 | When I feel the task or material is useless, I get bored | +3 |
| 32 | Mismatch in the aims of an activity and my proficiency level makes me bored. | +3 |
| Bottom 4 | | |
| 38 | Activities that do not make me cooperate with my classmates in the class make me bored. | -1 |
| 24 | Repetitive or monotonous tasks make me bored. | -2 |
| 16 | Activities that do not have clear purpose make me bored. | -4 |
| 3 | Memorizing activities makes me bored. | -4 |

One participant related to this factor also considered the lack of cooperative task (38: -1) as an important factor which induces boredom in the class. An excerpt from an interview with a representative participant (F29I) with respect to Factor 3 follows:

The silent reading task is the most boring to me. I think others feel the same too. It takes too much time for us to read the texts fast and try to memorize the key points to report later to class. The same goes for writing assignments that we should do in class. Such activities should be assigned as homework. In class, we prefer to speak English. Of course, when instead we read and write more we feel it a waste of time and we feel bored.

It is evident that the participant found the silent reading task and in-class writing uninteresting (21: +4) and unchallenging (5: +4). The need to quickly memorize the key points in the reading passage seems to be another source of boredom (3: -4). When the participant was asked how the activities could be made more interesting, she (F29I) continued:

We prefer to have more speaking tasks in class. We enjoy speaking English together though it is often delayed to the end of each session. But, we get engaged in speaking English together, we don't feel the time pass.

This can constitute one example of how class activities can be made less boring if they are replaced with enjoyable ones, as perceived by EFL learners. In particular the role of more cooperative tasks is highlighted (38: -1) as a way of diminishing in-class boredom.

5. Discussion

In order to seek an answer to the research question, the potential sources of boredom in an EFL class were investigated using Q methodology. Three different accounts of FLLB emerged and were analyzed and discussed using factor arrays and qualitative interview data analysis. The three factors point to the salient student types in the target setting. The participants from each factorial group also constitute the students who best represent the major prototypes of each factor. These three factors indicate that the learners hold three different prototypical points of view about sources of boredom in EFL classes: (a) teacher-induced, (b) student-induced, and (c) activity-induced. These factors, directly or indirectly, play an important role in generating boredom.

Factor 1 was named *teacher-induced boredom*. The most salient sources of boredom emanating from the teacher were related to an unsupportive role, failure to provide learners with required challenge or variety, excessive control over students and failure to set clear objectives. Moreover, the teacher's unfriendly behavior, lack of care, excessive use of repetition and memorization, reliance on outdated teaching techniques, failure to create opportunities for students' sharing of opinions as well as failure to perceive the value of language learning were also found among teacher-induced sources of boredom. These can be explained in light of the forced-effort theory (Hill & Perkins, 1985), the control-value theory (Pekrun, 2006) and the under-stimulation model (Larson & Richards, 1991). The relationship between the first two theories in explaining the kind of boredom learners experience is that in highly teacher-controlled circumstances students mostly have to deal with monotonous class learning situations. Thus, they are less motivated to show any mental interest in these classroom events and, as a result, they get easily bored.

The online environment during Covid-19 pandemic made L2 classes much more teacher-controlled. In effect, learners started perceiving teachers as less caring or supportive but they also felt dissatisfied with being exposed to less challenging, monotonous, and repetitive learning experiences. This controlling orientation embraced by teachers might have been triggered by the sudden, unexpected switch to the online environment. That is, in order to effectively manage the learners' confusion in this new environment and to help them accommodate to the new situation, teachers might have decided to exert more control in online classes. However, this may have caused learners to assign less value to their learning and class activities. The findings of the interviews provided support for these explanations as some learners neither took the tasks assigned in class seriously nor considered them valuable.

Besides, some participants viewed their teachers as unsupportive as they could rarely find space for expressing their concerns and were not properly

praised for completing the classroom assignments. This can be discussed in light of the under-stimulation model (Larson & Richards, 1991), which highlights the lack of stimulating incentives to learn as the reason for deactivating students and discouraging them from enthusiastic participation in school activities. In other words, if students' emotions are not positively activated, they are not properly engaged in the learning experience and they are not adequately encouraged to get involved in the learning process, signs of boredom are soon bound to appear, which can decrease motivation and thus academic achievement (e.g., Kruk & Zawodniak, 2018; Pekrun, 2006; Tulis & Fulmer, 2013).

Factor 2 was labeled *student-induced boredom*, which was primarily marked by learner disengagement in classroom. The most salient sources of boredom of this type were learners' passive role in class, feeling like doing nothing, feeling at a loose end and seeing no progress in L2 learning. These results can be explained in light of the attention theory of boredom proneness (Harris, 2000; LePera, 2011). This is because poor attention management, which can possibly be attributed to a low degree of self-awareness of attention, can induce boredom, resulting in distractibility and memory lapses. Learners' passive role in class and seeing no progress in their learning might be rooted in their poor degree of self-awareness of attention. It can be argued that misallocation of attention which can disrupt sufficient engagement with the information related to the current activity can cause boredom. Damrad-Frye and Laird (1989) also investigated the effect of self-perceived attention on the experience of boredom and found that even minor distractions can enhance this negative emotion.

Factor 3 was named *activity-induced boredom*. Learners associated with this factor experienced boredom when they were instructed to do tasks and activities that were unchallenging, uninteresting, repetitive, or those that needed memorization. Additionally, when learners could not understand the purpose of the task or when the task did not match their proficiency level (i.e., when it was too hard or too easy), they tended to succumb to boredom. The participants affiliated with this factor also considered the role of cooperative tasks as an important issue preventing the feeling of boredom. Such findings can be discussed in light of the under-stimulation model (Larson & Richards, 1991), the forced-effort theory (Hill & Perkins, 1985) and the control-value theory (Pekrun, 2006). As highlighted in the under-stimulation model (Larson & Richards, 1991), unchallenging and demotivating class activities can be a major source of boredom. It would appear that EFL learners find more challenge and attraction in speaking rather than reading and writing tasks (Pawlak et al., 2020b). The boredom caused by the repetitive and monotonous nature of class activities can be explained with reference to the forced-effort model as well. This is because this model relates the major source of boredom to highly teacher-controlled circumstances

where students have to complete activities they consider monotonous and thus undeserving of increased cognitive effort (Hill & Perkins, 1985). The finding that learners could not grasp the purpose of the task and, as a result found it boring, can be linked to the control-value theory (Pekrun, 2006).

6. Conclusions, limitations and implications

The present research explored the potential sources of boredom in L2 classes. To this aim, Q methodology, which is an innovative research method in investigating FLLB, was employed for data collection, analysis, and interpretation. Findings showed that different learner prototypes experience boredom differently, so teachers are advised to apply alternative preventive or reactive strategies to manage boredom in L2 learning. The study demonstrated the robustness of Q methodology in investigating FLLB. The findings of the qualitative analysis of interviews with the most typical participants of factorial groups were consistent with the results of the Q analysis. This indicates that Q methodology is a reliable way of exploring L2 learners' subjective viewpoints of the sources of boredom. This study also confirmed the presence of general boredom sources in all participants and specific boredom patterns related to each participant.

The multidimensional perspective on FLLB can serve as a basis for several pedagogical implications. Most importantly, it is essential to raise the awareness of L2 teachers and material developers of different student prototypes in the L2 learning process. Specifically, if teachers know that each prototype of EFL learner is bored for different reasons, they can develop the right tasks with the right level of challenge and stimulation or use the most suitable boredom-preventing strategies. For instance, learners who experience boredom mainly due to the activities performed in class can be assigned communicative tasks that encourage cooperation as a way of preventing this negative emotion. By contrast, learners who are more dependent on the teacher can be monitored more closely so that they do not get confused or feel abandoned, which can generate boredom. Similarly, language learners who get bored mainly because of individual factors can be monitored closely by the teacher so that their attention is not easily diverted and they do not feel disengaged and off-track. Seeing no control over the task and perceiving little value in doing it might also result in the occurrence of boredom. This problem could at least partly be solved by appropriate teacher interventions intended to highlight the value of the task and clarify its purpose. Furthermore, as the findings revealed, the use of more cooperative tasks could prevent boredom to some extent. As the interviews also showed, some students preferred class discussions and speaking tasks (which are by nature more cooperative) than reading and writing tasks.

The methodology used in this research project and the procedures involved in Q sorting encouraged participants to express their subjective points of view about sources of boredom. The typical instruments employed in methodologies of etic, external objective, perspective (in sharp contrast with Q methodology) cannot offer a thorough picture of participants' perspectives. Thus, researchers who intend to apply Q methodology are advised to carefully explain all the procedures to participants. Watts and Stenner (2003) warn against very common misunderstandings of the Q sorting and Q pattern analysis. Although we are aware that there are many ways to explore FLLB in EFL learning contexts, we believe that Q methodology is highly efficient in tapping into the dynamicity of complex systems in language learning. As it combines features of both qualitative and quantitative research, Q methodology provides a way of genuinely and comprehensively delving into L2 learners' subjective views and evaluations. In view of the growing focus on individuals' emotional experiences, SLA research is surely ripe for further research harnessing the potentials of Q methodology.

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