Examining English as a Foreign Language Students' Boredom in terms of Different Variables

Abdullah Coşkun,¹ Bolu Abant İzzet Baysal University, Turkey email: coskun a@ibu.edu.tr

Yücel Yüksel,²
Ministry of National Education, Turkey

DOI: 10.35974/acuity.v7i2.2539

Abstract

The aim of this study is to adapt the Boredom in Practical English Language Classes-Revised (BPELC-R) scale developed by Pawlak, Kruk, Zawodniak and Pasikowski (2020) into the high school English as a Foreign Language (EFL) context of Turkey and to reveal high school EFL students' level of boredom. Also, the study investigates whether their level of boredom differs depending on the variables of gender, grade level and selected academic track. The two-factor scale including 23 Likert-scale items were completed by 680 high school EFL students at different grade levels in eight public high schools in a city in Turkey. The data analyzed by means of the SPSS uncovered medium level of boredom. It was also found that the most common causes of boredom are the monotonous nature of the English lessons and the dissatisfaction of the participants with these lessons. While no significant difference was observed in the level of boredom depending on the gender variable, students' grade level and the chosen academic track led to significant differences. The highest level of boredom was revealed for final year students and for those who chose the science track. Some implications on how to reduce EFL classroom boredom are provided.

Keywords: Boredom, English as a Foreign Language.

INTRODUCTION

Emotions are regarded as mental activities affecting the learning and teaching processes (Meyer & Turner, 2006), and one of the deactivating emotions frequently experienced by learners is boredom (Pekrun et al., 2010) which is observed during approximately half of each lesson period (Goetz et al., 2007). Regarded as a serious problem of modern societies (Klapp, 1986), boredom is generally described in psychology as a displeasure of routine, and it becomes noticeable when the environment has lack of novelty (Watt & Vodanovich, 1999) and stimulation (Harasymchuk & Fehr, 2010). Other researchers describe it as an affective condition including unpleasant feelings (Pekrun et al., 2010), an inability to determine what to wish for (Greenson, 1953), a feeling that time passes by slowly and as a negative emotion preventing individuals from engaging in a task as well as maintaining required attention (Eastwood et al., 2012). Boredom is also referred to as a multi-faceted emotion giving rise to

Corresponding Author: Abdullah Coşkun, Faculty of Education, Bolu Abant İzzet Baysal University, email: coskun_a@ibu.edu.tr

the verbal expression of boredom and motivation to leave the situation that causes boredom (Nett et al., 2010).

In addition to being a research topic in the field of psychology, boredom has been under investigation in educational research studies (Pekrun et al., 2002). Although some researchers positively approach the concept of boredom in the field of education as a signal to teachers showing that learning is not occurring (Bench & Lench, 2013; Mugon et al., 2019), academic boredom is generally considered as a negative emotion related to achievement which can result in high cognitive failures (Sawin & Scerbo, 1995) and dropout rate (Bearden et al., 1989). Additionally, academic boredom is known to be one of the causes of lower levels of motivation (Preckel et al., 2010), school achievement (Mann & Robinson, 2009), perceived value attached to classroom-related tasks (Pekrun et al., 2010; Pekrun, 2006), learner engagement (Sharp et al., 2020) and attention (Pekrun et al., 2010).

Mostly because boredom is considered a less visible emotion when compared to other more observable emotions (e.g., anxiety), not many studies dealing with boredom have been conducted in the field of psychology (Goetz et al., 2014). Similarly, although boredom is closely connected with students' academic achievement, the concept of boredom is rarely investigated in the field of education (Pekrun et al., 2010). The negligence of boredom as a construct is also true for the field of foreign language education (Dumančić, 2018) even though boredom is among the most common emotions that can easily be observed in the foreign language classroom by focusing on student behaviors, such as looking at the clock, playing with some objects, yawning and talking with friends (Kruk, 2016a). Since most of the studies focusing on boredom have been carried out in Poland, it is needed to investigate this phenomenon in other settings such as the Turkish EFL context; therefore, the current study aims to adapt the Boredom in Practical English Language Classes-Revised (BPELC-R) scale (Pawlak, Kruk, Zawodniak, & Pasikowski, 2020) into the Turkish high school EFL context.

Boredom in the EFL Literature

In the relevant literature, boredom is classified into the following categories (Götz & Frenzel, 2006; Goetz et al., 2014): indifferent boredom (i.e., being indifferent to the external world), calibrating boredom (i.e., not knowing what to do and being open to options to reduce boredom despite not actively looking for alternative behaviors), searching boredom (i.e., actively searching for behaviors to reduce boredom), reactant boredom (i.e., having strong unpleasant motivation to avoid boredom-causing situations such as the teachers) and apathetic boredom (i.e., having strong unpleasant experience of negative as well as positive emotions and displaying helplessness). The terms known as trait boredom and state boredom are also frequently referred to in the literature as types of boredom. While the former refers to the tendency to experience boredom, the latter is associated with specific contexts not perceived to be sufficiently interesting (Vogel-Walcutt et al., 2012).

Especially in the foreign language classroom, although the individual affective factors including self-esteem, anxiety, attitudes and motivation (Muñoz & Ortega-Martín, 2005) were extensively explored as constructs having a significant influence on the learning process (Gardner et al., 2004; Clément et al., 1994), the number of studies delving into the concept of boredom in foreign language learning contexts has only recently been on the rise in some specific EFL contexts, such as Poland, Croatia, China and Thailand (Kruk, 2021; Li, 2021). The majority of these studies were carried out in Poland. For example, Kruk (2016a) aimed to reveal the changing boredom levels of senior high school students in English language classes in Poland and concluded that boredom changed from one class to another and even throughout one single lesson. In another study, he examined philology students' language

anxiety, motivation and boredom in learning the English language in Second Life (SL) and discovered that they were highly motivated to learn the language in SL while they had low levels of anxiety and boredom (Kruk, 2016b). In the same vein, Zawodniak and Kruk (2018) came to the conclusion that SL had a positive effect on learner motivation because of its relatively stress-free environment. In his most recent study, Kruk (2021) also collected data from English majors visiting SL and unveiled the changing nature of individual difference variables such as boredom. The findings of another study focusing on the perception of boredom by English philology students during EFL classes demonstrated that senior year students experienced the feeling of boredom more often than the younger participants maybe because they had been attending classes of a similar nature for a longer period of time (Kruk & Zawodniak, 2017). Likewise, the study examining the causes and changes of boredom in four English language lessons attended by three students scoring the highest, average and the lowest on the English Classroom Boredom Scale led to the finding that the fluctuations in boredom levels were related to factors, such as language activities and the lesson organization (Zawodniak & Kruk, 2019). Changing levels of boredom was the research focus of another more recent study as well (Pawlak, Zawodniak, & Kruk, 2020a), and boredom was found to be mostly associated with factors, such as monotony, predictability and repetitiveness (Kruk et al., 2021).

Examining the diaries of students in which their positive and negative learning experiences were documented, Zawodniak et al. (2017) ascertained boredom-evoking factors including language activities, teacher behavior and lesson preparation. Additionally, Kruk and Zawodniak (2018) discovered that the level of students' boredom varied in terms of in-class and out-of-class contexts, the characteristics of the task and the phase of the lesson. It was found in the study that in-class contexts were perceived to contribute to boredom more often than out-of-school contexts, the repetitive nature of some tasks was the cause of boredom, and the end of the lesson was perceived to be more boring than the beginning. In another study in Poland, two factors (i.e., disengagement, monotony and repetitiveness, and lack of satisfaction and challenge) were identified as reasons for boredom, and it was realized that there were significant differences in these factors depending on the achievement level of the learners and their proneness to boredom (Pawlak, Kruk, Zawodniak, & Pasikowski, 2020). Also, connection was found between general proneness to boredom and individual trajectories as well as between contextual factors and feeling more or less bored at different phases of the lesson (Pawlak, Zawodniak, & Kruk, 2020b).

On the other hand, in the EFL context of Croatia, Dumančić (2018) carried out a qualitative study with the intention of exploring primary and secondary Croatian English language teachers' perception of boredom. Factors, such as the subject matter and grammar-oriented activities were found to result in boredom. While many of the participants in the study indicated that boredom did not have an impact on the quality of their teaching, some of them stated that boredom had some negative effects on their instruction.

In the Chinese EFL context, Li et al. (2020) investigated boredom among university students and their English teachers. The participants in the study recalled their experiences and described how they perceived boredom in learning the English language. A large majority of students recalled situations causing boredom in or outside the classroom. Similarly, each of the teachers in the study recalled a minimum of one episode when the learners felt bored. In another study in China, Li (2021) revealed that EFL learners who felt more competent in the process of learning the English language had the tendency to feel less bored and attached intrinsic value to learning the language which played a protective role against situations giving rise to boredom.

In the university EFL context of Thailand, Nakamura et al. (2021) investigated the antecedents of boredom and found that reasons, such as the difficulty of tasks, intensity of the

input, inadequacy in second language skills and unwanted behaviors of classmates lead to boredom in the classroom.

To the best of authors' knowledge, no studies have specifically dealt with the concept of boredom in the EFL context of Turkey. Given the fact that boredom is a construct which has not attracted adequate attention in the foreign language classroom (Li, 2021; Kruk & Zawodniak, 2020), the present study has the main objective to adapt the BPELC-R scale (Pawlak, Kruk, Zawodniak, & Pasikowski, 2020) into the high school EFL context of Turkey and to reveal high school EFL learners' levels of boredom and whether their levels of boredom differ significantly depending on the variables of gender, selected academic track and grade level. Therefore, the current study addresses the following research questions:

- 1. What are high school EFL learners' levels of boredom?
- 2. Do high school EFL learners' levels of boredom differ significantly depending on gender?
- 3. Do high school EFL learners' levels of boredom differ significantly depending on the selected academic track?
- 4. Do high school EFL learners' levels of boredom differ significantly depending on grade level?

METHOD

Participants

A total of 680 EFL students from eight different public high schools in a city in the Black Sea Region of Turkey volunteered to participate in the study. Throughout high school, EFL students in Turkey proceed through the Common European Framework of Reference for Languages (CEFR) levels, and the English proficiency levels of 9th, 10th, 11th and 12th graders are described respectively in the high school English curriculum of the Ministry of National Education (MoNE) as follows: A1/A2, A2+/B1, B1+/B2, B2+ (MoNE, 2018). The demographic distribution of the participants in line with the grade levels is as follows: 236 9th graders, 202 10th graders, 161 11th graders, and 81 12th graders. Also, 461 (67.8%) of the participants are female while the remaining 219 (32.2%) are male. The age range of the participants is between 14 and 17.

In most of the high schools in Turkey, when students are in the 10th grade, they choose academic tracks, such as science, Turkish language-mathematics and foreign languages as the first step of career choice and start taking more courses in line with their selected academic tracks (Güneş & Korkut-Owen, 2021; Eren & Coşkun, 2016). While the majority of students had not yet made a track selection at the time when the scale was administered, the number of students is 106 in the Turkish language-mathematics track, 98 in science and 57 in the foreign languages track.

Instrument

The original scale under the shortened title of BPELC-R was developed by Pawlak, Kruk, Zawodniak and Pasikowski (2020). It includes a two-factor structure with 23 7-point Likert items. The first factor having a high internal consistency reliability (α = .89) was named by the researchers as "disengagement, monotony and repetitiveness" (henceforth DMR), and it contains items focusing on participants' perception of time, lack of stimulation, the monotonous nature of the lessons, reluctance to participate in the activities, and behaviors not related to the activities. In contrast, the second factor (α = .88) labeled as "lack of satisfaction and challenge" (henceforth LSC) contains items related to the lack of satisfaction with English language classes, being engaged in unchallenging activities and the lack of challenge.

Adaptation into Turkish

The BPELC-R scale originally designed for university students was translated without any modifications from English to Turkish for high school students. The translation was done by an English instructor holding a PhD in ELT and was named as Boredom in English Language Classes Scale. Then, expert opinions of a group of instructors who have PhDs in the relevant fields were obtained (Yüksel et al., 2019; Yüksel & Yıldız, 2019). First, to maintain the accuracy of the translation, the original scale and the translated version were sent out to receive feedback from two instructors working in the department of translation and interpretation. After necessary revisions were made in line with their feedback, the opinions of two instructors in the field of teaching the Turkish language were obtained in terms of the comprehensibility and the grammatical correctness of the items in Turkish. Afterwards, the face validity of the final scale was checked by an instructor working in the department of measurement and evaluation. Finally, the opinions of five high school students were gathered to reveal whether any of the items were not comprehensible enough.

Data Analysis

The data were analyzed in line with earlier scale adaptation studies (Yüksel et al., 2019; Yüksel & Yıldız, 2019) using SPSS 22.0 and AMOS 23.0 package programs. Exploratory factor analysis (henceforth EFA) was used to examine the scale's factor structure, and the inclusion of the items in the scale was determined by considering their load values between 0.30 and above; on the other hand, confirmatory factor analysis (henceforth CFA) was used to understand whether the translated scale was compatible with the original scale in terms of factor structure when the data was collected from another sample (Kline, 2011; Tabachnick & Fidell, 2007).

Item analysis was performed to identify the distinctiveness of the scale items. Total item correlation above 0.30 was deemed to be sufficient, and in the item analysis based on internal consistency criteria, 27% of the upper group and 27% of the subgroup of the scale score distribution were determined (Flury & Riedwyl, 1988). The t test was applied between these two groups, and the t values were calculated. Also, item total correlation was included in the analysis. To reveal the reliability of the scale, the Cronbach's alpha internal consistency coefficient was calculated and the following values were investigated to discover the convergent validity of the scale: standard factor loads, average variance extracted (henceforth AVE) and construct reliability (henceforth CR); furthermore, the discriminant validity of the scale was maintained by the comparison of the square root of the AVE which is related to a specific construct (Fornell & Larcker, 1981).

In this study, the normality Kolmogrov-Simirnov test was used (Kwak & Kim, 2017). To examine whether participants' boredom levels differ depending on the gender, Mann Whitney U Test was applied, and to unveil the effect of grade level and selected academic tracks on the level of boredom, Kruskal - Wallis Test was run. The source of the differences among groups was identified by the application of Mann Whitney U Test as pairs. Moreover, the mean and standard deviation values of the variables were computed.

RESULTS

Validity of the Scale

The construct validity of the scale was investigated by means of EFA. It was revealed that the data set is suitable to perform factor analysis considering the Kaiser-Meyer-Olkin (KMO) fit

coefficient (0.914) and the Bartlett test chi-square value (15373.518, p < .001) (Büyüköztürk, 2008). The EFA results are presented in Table 1:

Table 1. EFA Results

Rotated Factor Load Values								
Item	DMR	LSC						
23	.854							
20	.849							
22	.842							
6	.834							
1	.819							
21	.811							
19	.793							
10	.777							
14	.760							
15	.754							
11	.747							
16	.680							
18	.550							
17	.342							
4		.883						
3		.878						
2		.836						
8		.810						
13		.799						
12		.793						
7		.749						
9		.635						
5		.393						

Explained Variance: 66.64%

Factor 1: 51.22% Factor 2: 15.42%

As can be observed in Table 1, two factors that explain 66.64% of the total variance and have an eigenvalue above 1 were obtained. The first factor (DMR) consists of 14 items (23, 20, 22, 6, 1, 21, 19, 10, 14, 15, 11, 16, 18 and 17) and the second factor (LSC) is comprised of 9 items (4, 3, 2, 8, 13, 12, 7, 9 and 5). The factor loads of the first factor items vary between 0.342 and 0.854, and the items in the second factor have factor loads between 0.393 and 0.883. It is an appropriate criterion for each item to be included in the scale to have a factor load value above 0.50; therefore, items 17 (.342) and 5 (.393) were removed from the scale because of their low factor loadings (Truong & McColl, 2011). On the other hand, the CFA results presented in Figure 1 showed a good fit with the data of this research (χ^2 / df = 4.78; CFI = 0.918; IFI = 0.925; NFI = 0.912; RMSEA = 0.057) (Zainudin, 2012). Factor loads were found to be between 0.55 and 0.88, and thus they are sufficient values for the factor load of the items (Whitley & Kite, 2012). As a result of the analysis of regression coefficients by means of significance tests, the factor loads of all items in the scale were found to be significant (p <.05).

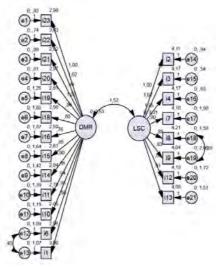


Figure 1. Structural Model

Convergent Validity Findings

In addition to factor loads, AVE and CR values are also important to reveal the convergent validity (Farrell & Rudd, 2009). Therefore, standard factor loads, AVE and CR values are provided in Table 2.

 Table 2. Standard Factor Loads, AVE and CR Values

Items	DMR	LSC	
23	.854		
20	.849		
22	.842		
6	.834		
1	.819		
21	.811		
19	.793		
10	.777		
14	.760		
15	.754		
11	.747		
16	.680		
18	.550		
4		.883	
3		.878	
2		.836	
8		.810	
13		.799	
12		.793	
7		.749	
9		.635	
AVE	0.49	0.53	
CR	0.618	0.699	

As can be understood from Table 2, the AVE values of all factors are above 50%. Also, the CR values were found to be 0.618 for the DMR factor and 0.60-0.70 for the LSC factor. These results indicate that the scale has convergent validity (Hair et al., 2010).

Discrimination Validity Findings

For discrimination validity, the AVE value of both factors must be higher than the square of the correlation coefficient between these factors (Henseler et al., 2014). The squares of the correlation coefficients calculated for the factors and the AVE values of the factors are illustrated in Table 3.

Table 3. Squares of the Correlation Values and AVE Values

Factors	DMR	LSC
DMR (AVE=0.49)	1	_
LSC (AVE=0.53)	0.016	1

It can be realized from Table 3 that the two-factor scale has discrimination validity (AVE value for the DMR factor .49>.016; AVE value for the LSC factor .53>.016).

Item Analysis Results of the Scale

The results of the T-test and the corrected item-total correlations are provided in Table 4.

Table 4. Item Analysis and Differences between Top and Bottom 27%

Items	t values	p	item-total correlation	
23	10.238	.00	.542	
20	7.516	.00	.456	
22	8.421	.00	.478	
6	8.124	.00	.525	
1	6.318	.00	.384	
21	7.368	.00	.518	
19	9.158	.00	.425	
10	10.24	.00	.511	
14	8.316	.00	.436	
15	7.396	.00	.409	
11	10.784	.00	.326	
16	8.315	.00	.478	
18	10.03	.00	.502	
4	11.98	.00	.457	
3	12.14	.00	.489	
2	8.946	.00	.365	
8	9.124	.00	.425	
13	12.656	.00	.489	
12	7.354	.00	.389	
7	6.587	.00	.431	
9	10.25	.00	.361	

As illustrated in Table 4, item-total correlations of the items were found to be between .326 and .542, and the t-values were between 6.318 and 12.656. The item total correlation values

of the items were above 0.30. These values mean that the items sufficiently represent the whole scale (Hair et al., 2010). The discrimination values of all the items in the scale were found to be sufficient (p < .05).

Reliability of the Scale

The Cronbach's alpha internal consistency coefficients found for each of the items are presented in Table 5.

Table 5. Reliability Analysis Results for the Items

Item No	Cronbach α	Sub-dimensions	Cronbach α
23	.756		
20	.745		
22	.690		
6	.750		
1	.754		
21	.912		
19	.978	DMR	.786
10	.866		
14	.745		
15	.698		
11	.780		
16	.862		
18	.749		
4	.779		
3	.781		
2	.780		
8	.757	LCC	745
13	.845	LSC	.745
12	.816		
7	.784		
9	.658		

As can be realized from Table 5, the Cronbach's alpha coefficients for the DMR factor (.786), for the LSC factor (.745) and for the whole scale (.762) demonstrate that the scale has sufficient reliability (Nunnally & Bernstein, 1994).

Results Regarding Students' Boredom Level in English Language Classes

In line with the first research question (What are high school EFL learners' levels of boredom?), students' boredom levels according to factors (Table 6) and students' boredom levels for each item (Table 7) are illustrated. The mean and the standard deviations for both factors and the whole scale are presented according to factors in Table 6.

Table 6. Students' Boredom Levels According to Factors

(Boredom in English Language Classes Scale)	n	\overline{X}	S	
DMR	680	4.34	1.22	
LSC	680	4.40	1.16	
The Whole Scale	680	4.36	1.31	

As can be seen in Table 6, for the DMR factor, the mean score was found to be 4.34 and the standard deviation was calculated as 1.22. In a similar vein, the mean score of the LSC factor is 4.40 and the standard deviation is 1.16. For the whole scale, the mean score was calculated as 4.36 and the standard deviation is 1.31. These results indicate that the boredom level of the participants in English language classes is at the medium level. The fact that the mean scores of both factors are close to each other also shows that students' perception of boredom does not differ depending on the factors. The answers given by the students (1-I completely disagree and 7-I completely agree) to each item are demonstrated in Table 7.

Table 7. Students' Boredom Levels for Each Item

Factor	Factor Itams -		Itoms		n \overline{X}			1		2		4		4		5		6	ı	7
Factor	Items	n	X	SS	f	%	f	%	f	%	f	%	f	%	f	%	f	%		
	1	680	4.35	1.92	80	11.8	51	7.5	105	15.4	91	13.4	120	17.6	161	19.3	102	15.0		
	6	680	4.49	1.88	55	8.1	69	10.1	85	12.5	114	16.8	112	16.5	121	17.8	124	18.2		
	10	680	4.46	1.97	76	11.2	62	9.1	78	11.5	108	15.9	90	13.2	142	20.9	124	18.2		
	11	680	3.61	2.08	159	23.4	96	14.1	73	10.7	123	18.1	75	11.0	57	8.4	97	14.3		
	14	680	3.76	1.96	115	16.9	105	15.4	91	13.4	125	18.4	73	10.7	99	14.6	72	10.6		
~	15	680	3.69	1.87	118	17.4	80	11.8	116	17.1	148	21.8	77	11.3	78	11.5	63	9.3		
DMR	16	680	4.26	1.87	71	10.4	69	10.1	91	13.4	136	20.0	100	14.7	119	17.5	94	13.8		
П	18	680	4.66	2.06	90	13.2	44	6.5	67	9.9	81	11.9	76	11.2	164	24.1	158	23.2		
	19	680	4.57	1.90	61	9.0	61	9.0	73	10.7	108	15.9	122	17.9	117	17.2	138	20.3		
	20	680	4.77	1.94	61	9.0	45	6.6	84	12.4	78	11.5	105	15.4	143	21.0	164	24.1		
	21	680	4.52	2.02	75	11.0	65	9.6	75	11.0	114	16.8	77	11.3	115	16.9	159	23.4		
	22	680	4.40	2.07	94	13.8	55	8.1	85	12.5	106	15.6	71	10.4	123	18.1	146	21.5		
	23	680	4.44	1.94	76	11.2	59	8.7	86	12.6	98	14.4	94	13.8	158	23.2	109	16.0		
	2	680	4.90	1.87	52	7.6	47	6.9	55	8.1	100	14.7	94	13.8	167	24.6	165	24.3		
	3	680	5.07	1.95	57	8.4	38	5.6	67	9.9	60	8.8	81	11.9	166	24.4	211	31.0		
()	4	680	4.33	1.84	66	9.7	64	9.4	93	13.7	120	17.6	115	16.9	133	19.6	89	13.1		
TSC	7	680	4.57	1.87	74	10.9	85	12.5	115	16.9	123	18.1	100	14.7	93	13.7	90	13.2		
	8	680	4.17	1.80	65	9.6	76	11.2	92	13.5	156	22.9	102	15.0	108	15.9	81	11.9		
	9	680	4.43	2.00	72	10.6	42	6.2	71	10.4	72	10.6	84	12.4	162	23.8	177	26.0		
	12	680	4.58	1.89	58	8.5	63	9.3	62	9.1	134	19.7	113	16.6	104	15.3	146	21.5		
	13	680	4.05	2.10	147	21.6	105	15.4	91	13.4	92	13.5	63	9.3	92	13.5	90	13.2		

Table 7 shows that the mean scores for different dimensions of the DMR factor were found as follows: students' perception of time (items 1, $23=\bar{x}$ 4.39), lack of stimulation (items 6, 15, 20, $22=\bar{x}$ 4.33), the monotonous nature of the lessons (items 11, $16=\bar{x}$ 3.93), reluctance to participate in the activities (items 10, 14, $21=\bar{x}$ 4.24) and behaviors not related to the activities (items 18, $19=\bar{x}$ 4.61). The results indicate that EFL students mostly experience boredom due to the monotonous nature of the lessons. On the other hand, the mean scores for

the dimensions of the LSC factor were found as follows: the lack of satisfaction with English lessons (items 4, 8, $9=\bar{x}$ 4.31), being engaged in unchallenging activities (items 2, $3=\bar{x}$ 4.98) and the lack of challenge (items 7, 12, $13=\bar{x}$ 4.40). These findings reveal that boredom is mostly experienced because of the lack of satisfaction with English lessons.

Results Regarding the Gender Variable

The Kolmogrov-Simirnov test was applied (Kwak & Kim, 2017), and the results are provided in Table 8. In order to answer the second research question (Do high school EFL learners' levels of boredom differ significantly depending on gender?), the Mann Whitney U Test was used, and the findings are presented below.

Table 8. Kolmogorov-Simirnov Normality Test Results Regarding the Gender

	Kolmogrov-Simirnov					
Test	ks	sd	p			
The Whole Scale	.065	680	.000			

As illustrated in Table 8, the research data were not normally distributed (p < .05). Therefore, non-parametric methods were used to investigate the effects of demographic variables. Mann Whitney U Test was applied to investigate the effect of gender on students' boredom levels, and it was ascertained that there is no significant difference between male and female students (U = 49139.0, p > .05). The mean rank of the female students (343.4) was found to be close to male students' mean rank (334.3).

Results Regarding the Selected Academic Track Variable

Related to the third research question (Do high school EFL learners' levels of boredom differ significantly depending on the selected academic track?), since the data were not normally distributed, the Kruskal - Wallis Test was firstly run to reveal the effect of the selected academic track on students' boredom levels in English language classes. In Table 9 summarizing the results, the category named as *Not selected* refers to students who had not selected their academic tracks.

Table 9. Kruskal - Wallis Test Results Regarding the Selected Academic Track

Factors	Track	N	Mean Rank	sd	χ2	p	Significant Difference
	Turkish language-mathematics (A)		314.02				4 B B G
The Whole Scale	Science (B)	98	255.98	3	3 40.07		A-B, B-C A-C, B-D
	Foreign languages (C)	57			.000	A-D	
	Not selected (D)	419	351.69				

As presented in Table 9, the selected academic track is an important variable [$\chi 2$ (3) = 40.07, p <.05]. The results of the Mann Whitney U Test unveiled differences between Turkish language-mathematics and science (U=4251, p <.05), Turkish language-mathematics and foreign languages (U=1795.5, p <.05), Turkish language-mathematics and Not selected (U=19682.5, p <.05), science and foreign languages (U=1259, p <.05), science and Not selected (U=8298, p <.05). Students' mean rank in the foreign languages track (452.82) was found to be higher than the mean ranks of the students in the other academic tracks; conversely, the mean rank of the

students in the science track (255.98) was found to be the lowest. From these findings, it would be true to conclude that students who selected the foreign languages track are the least bored in English lessons while students in the science track feel the most bored.

Results Regarding the Grade Variable

Pertaining to the fourth research question (Do high school EFL learners' levels of boredom differ significantly depending on grade level?), the results of the Kruskal - Wallis Test performed to show whether the grade level had any influence on students' boredom level in English lessons are demonstrated in Table 10.

Table 10. Kruskal - Wallis Test Results Regarding the Grade

	Grade Level	N	Mean Ranks	sd	χ2	p	Significant Difference
The Whole Scale	9 (A) 10 (B)	236 202	368.78 338.32	3			A-C A-D B-D
	10 (B) 11 (C)	161	328.01		11.27	.010	
	12 (D)	81	288.38				

It can be realized from Table 10 that grade level is an effective variable in terms of students boredom [$\chi 2$ (3) = 11.27, p <.05]. The Mann Whitney U Test revealed differences in terms of boredom levels between 9th and 11th graders (U = 16704, p <.05), 9th and 12th (U = 7335, p <.05) and 10th and 12th graders (U = 6938, p <.05). Additionally, the average rank of 12th grade students (288.38) was found to be the lowest, which indicates that their boredom level was the highest. In contrast, 9th graders' mean ranks (368.78) showed that their boredom level was the lowest. From these findings, it can be concluded that the higher the grade levels of the students, the more boredom they experience in English language classes.

DISCUSSION

The aim of the study was to adapt the BPELC-R (Pawlak, Kruk, Zawodniak, & Pasikowski, 2020) into the Turkish high school EFL context. 680 students from 8 different high schools participated in the study. The results of the EFA showed a 2-factor structure with an eigenvalue above 1 and these factors explain 66.64% of the total variance (Büyüköztürk, 2008). As a result of the CFA analysis, it was found that the model showed a good fit with the data of this research study (Zainudin, 2012). Factor loads varied between 0.55 and 0.88, and items 17 (.342) and 5 (.393) were excluded from the scale because of their low factor loadings (Truong & McColl, 2011). On the other hand, the convergent validity of the scale was maintained by the AVE values of all factors which were found to be above 50%; furthermore, the item-total correlations of the items were between .326 and .542, and the t values varied between 6.318 and 12.656 (Hair et al., 2010). The discrimination power of all the items of the scale was also found to be sufficient (p < .05), and the internal consistency of the scale was maintained by calculating the Cronbach's alpha coefficient for the whole scale (.762), for the DMR factor (.786) and for the LSC factor (.745) (Nunnally & Bernstein, 1994)

The resulting instrument after the adaptation process was named the Boredom in English Language Classes Scale which is comprised of 21 items. The mean of the whole scale was 4.36 and the standard deviation was 1.31 which means that the boredom level of the students

in English lessons is at the medium level. This result concurs with the findings of the report published by British Council and TEPAV (2013) which unveiled boredom as one of the most important causes of not enjoying the English classes in the Turkish EFL context.

Item analysis statistics in the present study led to the finding that students experience boredom mostly due to monotony and lack of satisfaction with English classes. The findings related to the monotonous nature of the lessons are in line with the results of other studies concluding that being monotonous, predictable and being taught by the same teachers are important reasons for boredom in English language classes (Kruk & Zawodniak, 2017; Zawodniak et al., 2017; Dumančić, 2018). Repetition of language materials and using the same teaching methods with similar types of activities are also the causes of monotony, thus boredom in the literature (Kruk & Zawodniak, 2020). According to researchers in the field of psychology, emotions such as boredom and frustration can emerge when routines or monotonous activities are obligated (Larson & Richards, 1991; Titz, 2001; Hill & Perkins, 1985).

Considering that boredom is a dynamic construct which can change from one lesson to the next and even in a single class (Zawodniak & Kruk, 2019), the study explored whether EFL learners' boredom levels differ depending on variables, such as gender, grade level and selected academic track at high schools. Contrary to the literature revealing significant differences in boredom proneness depending on gender (von Gemmingen et al., 2003; Jaradat, 2015), no significant difference was discovered in the current study between male and female students regarding their boredom levels.

On the other hand, it was revealed in this study that participants' boredom levels differ significantly depending on their grade level, and boredom increases as the grade level rises. Likewise, Kruk and Zawodniak (2017) ascertained that English majors in Poland experienced the feeling of boredom more frequently than the younger participants and justified this finding by referring to the similar nature of the lessons students had been attending for a long time. An increasing trend of reported boredom was also observed between 5th and 8th graders in another study (Larson & Richards, 1991). Additionally, the grade level was found to be negatively correlated with enjoyment of English language classes in the literature. For instance, while the majority of 5th grade students (80%) in Turkey state that they enjoy English classes, the enjoyment rate reduces continuously every year and ends up with 37% when these students are 12th graders (British Council & TEPAV, 2013). Similarly, although Japanese junior high school EFL learners display enthusiasm about learning the English language throughout the first semester in their first year, their enthusiasm decreases in later semesters (Hatori & Matsubata, 1980).

Another finding of the current research study is that the boredom level of students who selected the foreign languages track was the lowest while the level of boredom in English classes was the highest for students in the science track. This finding can be justified with the intrinsic value attached by more competent learners (i.e., students in the foreign languages track would like to pursue a career related to the English language in the context of the study) to the English language learning process (Li, 2021).

PEDAGOGICAL IMPLICATIONS AND CONCLUSIONS

Considering that the research studies related to boredom in language classes aim to uncover the reasons behind boredom and to conclude some strategies on how to reduce it (Dumančić, 2018), some suggestions in accordance with the findings and the context of the present study can be made. For instance, as recommended by Kruk (2016a), the medium level of boredom found in the study can be lowered if teachers try to understand the boredom proneness of their students and enrich their instructional practices and materials by introducing authentic

materials. He also underlined the need to design a variety of exercises at different difficulty levels and to encourage students to find activities on their own on the Internet.

In order to reduce monotony which was discovered as one of the most common causes of boredom in this study, it is also deemed necessary by Kruk (2016a) to expose students to different language teachers in a school year because students need to observe different teaching methods and techniques. If the similarity of the lessons, materials or teaching styles can be reduced over time, the boredom level which was found to steadily increase in higher grades in the current study can also be decreased (Kruk & Zawodniak, 2017).

Furthermore, now that grammar-oriented activities are one of the causes of boredom in EFL classes (Dumančić, 2018; Kruk, 2016a), interactive learning activities combining meaningful hands-on activities and self-regulated strategies (e.g., goal setting, self-assessment) which can pave the way for student autonomy as language learners ought to be incorporated into the lessons to make students more satisfied with English classes (Zawodniak et al., 2017). The importance of providing choices to learners in line with their most favorable learning environment is also highlighted by other researchers (Vogel-Walcutt et al., 2012).

The discussions between students and teachers related to the responsibility to reduce boredom in the classroom are considered important as well (Nett et al., 2011). According to the emotion theory, students need to identify, be aware of and explain their boredom to be able to deal with it successfully; therefore, a transparent classroom environment where instances of boredom experienced by the students can be openly stated should be created (Eastwood et al., 2012). Finally, Kruk (2016a) emphasizes that students can be motivated in EFL classes by focusing on their needs and desires after a needs analysis study involving students and their teacher/s. Especially for students in the science track who were found in the current study to have the highest level of boredom in English classes, a careful needs analysis aiming to specify their proficiency levels, lacks and wants as well as a comprehensive investigation of factors such as their language learning motivation are essential to be able to make the English language learning experience interesting to them (Nation & Macalister, 2010).

In conclusion, since the concept of boredom has not been investigated sufficiently in the foreign language classroom (Li, 2021) and no such studies have been carried out in Turkey, it would be fair to conclude this study with a call for more research inquiries in the Turkish EFL context. To fill the existing gap in the relevant literature, this study had the main objective to illustrate the adaptation of a scale into the Turkish EFL context and to determine the boredom levels of high school students. Although the aforementioned recommendations can be made considering the results of the present study, these results are limited to eight high schools in the research context and to a quantitative data collection instrument. Therefore, more research studies involving larger sample sizes in a variety of settings (e.g., primary schools, universities) and the addition of open-ended questions to the Likert scale can yield more conclusive results pertaining to the boredom profiles of EFL learners.

ACKNOWLEDGEMENT

The authors are grateful to Dr. Mariusz Kruk for his helpful comments/suggestions on an earlier version of the paper.

REFERENCES

Bearden, L. J., Spencer, W. A., & Moracco, J. C. (1989). A study of high school dropouts. *School Counselor*, 37(2), 113-120.

- Bench, S. W., & Lench, H. C. (2013). On the function of boredom. *Behavioral Sciences*, 3, 459-472.
- British Council & TEPAV. (2013). *Turkey national needs assessment of state school English language teaching*. Ankara: Mattek.
- Büyüköztürk, Ş. (2008). Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum. Ankara: Pegem Akademi.
- Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language. *Language Learning*, 44(3), 417-448.
- Dumančić, D. (2018). Investigating boredom among EFL teachers. ExELL (Explorations in English Language and Linguistics), 6(1), 57-80.
- Eastwood, J. D., Frischen, A., Fenske, M. J., & Smilek, D. (2012). The unengaged mind: Defining boredom in terms of attention. *Perspectives on Psychological Science*, 7(5), 482-495.
- Eren, A., & Coşkun, H. (2016). Students' level of boredom, boredom coping strategies, epistemic curiosity, and graded performance. *Journal of Educational Research*, 109(1), 574-588.
- Farrell, A. M., & Rudd, J. M. (2009). Factor analysis and discriminant validity: A brief review of some practical issues. Presented at the Australia-New Zealand Marketing Academy Conference, Melbourne, Australia, 30 November-2 December.
- Flury, B., & Riedwyl, H. (1988). *Multivariate statistics: A practical approach*. London: Chapman and Hall.
- Fornell C., & Larcker D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gardner, R. C., Masgoret, A. M., Tennant, J., & Mihic, L. (2004). Integrative motivation: Changes during a year-long intermediate level language course. *Language Learning*, 54(1), 1-34.
- Greenson, R. R. (1953). On boredom. *Journal of American Psychoanalytic Association*, 1, 7-21
- Goetz, T., Frenzel, A. C., & Pekrun, R. (2007). Regulation von Langeweile im Unterricht. Was Schülerinnen und Schüler bei der "Windstille der Seele" (nicht) tun. [Regulation of boredom in class. What students (do not) do when experiencing the 'windless calm of the soul']. *Unterrichtswissenschaft*, 35(4), 312-333.
- Goetz, T., Frenzel, A. C., Hall, N. C., Nett, U. E., Pekrun, R., & Lipnevich, A. A. (2014). Types of boredom: An experience sampling approach. *Motivation and Emotion*, 38(3), 401-419.
- Götz, T., & Frenzel, A. C. (2006). Phänomenologie schulischer Langeweile [Phenomenology of boredom at school]. Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 38(4), 149-153.
- Güneş, A., & Korkut-Owen, F. (2021). Examining career indecision of Anatolian high school students by academic procrastination and various other variables. *Pamukkale University Journal of Education*, 51, 498-528.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis. Upper Saddle River, NJ: Prentice Hall.
- Harasymchuk, C., & Fehr B. (2010). A script analysis of relational boredom: Causes, feelings, and coping strategies. *Journal of Social and Clinical Psychology*, 29(9), 988-1019.
- Hatori, H., & Matsubata, K. (1980). Gakushusya chushin no eigo kyoiku [Learner-centered English language education]. Tokyo: Taishukan Shoten
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.

- Hill, A. B., & Perkins, R. E. (1985). Towards a model of boredom. *British Journal of Psychology*, 76(2), 235-240.
- Jaradat, A. M. (2015). Differences in boredom proneness according to gender and academic achievement. *Indian Journal of Health and Wellbeing*, 6(10), 982-985.
- Klapp, O. (1986). Overload and boredom. New York: Greenwood Press.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press.
- Kruk, M. (2016a). Investigating the changing nature of boredom in the English language classroom: Results of a study. In A. Dłutek, & D. Pietrzak (Eds.), *Nowy wymiar filologii* (pp. 252-263). Płock: Wydawnictwo Naukowe Państwowej Wyższej Szkoły Zawodowej w Płocku.
- Kruk, M. (2016b). Variations in motivation, anxiety and boredom in learning English in Second Life. *The EUROCALL Review*, 23(1), 25-39.
- Kruk, M. (2021). Investigating dynamic relationships among individual difference variables in learning English as a foreign language in a virtual world. Cham: Springer.
- Kruk, M., & Zawodniak, J. (2017). Boredom in practical English language classes. *Neofilolog*, 49(1), 115-131.
- Kruk, M., & Zawodniak, J. (2018). Boredom in practical English language classes: Insights from interview data. In L. Szymański, J. Zawodniak, A. Łobodziec, & M. Smoluk (Eds.), *Interdisciplinary views on the English language, literature and culture* (pp. 177-191). Zielona Góra: Uniwersytet Zielonogórski.
- Kruk, M., & Zawodniak, J. (2020). A comparative study of the experience of boredom in the L2 and L3 classroom. *English Teaching & Learning*, 44, 417-437.
- Kruk, M., Pawlak, M., & Zawodniak, J. (2021). Another look at boredom in language instruction: The role of the predictable and the unexpected. *Studies in Second Language Learning and Teaching*, 11(1), 15-40. http://dx.doi.org/10.14746/ssllt.2021.11.1.2
- Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: the cornerstone of modern statistics. *Korean Journal of Anesthesiology*, 70, 144-56.
- Larson, R. W., & Richards, M. H. (1991). Boredom in the middle school years: Blaming schools versus blaming students. *American Journal of Education*, 99(4), 418-443.
- Li, C., Dewaele, J., & Hu Y. (2020). Foreign language learning boredom: conceptualization and measurement. *Applied Linguistics Review*.
- Li, C. (2021). A control-value theory approach to boredom in English classes among university students in China. *The Modern Language Journal*, 105, 317-334.
- Mann S., & Robinson A. (2009). Boredom in the lecture theatre: An investigation into the contributors, moderators, and outcomes of boredom amongst university students. *British Educational Research Journal*, 35(2), 243-258.
- Meyer, D. K., & Turner, J. C. (2006). Re-conceptualizing emotion and motivation to learn in classroom contexts. *Educational Psychology Review*, 18(14), 377-390.
- MoNE. (2018). *High School English Curriculum* (9th, 10th, 11th and 12nd Grades). Retrieved from http://mufredat.meb.gov.tr/ProgramDetay.aspx?PID=342
- Mugon, J., Danckert, J., & Eastwood, J. (2019). The costs and benefits of boredom in the classroom. In *The Cambridge handbook of motivation and learning*. Cambridge: Cambridge University Press.
- Muñoz, A., & Ortega-Martín, J. L. (2005). Affective variables in second language acquisition and their effect on the Spanish academic context. *Revista de Lenguas para Fines Específicos*, 21(1), 41-66.
- Nakamura, S., Darasawang, P., & Reinders, H. (2021). The antecedents of boredom in L2 classroom learning. *System*, 102469.
- Nation, I. S. P., & Macalister, J. (2010). *Language curriculum design*. New York & London: Routledge.

- Nett, U. E., Goetz, T., & Daniels, L. M. (2010). What to do when feeling bored?: Students' strategies for coping with boredom. *Learning & Individual Differences*, 20(6), 626-638.
- Nett, U. E., Goetz, T., & Hall, N. C. (2011). Coping with boredom in school: An experience sampling perspective. *Contemporary Educational Psychology*, *36*(1), 49-59.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Pawlak, M., Zawodniak, J., & Kruk, M. (2020a). Boredom in the foreign language classroom: A micro-perspective. Cham: Springer.
- Pawlak, M., Zawodniak, J., & Kruk, M. (2020b). Individual trajectories of boredom in learning English as a foreign language at the university level: Insights from three students' self-reported experience. *Innovation in Language Learning and Teaching*. https://doi.org/10.1080/17501229.2020.1767108
- Pawlak, M., Kruk, M., Zawodniak, J., & Pasikowski, S. (2020). Investigating factors responsible for boredom in English classes: The case of advanced learners. *System*, 91, 1-10.
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review, 18*, 315-341.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37(2), 91-106.
- Pekrun, R., Goetz, T., Daniels, L. M., Stupnisky, R. H., & Perry, R. P. (2010). Boredom in achievement settings: exploring control-value antecedents and performance outcomes of a neglected emotion. *Journal of Educational Psychology*, 102(3), 531-549.
- Preckel F., Götz, T., & Frenzel A. (2010). Ability grouping of gifted students: Effects on academic self-concept and boredom. *British Journal of Educational Psychology*, 80, 451-472.
- Sawin D. A., & Scerbo M. W. (1995). Effects of instruction type and boredom proneness in vigilance: Implications for boredom and workload. *Human Factors*, 37, 752-765.
- Sharp, J. G., Sharp, J. C., & Young, E. (2020). Academic boredom, engagement and the achievement of undergraduate students at university: a review and synthesis of relevant literature. *Research Papers in Education*, 35(2), 144-184.
- Tabachnick, B. G., & Fidell, L.S. (2007). *Using multivariate statistics*. (5th ed.). USA: Pearson Education.
- Titz, W. (2001). Emotionen von Studierenden in Lernsituationen-Explorative Analysen und Entwicklung von Selbstberichtskalen. Munster: Waxmann.
- Truong, Y., & McColl, R. (2011). Intrinsic motivations, self-esteem, and luxury goods consumption. *Journal of Retailing and Consumer Services*, 18(6), 555-561.
- Vogel-Walcutt, J., Fiorella, L., Carper, T., & Schatz, S. (2012). The definition, assessment, and mitigation of state boredom within educational settings: A comprehensive review. *Educational Psychology Review*, 24(1), 89-111.
- von Gemmingen, M. J., Sullivan, B. F., & Pomerantz, A. M. (2003). Investigating the relationships between boredom proneness, paranoia, and self-consciousness. *Personality and Individual Differences*, *34*(6), 907-919.
- Watt, J. D., & Vodanovich S. J. (1999). Boredom proneness and psychosocial development. *The Journal of Psychology*, *133*(3), 303-314.
- Whitley, B. E., & Kite, M. E. (2012). Factor analysis, path analysis, and structural equation modeling. In *Principles of Research in Behavioral Science*: Routledge.
- Yüksel, Y., & Yıldız, B. (2019). Adaptation of sustainability consciousness questionnaire. *Erciyes Journal of Education*, *3*(1), 16-36.

- Yüksel, Y., Kurtuluş, F., & Yüksel, G. A. (2019). Yabancı dil öğretmeni dönüt ölçeği'nin Türkçe'ye uyarlanması. *Uluslararası Alan Eğitimi Dergisi*, 5(2), 14-29.
- Zainudin, A. (2012). A handbook on SEM: Structural equation modelling using amos graphics (4th ed.). Kelantan: University Technology MARA Press.
- Zawodniak, J., & Kruk, M. (2018). Wpływ świata wirtualnego Second Life na zmiany w poziomie motywacji, lęku językowego i doświadczenia nudy u studentów filologii angielskiej. *Neofilolog*, *50*(1), 65-85.
- Zawodniak, J., & Kruk, M. (2019). Boredom in the English language classroom: An investigation of three language learners. *Konin Language Studies*, 7(2), 197-214.
- Zawodniak, J., Kruk, M., & Chumas, J. (2017). Towards conceptualizing boredom as an emotion in the EFL academic context. *Konin Language Studies*, *5*(4), 425-441.