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The Effects of Music on Achievement Emotions and Self-Efficacy Beliefs of Students Who Have Different Learning Styles

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Abstract

This study aims to examine the effects of English course with background music on self-efficacy beliefs and achievement emotions of students who have different learning styles and find out what students think about the implementation. For this purpose, the sequential explanatory design was used. To obtain quantitative data, an experimental design, and to collect qualitative data, a semi-structured questionnaire form was applied. The study was carried out with 53 students at a high school in Turkey. During the experiment period, the background music was used in the English course. The study has revealed that using background music leads to a significant diferentiation in the achievement emotions in a positive way but not on self-efficacy beliefs. In terms of learning styles, the implementation has had positive effects on class-related enjoyment of the students with the style of converging and accommodating. In terms of class-related boredom, the implementation has had a positive effect on students having converging learning styles. The data obtained from qualitative processes also has confirmed this. The qualitative data has proved that the implementation is effective on emotions such as happiness, enjoy, excitement, boredom, anger and on motivation, engagement and actively participating. The students generally have supported background music.

Müziğin Farklı Öğrenme Stillerine Sahip Öğrencilerin Başarı Duyguları ve Öz-yeterlik İnançları Üzerine Etkisi

Makale Bilgisi

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Özet

Bu çalışma müzik eşliğinde yapılan İngilizce derslerinin farklı öğrenme stillerine sahip öğrencilerin özyeterlik inançları ve başarı duyguları üzerine etkisini araştırmayı amaçlamaktadır. Bu amaçla sıralı açıklayıcı tasarım kullanılmıştır. Nicel verileri toplamak için deneysel desen, nitel verileri toplamak için yarı yapılandırılmış anket formu kullanılmıştır. Çalışma Türkiye'de bir lisede öğrenim gören 53 öğrenci ile yürütülmüştür. Deney esnasında İngilizce derslerinde arka planda müzik kullanılmıştır. Çalışma, arka plan müziğinin kullanılmasının, başarı duygularında olumlu bir farklılığa yol açtığını, ancak öz-yeterlik inançlarına herhangi bir fark yaratmadığını ortaya çıkarmıştır. Öğrenme stilleri açısından ayrıştırma ve yerleştirme stiline sahip öğrencilerde ders keyif duygusunda olumlu yönde etkiye sahip olduğu bulunmuştur. Ders sıkılma duygusu açısından uygulama ayrıştırma stiline sahip öğrenciler üzerinde olumlu etkiye sahip olduğu görülmüştür. Nitel süreçlerden elde edilen veriler de bunu doğrulamıştır. Nitel veriler uygulamanın mutluluk, keyif, heyecan, sıkılma, öfke duyguları ve motivasyon, derse bağlanma ve aktif katılım üzerinde etkili olduğunu göstermiştir. Öğrenciler genel olarak arka plan müziğini desteklemişlerdir.

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Introduction

From the moment he was born, the human being has interacted with the environment. In addition to the fact that this interaction and his inherent features shape the future life of human being, the most important thing that affects people is learning skill. Learning was defined by Collins and O'Brian (2011) as a psychological process in which permanent changes related to an individual's knowledge or behaviour occurring as a result of experience. Pritchard (2009) defined learning as changes occurring in behaviour, a process of acquiring skills and having new knowledge and a process of developing insight based on experiences the individual has had from various sources. Learning, which can generally be defined as the change in behaviour, can be affected positively or negatively by many variables. These variables can be external factors besides the physical, affective and physiological characteristics of individuals (Şimşek, 2002).

Among these factors, one of the concepts which has become a priority research subject in recent years and on which many discussions continue is learning style. Learning style can be defined as the preference of the individual to use his/her abilities in experiential learning (Kolb, 2015) and students' using different and specific methods while preparing for learning new and difficult facts, acquiring and remembering them (Dunn & Dunn, 1986). Grasha, who emphasized the importance of preferences in learning, defined the learning style as combining the skills and learning experiences of students in the process of acquiring knowledge (Güven & Kürüm, 2006).

Given the individuals learning new things, it is a known fact that not every individual learns the same way. Each people approach learning where they are most comfortable, and in doing so, they leave behind approaches which they are less comfortable with (Pritchard, 2009). It will be beneficial for individuals to be able to use learning styles that are suitable for their learning and to be aware of their learning preferences to improve their learning potential when they encounter a certain learning situation. Because, an individual will manage the process according to the style he/she is weak or strong and thus will manage the learning activity in the best way (Güven & Kürüm, 2006). Because, there is a strong relationship between the individual's success in solving the problems faced and making his life effective (Fidan, 2012).

Designing learning environments by the learning styles of individuals will be effective to increase the quality of learning outcomes. Individuals who are educated in an environment that is not compatible with their learning style may cognitively be affected negatively. So, being aware of the learning styles of students will provide an opportunity for the teacher to study in an emotionally productive environment (Güven & Kürüm, 2006). Therefore, it is inevitable that learning styles will have an impact on the emotion that students feel during the lesson.

In the literature, it was revealed that emotion has an important effect on students' academic success (e.g. Daniels et al., 2009; Putwain, Sander, & Larkin, 2013). For example, Putwain, Sander and Larkin (2013) revealed that self-efficacy beliefs about studying are related to academic achievement and positive feelings about the course. Therefore, it was observed that there was a linear relationship between positive emotions, self-efficacy belief, and academic achievement. For example, in their study, Daniels et al. (2009) stated that while positive emotions affect students' achievements positively, negative emotions negatively affect their success. In their study, they revealed that the emotions experienced by the students were an important factor in predicting their academic success (Daniels et al., 2009).

Emotions arise from one's own experience, and each emotion is a different phenomenon (Pekrun, 1992). The emotions experienced in learning environments are a multidimensional phenomenon and these emotions consist of many different components such as psychological, physiological, motivational, and cognitive (Pekrun & Stephens, 2010). For this reason, it is accepted that emotions play a big role in the academic success of individuals and it is accepted to be important in understanding students' learning processes and predicting their success accordingly (Peixoto, Mata, Monteiro, Sanches, & Pekrun, 2015; Pekrun, 2006). In the literature, achievement emotions are defined as emotions related to activities for achievement and the results of it (Pekrun, 2006). With a different perspective, achievement emotions can be defined as all kinds of emotions that individuals experience in learning environments and are related to learning and success (Schutz & Pekrun, 2007). The pleasure or boredom of the students while studying, reading, or listening to the lesson, the anger they feel during the exam or the relief they experience after the learning activity can be expressed as achievement emotions.

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The role of emotions in language teaching cannot be denied. Krashen (1982) stated that developing positive emotions for students have an important role in language learning and said that to have a high-level learning outcome it is important for individuals to develop positive emotions. In this respect, Krashen (1982) stated that there is an affective filter and the increase of the power of this filter negatively affects the language acquisition and the weakness of the filter affects the language acquisition process positively (Richards & Rodgers, 2001). For this reason, it is understood that it is important for language teachers to create a positive environment for students.

One of the factors that affect success in language teaching is the self-efficacy beliefs of individuals. Self-efficacy is defined as the judgment of individuals about how well they can take the actions necessary to deal with possible situations (Bandura, 1977). Zimmerman (2000) defined self-efficacy as the judgment of the individual about the ability to perform a task. Self-efficacy beliefs are requirements of individuals for performing in events that can affect their lives. This belief affects one's feelings, thoughts, motivations and how they will behave (Bandura, 1977). On the other hand, in terms of learning a foreign language, self-efficacy can be explained as the judgments of individuals about their ability to organize and perform the activities necessary to achieve foreign language performance (Yanar, 2008). Self-efficacy is a multidimensional phenomenon. For this reason, self-efficacy beliefs can change according to situations and events. For example, a student's language learning self-efficacy and physics learning self-efficacy beliefs may differ. People with strong self-efficacy belief insist on the events and challenges the difficulties they face, make more efforts and has powerful endurance. These may have an impact on one's academic success (Yılmaz, Yiğit, & Kaşarcı, 2012).

There are many educational tools could be used to make classroom climate fun and friendly and music may be one of them. When the studies on the use of music in the language teaching process are reviewed, it was observed that songs had a positive effect on improving four language skills (Sariçoban & Metin, 2000). Lo and Li (1998) stated that using music in learning environments makes the classroom environment more fun, which is effective in learning language skills. Eken (1996) stated that songs are effective in diversifying the learning environment and creating a fun environment, developing students' creativity and imagination, creating discussion environments, and creating a comfortable classroom environment.

In addition to these, it was also stated in various studies that music plays an important role in developing positive emotions and acquiring language skills of individuals (Domoney & Harris, 1993; Lake, 2002). Besides, Lake (2002) stated that students are generally reluctant to foreign language classes and usually do not feel comfortable in the lessons, but he also stated that lessons with music make students more comfortable in the classroom. Lake (2002) also stated that, in reading activities, music enables students to be directly involved in the activity, regardless of whether students are ready for the lesson or not, their pronunciation improves in the target language with music, and is effective in writing activities.

Domoney and Harris (1993), on the other hand, stated that pop music played during the lesson provide a comfortable environment for students who are afraid to speak in the target language and avoid from these situations as much as possible. In literature, no studies have been found on how teaching with music in accordance with the learning styles of students affects their achievement emotions and self-efficacy beliefs, and this is among the most important reasons for this study. Besides this, it is extremely important that the concepts of learning styles, self-efficacy beliefs and achievement emotions play an important role in the learning process of individuals and reveal the effect of these concepts on each other.

Aim

This study aims to examine the effects of English course with background music on self-efficacy beliefs and achievement emotions of students who have different learning styles and find out what students think about this implementation. For this purpose, the following questions were tried to be answered:

1. What is the effect of a foreign language lesson with background music on achievement emotions (class-related enjoyment, boredom, and anger) and self-efficacy beliefs relating to reading and writing of students having different learning styles?
2. What are the opinions of the students regarding the foreign language lesson with background music?

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Method

Research Model

In this study sequential explanatory design which is one of the mixed methods was used. This design is characterized by the collection and analysis of quantitative data in the first phase of research followed by the collection and analysis of qualitative data in a second phase that builds on the results of the initial quantitative results. Analysis of quantitative and qualitative data is interrelated. At the same time, these data are combined in the interpretation and discussion sections (Creswell, 2009 p.211). In quantitative data collection processes, experimental design with a pre-test post-test control group was used. In this design, two randomly selected groups are determined and one of the groups is randomly selected as the experimental and the other as the control group. Measurements are made before and after the experiment (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2014; Karasar, 2014). The quantitative data collection process of the research is shown in Table 1.

Table 1. Experimental Pattern with The Pre-Test Post-Test Control Group

Group	*Pre-test*	*Operation*	*Post-test*
G (Experiment)	O_1	X	O_2
C (Control)	O_1		O_2
	-Learning Style Inventory -Achievement Emotions Questionnaire (Dependent Variable) -English Self-Efficacy Scale (Dependent Variable)	Studying English accompanied by music for 8 weeks	-Learning Style Inventory -Achievement Emotions Questionnaire (Dependent Variable) -English Self-Efficacy Scale (Dependent Variable)

As it is seen in Table 1, the independent variable in this structure is “music played in English lessons” and the dependent variable is students' achievement emotion and English self-efficacy beliefs. To determine the learning styles of the students, learning style inventory 3 which is based on Kolb's experiential learning theory and adapted into Turkish by Gencel (2007) was used. Besides, before and after the implementation, "Achievement Emotion Questionnaire" and "English Self-Efficacy Scale" were applied. At the end of the research, a semi-structured questionnaire form was applied to get the opinions of volunteer students who participated in the experiment.

Research Group

This research was carried out with 53 students attending 10th grade in an Anatolian High School in Turkey in the 2018-2019 academic year. The research was carried out at the school where the researcher worked for reasons such as effective use of resources, access to data and ease of implementation. Demographic information of the research group is given in Table 2.

Table 2. Demographic Information of The Research Group

			Research Group			
			Experimental Group		*Control Group*	
			f	*%*	*f*	*%*
Gender	Male		13	50	12	44.4
	Female		13	50	15	55.6
		Total	26		27	
Age	15		4	15.4	8	29.6
	16		22	84.6	19	70.4
		Total	26		27	

As seen in Table 2, a total of 53 students participated in the research. There are 26 students in the experimental group and 27 students in the control group. Half of the students in the experimental group are girls and half are

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boys. There are 12 male and 15 female students in the control group. The ages of the students are between 15 and 16. 22 students in the experimental group and 19 students in the control group are 16 years old.

Data Collection Tools

In the research, 5 different data collection tools were used. These tools are "achievement emotion questionnaire, learning styles inventory, English self-efficacy scale, classroom observation form, and semi-structured questionnaire form. To determine the learning styles, "Learning Inventory Based on Experiential Learning Theory", which was adapted to Turkish by Gencel (2007) and whose validity and reliability was tested, was applied to both control and experiment groups. Besides, before and after the implementation, class-related enjoyment, anger and boredom emotion questionnaires, which is a sub-questionnaire of achievement emotion questionnaire, developed by Pekrun, Goetz, and Perry (2005) and adapted to Turkish by Can, Sarıkaya and Bardakcı (2020) was conducted. To measure students' reading and writing self-efficacy beliefs before and after the implementation, the Self-Efficacy Belief Scale related to English, developed by Yanar and Bümen (2012) and whose validity and reliability was tested, was used. Also, class observation forms were used in the experimental and control groups for the reliability of the implementation. Also, a semi-structured questionnaire form was used to get the students' opinions about the practice. Before applying the scales, the authors were contacted via e-mail and necessary permissions were obtained.

It is seen that the inventory of learning styles developed by Kolb based on experiential learning theory is used and accepted effectively in literature. There are 4 different versions of Kolb's learning styles inventory. In this research, "Version 3" adapted to Turkish culture by Gencel (2007) was used. The original version of the inventory was prepared in 1999 and some changes were made compared to the previous version. In this inventory, the name of learning styles is arranged as "Diverging", "Assimilating", "Converging" and "Accommodating". There are 12 questions in the scale. Four options are scored between 1 and 4 for each item. The lowest score is 12, the highest score is 48. After this scoring, the combined scores are calculated. The combined scores are obtained as Abstract Conceptualization (A.C.)-Concrete Experience (C.E.) and Active Experimentation (A.E.)-Reflective Observation (R.O.) and the scores obtained as a result of this process vary between –36 and +36. The positive score obtained from AC and CE shows that learning is abstract and negative score shows it is concrete; Similarly, scores obtained from AE and RO indicate that learning is active or reflective (Gencel, 2007). Cronbach Alpha reliability coefficient of the scale adapted to Turkish is between .73 and .88. The Cronbach Alpha reliability coefficient obtained in this study is between .71 and .81.

"Achievement Emotion Questionnaire" is a multidimensional self-report questionnaire designed to evaluate students' achievement emotions and consists of three different subs-questionnaires: emotions related to the course, learning and test. Learning-related emotions questionnaire is used to measure the emotions experienced in learning activities outside the classroom and the test-related emotions questionnaire is used to measure the emotions experienced in the exam process. Class related emotions questionnaire was prepared to measure the emotions felt during the course. In this study, learning and test-related emotion sub-questionnaires were not used, the class-related emotion questionnaire was preferred to use because the implementation was in the classroom and was not related to the test. The class-related emotions questionnaire consists of 80 items and measures 8 different emotions related to the lesson: enjoyment, hope, pride, anger, anxiety, embarrassment, hopelessness, and boredom. The items in the questionnaire are organized in three sections to measure the emotions that can be experienced before, during and after the lesson. The scale is designed modularly and according to the purpose of the research, these three sections can be used together or separately. Besides, each emotional state such as boredom, hope, pride etc. can be used separately. In this study class-related boredom, anger and enjoyment achievement emotions were used. Besides, the questionnaire has four different sub-dimensions: cognitive, affective, physiological, and motivational (Pekrun et al., 2005). The questionnaire was prepared as a five-point Likert type. Cronbach Alpha reliability coefficient of the questionnaire adapted to Turkish is .88. In this study, Cronbach Alpha value was calculated as .88.

The "English Self-Efficacy Scale" consists of four sub-dimensions and measures students' self-efficacy about reading, writing, speaking, and listening (Yanar & Bümen, 2012). The scale consists of a total of 34 items in the five-point Likert type. Since this study was conducted within the framework of English reading and writing activities, the reading and writing subscales of the English Self-Efficacy Scale were used, other sub-dimensions were excluded from the scope of the study. The reliability of the scale is .97. The high score to be obtained from

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the scale was accepted as an indication of the high self-efficacy belief in English. In this study, Cronbach's Alpha reliability coefficient of the scale was calculated and found as .94.

During the research, an observation form was developed by the researcher to ensure the validity and reliability of the experiment. In this process, preliminary researches were firstly revised, and a draft form was created. Then the draft form was reviewed by two curriculum expert and necessary corrections were made according to their feedback. Afterwards, the suitability of the form to Turkish was examined by two Turkish Language and Literature teachers and according to their feedback, the form was checked and corrected accordingly. Then it was applied to two teachers as a pilot study. As a result of this pilot study, it was understood that there was no problem and the observation form was finalized.

The observation form consists of 6 dimensions. These sub-dimensions are "physical environment of the classroom, social environment of the classroom, teaching methods and techniques, assessment methods, time management and classroom management". Regarding the physical environment of the classroom, there are some sections such as "seating arrangement, classroom size, heat and heat", and for the social environment of the classroom, "teacher-student interaction, student-student interaction, engagement, student questions, teacher questions and other". For the other sub-dimensions in the observation form, there are three different sections: the beginning of the course, during the course and at the end of the course.

In this study, a semi-structured questionnaire form was applied to collect qualitative data. This method, which is a powerful method to reveal the feelings, thoughts, perspectives, thoughts and experiences of people (Yıldırım & Şimşek, 2013), was preferred to determine the positive and negative experiences, feelings and attitudes of the students towards the lessons with background music in this study. For this purpose, firstly literature was reviewed on the attitudes and emotions toward English lesson and then a question form was prepared. Afterwards, an expert evaluation form was prepared, and this form was checked by two curriculum and instruction experts in terms of content, scope, and suitability for the questionnaire.

In line with the feedback of the experts, the form was corrected accordingly, and it was submitted to the experts again and this process was repeated two times until it was reached a final agreement on the questionnaire. Afterwards, the questions were examined by two Turkish Language and Literature teachers for their coherent to Turkish and it was understood that there were no problems. For the final form of the questionnaire, a pilot study was made with two students and the intelligibility of the questions was examined. At the end of this study, it was determined that there was no problem and the questionnaire was finalized. The semi-structured questionnaire form consists of five parts and these parts tried to collect data in general about what students think about English lesson with music and about their selfefficacy beliefs after the implementation. Besides this, it was asked them whether teaching English lessons with music is suitable for their learning characteristics or not.

Implementation Process

This research was carried out with 10^{th}-grade students in an Anatolian high school in Turkey for 8-weeks period in the second semester of the 2018-2019 academic year. Before the research, students and their parents were informed about the related research and relevant permissions were obtained from the school administration. Afterwards, the students in the experimental group were interviewed about the music to be played in the background during the reading and writing activities.

Afterwards, the classroom sound level was measured with the "UNI-T UT 353 Mini Digital Sound Level Meter" device and it was found that the average classroom sound level was 55.4. Abakay and Bulunuz (2018) obtained 59-70 results in their studies in different lessons at the high school level in their researches about their in-school and out-of-school noise levels. According to the results obtained in this study, it was observed that the sound level of the class in which the research would be conducted was lower. Sound intensity limit in school determined by the World Health Organization is 55 decibels (cited in Abakay & Bulunuz, 2018). Considering this criterion, the music sound intensity was determined around 50-55 decibels in lessons and the experiment carried out in line with this criterion. In general, the implementation process is presented in Figure 1.

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Fiure 1. Implementation Process

Data Collection

In the study, while collecting data, code was used for the scales to match students' learning styles, class-related achievement emotion questionnaire and English self-efficacy scale. For this purpose, students were asked to write their shoe size, the second letter of their last name, and the first letter of an animal they love most. For example, in the code "41FK", 41 is shoe size, "F" represents the second letter of the surname, and "K" represents the first letter of the animal he/she loves. They were asked to write the same code in both pre-test and post-test. Thus, matching was made related analyses were carried out accordingly. The scales are filled in the class. Before the implementation, firstly, the class-related achievement emotion questionnaire was applied to the experimental and control group students. The self-efficacy scale related to English was applied one day later.

Qualitative data were collected voluntarily at the end of the 8 weeks through a semi-structured questionnaire form. 19 students volunteered to fill out the questionnaire. The semi-structured questionnaire form was asked to fill in at home to prevent students from being affected by each other. Students were given a day and asked to bring the questionnaires the next day. Also, observations were carried out in the experimental and control groups through the classroom observation form. The observations were carried out by a Turkish Language and Literature teacher working in the same school. The observer teacher made observations in both the control and experimental groups and sat in a chair at the back of the class.

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Data Analysis

This research was carried out to determine the effects of studying English with background music on achievement emotions and self-efficacy beliefs of students having different learning styles and reveal their opinions. For this purpose, firstly Kolb's Learning Styles inventory was applied to determine the learning styles of the students. Accordingly, the learning styles of the students participating in the research are shown in Table 3.

Table 3. Learning Styles of The Research Group

		Experiment Group		*Control Group*	
		f	*%*	*f*	*%*
Learning Styles	Diverging	3	11.5	3	11.1
	Assimilating	10	38.5	11	40.7
	Converging	8	30.8	10	37.0
	Accommodating	5	19.2	3	11.1
	Total	26		27	

As seen in Table 3, there are 3 diverging, 10 assimilating, 8 Converging and 5 Accommodating learning styles in the experimental group. In the control group, it is seen that there are 3 diverging, 11 assimilation, 10 converging and 3 Accommodating learning styles. In both the experimental group and the control group, there are the students with the most “Assimilating” and the fewest with “Diverging” learning style. This shows that both groups have similar learning styles.

In the research, the students' course-related achievement emotions and self-efficacy beliefs about reading and writing were measured before and after the implementation. “Two-way ANOVA” was performed to see if there were a significant difference before and after the implementation. Extreme values were examined with Boxplot before the analyses. Afterwards, the normal distribution properties of the difference score between the pre-test and post-test scores were examined using skewness and kurtosis coefficients. Two-way ANOVA is a parametric test to determine whether there is a statistically significant difference between the averages scores obtained from different groups (Can, 2017). Besides, the "dependent groups T-test" was used to examine the differences in the achievement of emotion and self-efficacy beliefs of students with different learning styles in the experimental group. This test is used to test whether the difference between the two sample averages is significantly different from each other (Büyüköztürk, 2018). The analyses used in the research are presented below (Table 4).

Table 4. Parameters used in the Research and Tests applied

Parameters Evaluated	***Applied Tests***
Descriptive features	*Arithmetic Mean, Standard Deviation*
Extreme Values	Boxplot
Normal distribution properties of the difference between pre-test and post-test	Skewness and Kurtosis
Covariances of the experiment and control groups are equal or not	Box’s M (Wilks’ Lambda, Pillai’s Trais)
Difference between scores of achievement emotions and reading and writing self-efficacy beliefs between experimental and control groups	Two-way ANOVA
Differences in the achievement emotions and self-efficacy beliefs of students with different learning styles	Dependent groups T-test

In this study, statistical differences between intra-group factors (time: pre-test-post-test) and inter-group factors (group: experiment, control group) were investigated using two-way ANOVA. Before performing the two-way ANOVA test, firstly, necessary assumptions were examined with Box’s M test. The Box’ M test examined whether the covariances of the experiment and control groups are equal. If the equality is assumed, “Wilks’ Lambda test, if not “Pillai’s Trace” was used among multivariate tests” (Can, 2017, p.207). The univariate test was examined whether there was a statistically significant main effect of within-group factor (time) and between-group factors (group), and the interaction effect between within and between-group factors (time*group) on achievement emotion and self-efficacy beliefs. To investigate the statistical differences in the achievement emotions and self-efficacy beliefs of students who have different learning styles “dependent groups t-test” was used.

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In the analysis of qualitative data, a thematic method was followed since the themes and codes were not determined before the research. In this method, the researcher focuses on various analytical techniques to search for the themes and patterns in the data collected. Qualitative data were transcribed primarily. Then, a qualitative data analysis software called MAXQDA© was used to encode the data, find themes, organize themes, define, and interpret the findings. For this purpose, the data were uploaded to the MAXQDA© software. Afterwards, coding was done in line with expert opinions. Later, categories were created by considering the relations between codes and themes obtained. Then the researcher and the two curriculum development experts have thoroughly read, examined the data, and identified the themes and codes. Interviews were repeated four times until the researchers agreed on the themes and codes for the reliability of the research data and the themes and codes were finalized. To increase the reliability, the agreement percentage about the coding of the three researchers was calculated by using the following formula: "Reliability = Consensus / (Consensus + Disagreement) x 100". The result obtained by applying this formula should show a reliability percentage of at least 70% (Miles & Huberman, 1994). In this study agreement percentage was determined to be .88. Finally, 6 themes and 21 codes were identified.

Results and Discussion

Findings Related to Quantitative Data

The effects of reading and writing English lessons using background music on students' emotions (course-related enjoyment, anger, boredom) and reading and writing self-efficacy beliefs were examined with two-way ANOVA. Before starting the test, the extreme values were examined with Boxplot and it was found that there was no extreme value. Afterwards, the normal distribution characteristics of the difference between the pre-test and post-test scores were examined by the skewness and kurtosis values. The related results are presented in Table 5.

Table 5. Normality Coefficients of Pre-Test and Post-Test Course-Related Achievement Emotions and English (Reading and Writing) Self-Efficacy Scales

		Experiment Group		***Control Group***	
	Measurement	***Skewness***	***Kurtosis***	***Skewness***	***Kurtosis***
Self-efficacy belief for reading	Pre-test	-.172	-,087	.215	-,796
	Post-test	.073	,563	.224	-,620
Pre-test self-efficacy belief for writing	Pre-test	-.198	-,799	-,545	-,290
	Post-test	.268	,295	-,126	-,763
Class-related enjoyment	Pre-test	-.584	,383	,384	-1,032
	Post-test	.928	1,890	,268	-,923
Class-related anger	Pre-test	.443	-,551	1,421	1,668
	Post-test	-.327	-1,432	,527	-1,021
Class-related boredom	Pre-test	.378	,054	,695	-,336
	Post-test	-.551	-1,176	,409	-,959

According to the data obtained, the skewness coefficients are between -.584 and 1.421, and the kurtosis coefficients are between -1.432 and 1.668. Can (2017) stated that the skewness and kurtosis values that are between +1.96 and -1.96, and Kline (2015) stated that the skewness values are within ± 3 and the kurtosis value within the limits of ± 10 can be accepted as a normal distribution indicator. In line with these results, it was seen that the data has a normal distribution.

ANOVA Results on Course Related Achievement Emotions (Enjoyment, Anger, Boredom)

1. Class-Related Enjoyment

Two-way ANOVA analyses were carried out to examine the effects of reading and writing activities with background music in English lessons on students' course-related enjoyment achievement emotions. Descriptive statistics regarding the pre-test and post-test achievement emotion applied to the experimental and control groups are given in Table 6.

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Table 6. Descriptive Statistics Results of Experiment and Control Groups Regarding Course-Related Enjoyment

Time	***Experiment Group***			***Control Group***			***Total***		
	N	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
Pre-test	26	2.83	.77	27	3.26	1.05	53	3.05	.94
Post-test	26	3.40	.54	27	3.00	1.11	53	3.19	.89

The pre-test average score of students in the experimental group is 2.83, and the post-test average score is 3.40. The pre-test average score of students in the control group is 3.26, and the post-test average score is 3.00. The post-test score of the experimental group was higher than the pre-test score and lower in the control group. Two-way ANOVA analysis was conducted to examine whether this difference is significant.

Before performing ANOVA analysis, the assumptions of the normal distribution, equality of covariances and equality of variances were examined. The normal distribution status of the pre-test and post-test scores of the examined groups and the equality of covariances between the groups were examined with the Box's M test and it was observed that there was no equality between the experimental and control groups [Box's M=12.65, F=4.038, $p<.05$]. In this case, Pillai's Trace test was chosen from alternative multivariate tests. As a result of the Pillai's Trace test, the group had a significant effect on measurement [$F_{(1-51)}$ =18.88, p<0.05]. Therefore, it can be said that there is a significant difference between the pre-test and post-test scores of the experimental and control groups in general.

In ANOVA, Levene test was carried out to test the equality of the variances between the groups and it was observed that the equality was achieved [Pre-test=$F_{(1,51)}$=2.905, p=.094; Post-test= $F_{(1,51)}$=16.961, p=.06]. As a result of the two-way ANOVA test carried out to measure the group-measurement effect, the increase in the experimental group score was found to be significantly higher than the control group [$F_{(1-51)}$ =18.88, p<0.05]. In this case, it can be said that reading and writing activities using background music significantly increases students' course-related enjoyment. The change in the meanings of course-related enjoyment supports this finding. The finding of this change is presented in Figure 2.

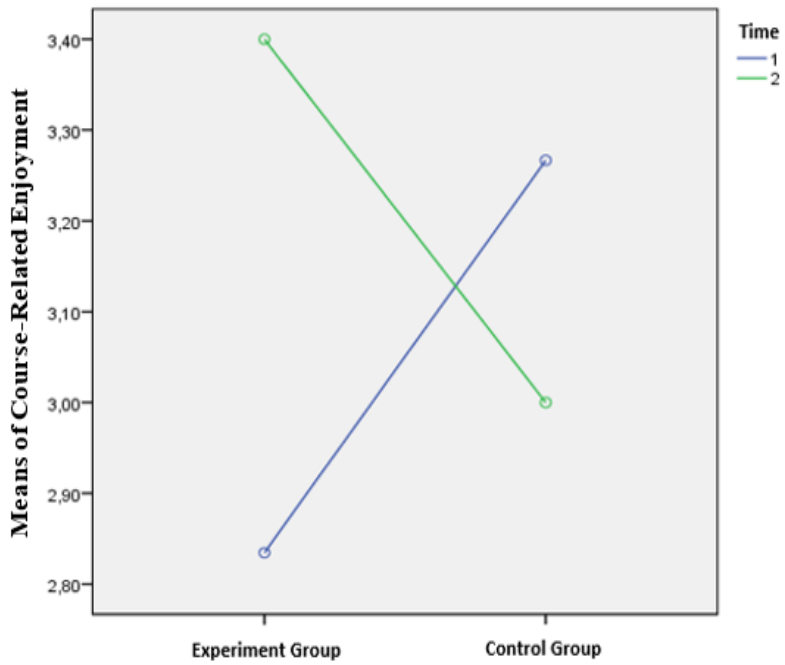

Figure 2. Distribution of English course-related enjoyment according to time and group variables

"Dependent groups t-test" was performed to examine course-related enjoyment differences of students who have different learning styles in the experimental group. The results obtained are presented in Table 7.

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Table 7. t-test Results Related to The Differences Between the Course-Related Enjoyment Achievement Emotions of The Students Having Different Learning Styles.

	Learning Styles	***Measurement***	***N***	***M***	***SD***	***S***	***t***	***p***
Course-related enjoyment	Diverging	Pre-test	3	2.80	.36	2	-1.309	.321
		Post-test	3	3.20	.30			
	Assimilating	Pre-test	10	3.04	.94	9	-1.754	.113
		Post-test	10	3.62	.62			
	Converging	Pre-test	8	2.61	.71	7	-3.614	*.009
		Post-test	8	3.22	.41			
	Accommodating	Pre-test	5	2.80	.77	4	-3.500	*.025
		Post-test	5	3.36	.61			

*p<.05

As a result of the research, it was found that doing writing and reading activities in English lesson using background music has a statistically meaningful effect on students' class-related enjoyment who have converging learning style [$t_{(7)}$=-3.614, p <.05] and accommodating learning style [$t_{(4)}$ =- 3.50, p <.05]. While the average of class-related enjoyment of students who have a converging style about pre-implementation English lesson was 2.61, it increased to 3.22 after the implementation. While the average of class-related enjoyment of the students having accommodating learning style related to the pre-implementation English lesson was 2.80, it increased to 3.36 after the implementation. These findings show that reading and writing activities in English lessons accompanied by music have a significant effect on students' class-related enjoyment of students who have converging and accommodating learning styles.

2. Class-Related Boredom

Descriptive statistics regarding the class-related boredom pre-test and post-test scores applied to the experimental and control groups are given in Table 8.

Table 7. Descriptive Statistics Results of Experiment and Control Groups Regarding Course Related Boredom

Time	***Experiment Group***			***Control Group***			***Total***		
	N	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
Pre-test	26	2.57	.94	27	2.05	.64	53	2.31	.97
Post-test	26	2.09	.64	27	2.45	1.01	53	2.27	.95

The pre-test average score of the students in the experimental group is 2.57, and the post-test average score is 2.09. The pre-test average score of the students in the control group is 2.05 and the post-test average score is 2.45. The post-test score of the experimental group was lower than the pre-test score and higher in the control group. Two-way ANOVA analysis was conducted to examine whether this difference is significant.

Prior to performing ANOVA analysis, the assumptions of the normal distribution, equality of covariances and equality of variances were examined. The normal distribution status of the pre-test and post-test scores of the examined groups and the equality of covariances between the groups were examined with the Box's M test and it was observed that there was no equality between the experimental and control groups [Box's M=9.052, F=2.89, p<.05]. In this case, Pillai's Trace test was chosen from alternative multivariate tests. As a result of Pillai's test, the group had a significant effect on measurement [$F_{(1-51)}$ =13.014, p<0.05]. Therefore, it can be said that there is a significant difference between the pre-test and post-test scores of the experimental and control groups in general.

In ANOVA, the Levene test was performed to test the equality of the variances between the groups and it was observed that the equality was achieved [Pre-test=$F_{(1,51)}$=.171, p=.681; Post-test= $F_{(1,51)}$=14.171, p=.00]. As a result of the two-way ANOVA test carried out to measure the group-measurement effect, the increase in the experimental group score was found to be significantly higher than the control group [$F_{(1-51)}$ =13.014, p<0.05]. In this case, ı was understood that reading and writing activities in English lessons accompanied by music

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significantly reduce students' class-related boredom. The change in the mean of class-related boredom supports this finding. The finding of this change is presented in Figure 3.

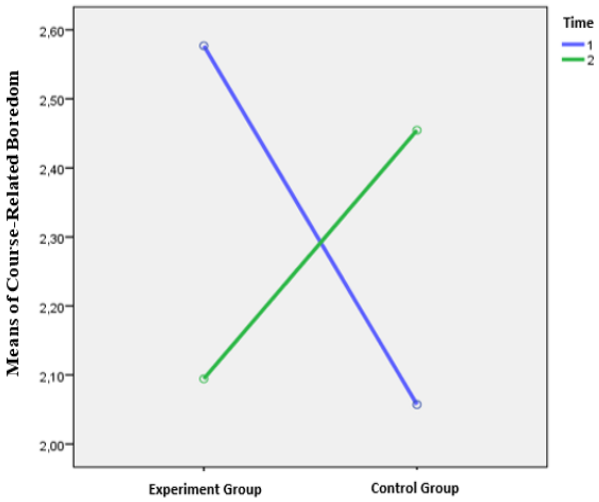

Figure 3. Distribution of Class-Related Boredom Emotion by Time and Group Variables

"Dependent groups t-test" was conducted to examine the differences between students' class-related boredom, who have different learning styles in the experimental group. The results obtained are presented in Table 9.

Table 9. t-test Results Related to The Differences between Students' Class-related Boredom with Different Learning Styles

	Learning Styles	***Measurement***	***N***	***M***	***SD***	***S***	***t***	***p***
Class-related boredom	Diverging	Pre-test	3	2.39	.19	2	.866	.478
		Post-test	3	2.30	.37			
	Assimilating	Pre-test	10	2.56	1.24	9	1.695	.124
		Post-test	10	1.90	.59			
	Converging	Pre-test	8	2.85	.88	7	3.067	*.018
		Post-test	8	2.27	.79			
	Accommodating	Pre-test	5	2.27	.62	4	1.177	.305
		Post-test	5	2.05	.69			

As a result of the study, reading and writing activities in English lessons with music had a statistically significant difference on the class-related boredom emotions of the students who had the learning style of converging [$t_{(7)}$=- 3.067, p <.05]. While the average of class-related boredom of students with converging style related to pre-implementation English lesson was 2.85, it decreased to 2.2 after implementation. These findings show that reading and writing activities in English lessons accompanied by music have a significant reducing effect on students' class-related boredom emotions.

3. Class-Related Anger

Descriptive statistics regarding the class-related anger pre-test and post-test scores applied to the experimental and control groups are given in Table 10.

Table 10. Descriptive Statistics Results of Experiment and Control Groups Regarding Course-Related Anger Emotions

Time	***Experiment Group***			***Control Group***			***Total***		
	N	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
Pre-test	26	2.09	.75	27	1.63	.77	53	1.86	.79
Post-test	26	1.69	.46	27	1.99	.90	53	1.84	.73

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The pre-test average score of students in the experimental group is 2.09 and the post-test average score is 1.69. The pre-test average score of the students in the control group is 1.63, and the post-test average score is 1.99. The Post-test score of the experimental group was lower than the pre-test score and higher in the control group. Two-way ANOVA analysis was conducted to examine whether this difference is significant.

Prior to performing ANOVA analysis, the assumptions of a normal distribution, equality of covariances and equality of variances were examined. The normal distribution status of the pre-test and post-test scores of the examined groups and the equality of covariances between the groups were examined with the Box's M test and it was observed that there was no equality between the experimental and control groups [Box's M=12.727, F=4.062, $p<.05$]. In this case, Pillai's Trace test was chosen from alternative multivariate tests. As a result of Pillai's test, the group had a significant effect on measurement [$F_{(1-51)}$ =21.180, p<0.05]. Therefore, it can be said that there is a significant difference between the pre-test and post-test scores of the experimental and control groups in general.

In ANOVA, the Levene test was performed to test the equality of the variances between the groups and it was observed that the equality was achieved [Pre-test=$F_{(1,51)}$=.011, p=.918; Post-test= $F_{(1,51)}$=16.842, p=.00]. As a result of the two-way ANOVA test carried out to measure the group-measurement effect, the decrease in the experimental group score was found to be significantly higher than the control group [$F_{(1-51)}$ =21.18, p<0.05]. In this case, it was understood that reading and writing activities in English lessons accompanied by music significantly reduce students' class-related anger. The change in anger emotions averages supports this finding. The finding of this change is presented in Figure 4.

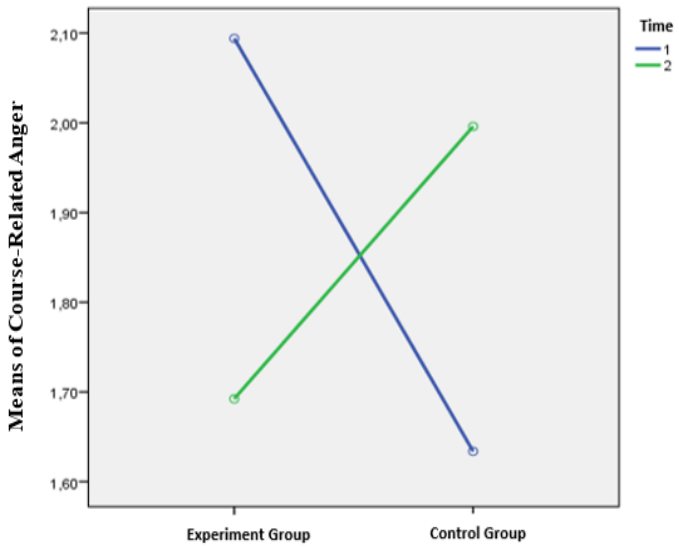

Figure 4. Distribution of Class-Related Anger According to Time and Group Variables

"Dependent groups t-test" was conducted to examine the differences between students' class-related anger emotions of students with different learning styles in the experimental group. The results obtained are presented in Table 11.

Table 11. t-test Results Related to The Differences Between Class-Related Anger Emotions of Students with Different Learning Styles

	Learning Styles	***Measurement***	***N***	***M***	***SD***	***S***	***t***	***p***
Class-related anger	Diverging	Pre-test	3	2.14	.42	2	.200	.86
		Post-test	3	2.07	.23			
	Assimilating	Pre-test	10	2.07	.86	9	2.159	.059
		Post-test	10	1.56	.40			
	Converging	Pre-test	8	2.02	.84	7	1.833	.109
		Post-test	8	1.65	.50			
	Accommodating	Pre-test	5	2.20	.71	4	1.764	.152
		Post-test	5	1.77	.58			

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As a result of the research, no statistically significant difference was found on class-related anger of the students who had different learning styles. In general, there was a significant decrease in the class-related anger in the experimental group, while there was no significant change in different learning styles.

ANOVA Results Regarding English Reading and Writing Self-Efficacy Belief

Two-way ANOVA analyses were carried out to examine the effects of reading and writing English lessons with music on students' reading and writing self-efficacy beliefs. The results showed that performing reading and writing activities accompanied by music did not have a statistically significant effect on reading and writing self-efficacy beliefs in English. Descriptive statistics on self-efficacy beliefs are presented in Table 12.

Table 12. Descriptive Statistical Results Regarding the Results of The Reading and Writing English Self-Efficacy Beliefs of The Experimental and Control Groups

	Time	***Experiment Group***			***Control Group***			***Total***		
		N	***M***	***SD***	***N***	***M***	***SD***	***N***	***M***	***SD***
Reading Self-efficacy beliefs	Pre-test	26	3.34	.81	27	3.55	.76	53	3.45	.79
	Post-test	26	3.42	.68	27	3.41	.81	53	3.41	.75
Writing Self-efficacy beliefs	Pre-test	26	3.07	.71	27	3.13	.70	53	3.10	.70
	Post-test	26	3.19	.66	27	3.15	.79	53	3.17	.72

When the descriptive statistics are analysed, it is seen that there is a positive change in the experimental group for the self-efficacy beliefs of reading and writing. Findings regarding this change are presented in Figure 4 and Figure 5.

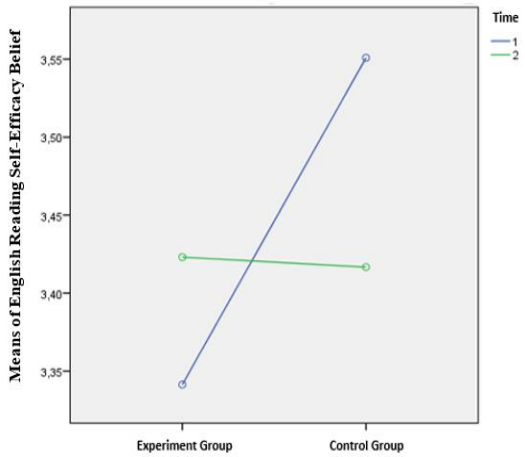

Figure 4. Distribution of English Reading Self-Efficacy Beliefs by Time and Group Variables

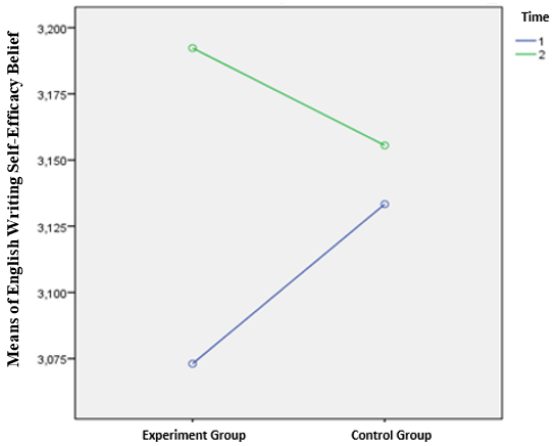

Figure 5. Distribution of English Writing Self-Efficacy Beliefs by Time and Group Variables

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Findings Related to Qualitative Data

At the end of the research, a semi-structured questionnaire was applied to examine the effects of reading and writing activities accompanied by music on reading and writing self-efficacy belief, learning characteristics and class-related achievement emotions experienced in the classroom environment. As a result of the survey, content analysis was made, and the following themes and codes were obtained.

Table 13. Themes and Codes Derived from Qualitative Data

Themes	***Codes***	***f***
Positive thoughts about English lesson with background music	Enjoy	44
	Relief	9
	Motivation	7
	Engagement	6
	Concentrate on course	6
	Active Participation	5
	Self-confidence	1
	Interaction	1
Negative thoughts about English lesson with background music	Focusing	11
	Type of music	5
	Noise	2
English reading self-efficacy belief	Inefficient	17
	Efficient	3
English writing self-efficacy belief	Inefficient	16
	Efficient	5
Compliance with Learning Features	Matches	14
	No matches	3
Suggestions	Sound intensity	5
	Type of music	5
Total		165

As a result of the study, the students generally stated positive opinions regarding the implementation. It was observed that students had positive thoughts about reading and writing activities accompanied by music. They also stated that they enjoyed this practice, the course with music made the lesson fun, the course was effective in motivating them toward the lesson and was positive in engaging and focusing the lesson.

For the “positive thoughts about English lesson with the background music” theme, a student who mentioned that the lesson with music is fun and so they did not get bored and enjoyed the lesson said that “I think it is fun. It prevents me from getting bored in class. It's a good method.”. In addition to this, another student stated that "It makes the lesson more fun. I think it is better for those who are bored and sleepy (for example me).”. Another student similarly mentioned his/her ideas saying, “I think it was fun and nice to do lessons with music. Obviously, I like it. It was good for me not to break with the lesson." and so the student stated that besides lesson with music makes the lesson fun, it also engages them in the course. Under the same theme, a student who stated that this kind of lesson enable them a stress-free environment mentioned his/her ideas saying "Music provides me with a stress-free environment. It comforts me.". Another student said “I can write more easily while listening to music. Because music seems to ease the burden on me. It had a positive effect on me.”. and so, he/she stated music makes them feel relax and so it is beneficial. Therefore, it can be said that the students entered the lesson with a positive thought towards the lesson in a comfortable environment. Also, in the case of participation in the lesson, one student said, “It encouraged me to participate in the class. It made me happy in the lessons.”. Another student said, “English has become more fun. I was happier in the lessons. I was enthusiastic about attending and participating in the lesson.”. Therefore, students expressed positive opinions about the implementation in general and stated that the lesson with background music had positive effects on them. At the end of the implementation, a student who stated that music has a positive role in motivating the lesson said, “The more fun of the lesson motivated me more. While I get bored in the past, I feel more enjoyable now.”. Another student expressed his/her opinion saying, “Having music in the classroom while doing any

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activity motivates me for that activity." Therefore, the students generally stated that the lessons accompanied by music motivated them positively.

As can be seen from Table 4, the students also stated some negative opinions about the implementation. For example, a student said, "As a person who normally focuses on the lesson, I sometimes get lost in the music when I do lessons with music. Then there can be a problem focusing.". He/she stated that the music caused the problem of focusing on himself. Similarly, another student said, "Sometimes I can be distracted in reading activities. This can affect me negatively. I'm not overly disturbed but still reading silence is better." and therefore stated that his/her attention can be distracted in reading activities. Besides, it was stated that playing similar music and causing noise in the classroom may be negative. For example, one student said, "It is not music that distracts me, but it is the noise that sometimes my friends do in the back. Because music sometimes gives them the opportunity to talk and this cause noise. This bothers me.". Another student expressed his thoughts saying, "I think the downside is not to listen to the music I want. I think the music we listened to, however good, could have been different.". Therefore, the students stated that in classes accompanied by music, there may be difficulties in focusing due to the plus voice in the classroom, and similar music can sometimes be boring.

Within the scope of the study, the students stated that the lessons with music, in general, did not have a positive effect on their English reading self-efficacy beliefs. In this context, a student, for example, "I understand whether there is music or not. Music does not affect my understanding.", and another student "It did not affect me in terms of my belief in reading. I have no change." expressed their opinions. So, they stated that there was no change in their belief in reading self-efficacy beliefs. When Table 4 is analyzed, according to the students, music during writing activities in English lesson does not affect students writing self-efficacy beliefs as in the reading self-efficacy belief in English. A student expressed his thoughts saying "I don't think there is a change on me. I have full faith in this matter than before. I love writing in English very much. But music doesn't affect that.". Another student similarly said, "It has not had a positive effect on writing belief in me. It is the same for me." and so there was no change in the self-efficacy belief towards writing. Different from other students, a student stated that music had a positive effect in terms of the affective side saying "I think it is fun and better to write with music. There can be more creative texts.". One student stated that music had a positive influence on his/her self-efficacy belief in English saying that "My writing improved. It increased my faith.". Therefore, students generally mentioned that in the context of self-efficacy beliefs about reading and writing, the implementation of music does not have a significant effect on them.

When Table 4 is examined, it is understood that in the context of learning features, students generally give an opinion about this practice is suitable for them. A student who expressed his/her opinion on this subject said, "It is suitable for my learning characteristics. Because music makes people comfortable. You can think better.", another student says, "I think it suits me. Because we are studying English lesson without getting bored and we enjoy the course. This is very good.". So, students generally stated that this practice is suitable for them. A small number of students, on the other hand, said that this situation was not suitable for them saying "I think it is not for me because I can lag attending the lesson by singing music or getting it rhythmic." Within the scope of the research, students were also asked about their suggestions for implementation. In general, it is seen that students make various suggestions. When these suggestions are examined, a student expressed the volume of the music should have been a little too much saying, "I think there is no negative situation, except for the low volume.". Another student said, "I think music without words is better, not verbal. It's just better instrumental". One student said, "I think the downside is not listening to the music I want.". He/she said that "Although the music we listen to is good, there may be more different things.". He/she stated that everyone could have different musical tastes and the music played could not appeal to everyone.

When the results of the research are examined in general, both quantitative and qualitative findings reveal that the lesson accompanied by music has positive effects on increasing students' positive emotion (class-related enjoyment) and is effective in reducing negative emotions (class-related boredom and anger). It was observed that there was a statistically significant decrease in the class-related anger and boredom, while there was an increase in the class-related enjoyment in the experimental group students. When this change is analyzed in the context of learning styles, while there is a statistically significant difference in the emotions of students who have a converging and accommodating learning style in terms of course-related enjoyment, no significant difference was found for students with other learning styles. In terms of class-related boredom and anger, no significant difference was found for students with different learning styles. When the research findings were

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examined in terms of English self-efficacy beliefs about reading and writing, it was seen that there was no significant change in the experimental group compared to the control group. Qualitative studies showed similar results. Students in the experimental group stated that the lesson with music did not affect their self-efficacy beliefs in reading and writing. In addition to these, it was understood from the qualitative data that students liked this practice, the implementation contributed to creating a pleasant environment in the lesson, reduced the stress felt, increased the participating in the lesson, and was effective in motivating the lesson. Besides, the students made suggestions that instrumental music is better and that different types of music should be included in the course.

Conclusion and Recommendations

In this study, the effects of doing reading and writing activities in English lessons with background music on class-related enjoyment, boredom and anger, and self-efficacy beliefs of students having different learning styles were examined. For this purpose, an 8-weeks implementation was made, and quantitative and qualitative processes were carried out to examine the effects of this implementation. As a result of the research, it was seen that the class-related enjoyment of the experiment group was higher than the control group. In the control group, there was no significant increase in the class-related enjoyment achievement emotion. For this reason, it can be said that reading and writing activities accompanied by music are effective on students' class-related enjoyment. Besides, it is observed that the music accompanied lesson has a positive effect on class-related anger and boredom compared to the control group and that these emotions in experimental group students decreased more compared to the control group. Therefore, it was generally observed that doing reading and writing activities with background music create positive emotions in students. Findings from qualitative data also support this situation. Most of the students stated that the activities accompanied by music were much more enjoyable and that they had the opportunity to study without getting bored. When the literature is examined, it has been determined in various studies that music has an important role in developing positive emotions and acquiring language skills (Domoney & Harris, 1993; Lake, 2002). Krashen (1982) stated in “Effective Filter Theory” that the most positive learning environments are created in environments where students' anxiety is low, their self-esteem and motivation are high, and they feel comfortable and pleasant. The use of music in lesson environments contributes to lower efficiency of students' filters, provides a pleasant environment and contributes positively to language learning by ensuring that they are comfortable (Murphey, 1992). Besides, Krashen (1982) stated that music can be used to create a positive classroom environment. Lo and Li (1998) stated that the use of music in learning environments is effective in turning the classroom environment into a pleasant environment, which has a positive effect on learning language skills. Similarly, Eken (1996) stated that songs are effective in diversifying the learning environment, creating a fun and comfortable environment, and developing positive emotions for students. Pekrun (2006) emphasized in the “Control Value” theory that positive emotions experienced in learning environments play an important role in predicting students' academic achievement and positive emotions are effective in increasing academic success. Putwain, Sander, and Larkin (2013) also stated that emotion experienced by students in learning settings have important effect. From this point of view, it can be said that the use of music in various activities may have a positive effect on student success indirectly.

As a result of the research, when it is analysed in terms of the learning styles, it is seen that implementation has positive effects on class-related enjoyment of the students with the style of converging and accommodating. Besides this, in terms of class-related boredom music accompanied lesson has a positive effect on students having converging learning styles. According to this result, considering the most important features of students with a learning style that converging and accommodating give importance on practical implementation-based learning processes (Kolb, 1984), it can be seen as a normal result that the course gives them pleasure with music. Regarding other achievement emotions, there was no difference in terms of different learning styles. In the study, students' reading and writing self-efficacy beliefs in English were examined. However, when the experimental and control group pre-test and post-test results were compared, it was observed that music did not have a significant effect on self-efficacy beliefs. When the literature is examined, no research investigating the effect of the reading and writing activities with music in foreign language classes on students' self-efficacy beliefs is held, but it is thought that studies on this subject should be continued.

The results obtained from the qualitative data show that music can also be effective in students' motivation, engagement, and active participation. Similar findings were found when the literature was examined. For

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example, Cook (1997) stated that music can be used to increase students' motivation in the classroom while learning a foreign language. Similarly, it was stated that the use of popular music in the classroom environment has a positive effect on students' motivation (Chen & Chen, 2009; Li & Brand, 2009; Razmjoo, Mehrpur, & Darban, 2012), and being active in the course (Chen & Chen, 2009; Razmjoo et al., 2012). As a result of the research, the students were also asked for their negative opinions and suggestions regarding the implementation. As a negative opinion for the implementation, students generally stated that the sound of the music was hoarse, sometimes they had difficulty hearing it, and sometimes it was problematic to focus the course. As a suggestion, they stated that different kinds of music should be used in the activities performed in the lesson, it would be better to have a higher volume of music and instrumental music would be better. As a result, it can be suggested to repeat this study with different types of music, to repeat the implementation by changing the sample groups and research method.

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