

The Effect of Educational Entertaining Activities Supported with Co-Operative Learning in Teaching English ¹

İngilizce Öğretiminde İşbirlikli Öğrenme Destekli Eğitsel Eğlenceli Etkinliklerin Öğrencilerin Motivasyonlarına Etkisi

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İlk Kayıt Tarihi: 11.07.2014

Yayına Kabul Tarihi: 03.08.2015

Abstract

The purpose of this study is to investigate the effect of educational entertaining activities supported with co-operative learning on student motivation in teaching English. This study was implemented with 68 students based on neutral criteria out of 105 fifth grade students in Elazığ Namık Kemal Primary School. Pre-test and post-test control group experimental design was used in the study. The data was obtained through "The Scale of Motivation in Education" (SME) adapted into Turkish by Kara (2008). The research result showed that the effect of educational entertaining activities supported with co-operative learning has significant impact on the motivation of students.

Keywords: Educational entertaining activities, motivation, English teaching, co-operative learning.

Özet

Bu araştırmanın amacı, İngilizce öğretiminde işbirlikli öğrenme destekli eğitsel eğlenceli etkinliklerin öğrencilerin motivasyonlarına etkisini belirlemektir. Bu araştırma Elazığ Namık Kemal İlköğretim okulunda bulunan 105 beşinci sınıf öğrencisi içerisinde yansızlık ölçütüne göre seçilen toplam 68 öğrenci üzerinde yürütülmüştür. Araştırmada ön test-son test kontrol gruplu deneysel desen uygulanmıştır. Veriler Kara (2008) tarafından Türkçeye uyarlanan "Eğitimde Motivasyon Ölçeği (EMÖ)" ile elde edilmiştir. Verilerin istatistiksel analizleri sonucunda işbirlikli öğrenme destekli eğitsel eğlenceli etkinliklerin öğrencilerin motivasyon düzeyleri üzerinde anlamlı etkiye sahip olduğu görülmüştür.

1. This study was produced using data and results from the PhD dissertation called "The Effect of Educational Entertaining Activities Supported With Co-operative Learning in Teaching English on the Self-efficacy Skills, Self-regulation Strategies, Meta cognitive Skills, Motivations and Academic Achievement of the Students".

Anahtar Kelimeler: *Eğitsel eğlenceli etkinlikler, motivasyon, İngilizce öğretimi, işbirlikli öğrenme.*

1. Introduction

Motivation enables a person to increase his/her desire and effort to realize learning goals and maintain this desire and effort, making the teaching and learning processes easy, enjoyable and efficient (Ur, 1996). Motivation is also defined as an internal drive, strength, feeling or desire leading a person to carry out a special behavior (Brown, 1994a). Motivation is known to be a complicated entity which has a number of definitions and explanations. Whereas it is a reward according to the behaviorist approach, it is an internal drive or need for the cognitive approach. It can be explained in the widest sense as a dimension to make an effort to realize his/her aims based on his/her preferences (Brown, 1994b). It is understood from the definitions that motivation is a complicated concept which enables the individual to start the intended behavior, decide its direction, determine its strength and ensure its continuance.

Motivation is a separate and important part of education and training because it not only affects learning level but it also helps reveal what a student has learnt (Ertan, 2008; cited in Aydın and Coşkun, 2011). While being motivated for a lesson makes learning easy, there are also de-motivated students. Pintrich and Schunk (1996) have stated that students lacking motivation do not come to school regularly, are not in the habit of listening to lessons carefully, and are unwilling to complete their homework and duties (cited in Aydın and Coşkun, 2011). Accordingly, motivation is seen as important for achievement in the education system. It is almost impossible for low levels of motivation to result in high achievement. Therefore, a variety of different entertaining activities such as games and songs have to be used to build motivation in English lessons. Khan (1991) claims that games are closely related to motivation and naturally children like games and their motivation levels increase on account of their liking games (cited in Kupeckova, 2010). Hence, it can be argued that these activities have to be used as a part of teaching process in teaching English in the sense that a lesson containing lots of entertaining activities attracts the attention of students.

When learning is explained as a behavioral change in the teaching process, motivation is said to be required for the behavioral change (Sevinç, Özmen and Yiğit, 2011). In other words, achievement occurs as a result of being motivated well (Yule, 1996). One of the most important factors determining learning and achievement is motivation (Yılmaz and Çavaş, 2007) and it can be treated as both intrinsic and extrinsic (Brown, 1994b). Intrinsic motivation can be defined as the motivation stemming from within an individual: that is to say, people do things to satisfy themselves. These people can manage themselves to be successful and they are generally self-confident. This confidence motivates them to do their best (Brown, 1994b). There are material and spiritual values which can have positive and negative impacts generated by others and increase and decrease the repetition of behaviors in extrinsic motivation which means acting being inspired as a result of external factors (Ur, 1996). It can be said for extrinsic motivation that it is not directly related to the student himself/herself; events and conditions taking place in external environment affect students positively

and negatively.

Another crucial factor in the learning process was the case of applying co-operative learning approach effectively. Co-operative approach is a way of learning with at least two individuals to attain an intended activity (Yeşilyurt, 2010). Moreover groups must be heterogeneous in co-operative approach so as to offer equal opportunities to students (Quinn and Jannasch-Pennel, 1995). In addition, in co-operative learning environments, students feel more tolerant to and respectful to others' ideas, their attendance to lesson increases and learning difficulties can be removed right away (Yeşilyurt, 2009). This way of learning, therefore, can be stated to have a great effect on students' motivation levels and academic achievement, thereby. For that reason, the rationale behind this study is that educational entertaining activities supported with co-operative learning increase the motivation of students to be successful in learning foreign languages.

1.1. The Aim and Importance of the Study

The primary aim of this study is to investigate the effect of educational entertaining activities (games and songs) supported with co-operative learning on student motivation in teaching English. The fact that the teaching methods supported with educational entertaining activities are used in teaching English, are regarded necessary and important in the sense that the highly motivated students in teaching process contribute to qualified and effective learning. Throughout the literature review, it was recognized that there are many studies considering the effect of songs (Ratnasari, 2007; Millington, 2011; Bütüner, 2010; Şaktanlı, 2007); games (Rohani and Pourgharib, 2013; Wang, 2010; Liu, Cheng and Huang, 2011; Kim and Chang, 2010; Ural, 2009; Dursun, 2007; Atay, 2007) co-operative learning (Liang, 2011; Seng, 2006; Uğurlu, 2010). However, the application of combination of three has not been met yet. It is aimed, therefore, to determine the efficiency of games and songs supported with co-operative learning on student motivation in teaching English.

1.2. Hypothesis

1. There are important differences for the experimental group in the notes by experimental group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the post-test applications of the SME where the educational entertaining activities supported with co-operative learning were applied in the experimental group unlike the traditional method applied in the control group.
2. There are important differences for the experimental group where the educational entertaining activities supported with co-operative learning were applied in the notes taken by experimental group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the pre-test and post-test applications of the SME.
3. There are important differences for the control group where the traditional

method was applied, in the notes taken by control group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the pre-test and post-test applications of the SME.

2. Method

2.1. Research Design

The study was implemented according to an experimental design which was devised by the researcher. In this context, two groups, namely experimental and control groups were designated. Whereas the educational entertaining activities supported with co-operative learning were applied in the experimental group, the traditional method was applied in the control group. In this context, two groups were formed randomly in pre-test and post-test control group in the experimental design. The measures concerning the dependent variables were conducted in each two groups designated as experimental and control groups.

2.2. Study Group

This study was implemented with the 68 students (34 students for experimental group and 34 control group) sharing similar traits based on neutral criteria out of 105 fifth grade students in Turkey/Elazığ Namık Kemal Primary School. In this regard, the students' point averages in English concerning their first and second semesters in the 4th grade and the first semester in the 5th grade and their pre-test points were taken into account. Cluster analysis defined as a cluster of methods realizing a number of functions, was used to assess the data (Özdamar, 2010). As a result of this, a group consisting of 68 students was identified as a working group.

2.2.1. Ensuring the Neutrality of the Sampling Group

One sampling technique, Kolmogorov-Smirnov (K-S) testing, was used to identify the type of test to compare the students' in the experimental and control group, *English points in the first and second semesters in the 4th grade and the first semester in the 5th grade* and to find out whether the normal distribution occurred in the groups' testing score. The result of the study shows that the normal distribution happened in both the control and experimental groups.

Table 1. The Results of T-Test Analysis of the Independent Groups Concerning the Points of the Neutrality Measures of the Experimental and Control Groups

| Measures | Groups | \bar{X} | ss | Levene | | t | p |
|---|--------|-----------|-------|--------|------|------|------|
| | | | | F | p | | |
| 4 th grade 1 st semester English points | Exp. | 82.35 | 10.33 | .440 | .509 | .567 | .572 |
| | Cont. | 83.70 | 9.22 | | | | |
| | Total | | | | | | |

| Measures | Groups | \bar{X} | ss | Levene | | t | p |
|---|---------|-----------|-------|--------|------|-------|------|
| | | | | F | p | | |
| 4 th grade 2 nd semester English points | Exp. | 83.54 | 8.09 | | | | |
| | Control | 86.92 | 8.86 | .217 | .643 | 1.641 | .105 |
| | Total | | | | | | |
| 5 th grade 1 st semester English points | Exp. | 80.46 | 9.85 | | | | |
| | Cont. | 81.57 | 11.91 | 2.877 | .095 | .421 | .675 |

*p>.05 Exp.: Experimental Cont.:Control n_{Exp} =34 n_{Cont.} =34 sd=66

When Table 1 is examined in a detailed way, the results of the determined neutrality measures concerning “4th grade 1st semester English points” [$X_{\text{experimental}}=82.35$, $X_{\text{control}}=83.70$, $t_{(66)}=.567$, $p=.572$, $p>.05$]; “4th grade 2nd semester English points” [$X_{\text{experimental}}=83.54$, $X_{\text{control}}=86.92$, $t_{(66)}=1.641$, $p=.105$, $p>.05$]; “5th grade 1st semester English points” [$X_{\text{experimental}}=80.46$, $X_{\text{control}}=81.57$, $t_{(66)}=.421$, $p=.675$, $p>.05$] are seen to be not statistically meaningful. The experimental and control groups can be said to be designated neutrally in terms of the determined measures before the experimental treatment based on these results.

2.2.1.1. Matching the Experimental Group where the Educational Entertaining Activities Supported with Co-Operative Learning Were Applied with the Control Group where the Traditional Method Was Applied in Teaching English Based on the SME Points

The results of Mann–Whitney U and t-tests concerning the sub-dimension of pre-test application of the SME including the experimental and control groups are given in Table 2. When the findings are examined, meaningful differences are statistically seen as a result of a t-test which was implemented for the averages of the sub-dimension of pre-test application of the SME including the experimental and control groups.

Table 2. The Results of Mann–Whitney U And T-Tests Concerning the Sub-Dimension of Pre-Test Application of the SME Including the Experimental and Control Groups

| Group | \bar{X} | Ss | Levene | | t | p | M.W.U | | MeanRank | Sum of Ranks |
|-------|-----------|-----|--------|------|-------|------|-------|------|----------|--------------|
| | | | F | p | | | M.W.U | p | | |
| Exp. | 2.16 | .27 | | | | | | | | |
| Cont | 2.19 | .19 | 5.877 | .018 | -.131 | .896 | 533 | .578 | 35.82 | 1218 |
| | | | | | | | | | 33.18 | 1128 |

Exp.: Experimental Cont.:Control n_{Exp} =34 n_{Cont.} =34 sd=66

In other words, Levene test was examined and it was seen that the variances were not distributed homogeneously [$F=5.877$; $p=.018$]. MWU, which is one of the parametric tests, was chosen to be used because of this difference in Levene test. The differences in the points concerning the general sub-dimension of pre-test application

of the SME were not meaningful following statistical treatments [MWU=533.000; $p=.578$]. According to this result, it can be said that the groups were formed neutrally based on the SME.

2.3. Data Collection Tools

The work “The Adaptation of The Scale of Motivation in Education in the 1st Grade into Turkish” adapted into Turkish by Kara (2008) was relied upon to design the ways in which data was collected for the study. The scale in its original format and adapted Turkish version consists of 4 dimensions, namely 1-identified extrinsic motivation, 2-lack of motivation, 3-reflected intrinsic motivation, and 4-intrinsic motivation. The Cronbach Alpha values of the coefficient of consistence of the sub-dimension of the original scale were between 0.62 and 0.86. The items of the scale were designated as “Very often: 5, Often: 4, Sometimes: 3, rarely: 2 and Almost Never: 1” in a 5-point Likert scale. As a result of expert opinions expressed during the adaptation of the scale into Turkish, a 3-point Likert type “Yes: 3, Neutral: 2 and No:1” instead of a 5-point scale was employed different from the original scale.

Factor analysis was carried out to ensure the construct validity of the SME and to obtain the functional dimensioning by determining the factor loadings of the items. For this purpose, the total correlations of each item were given. To ensure the reliability of the measure, the internal coefficient of consistence of Cronbach Alpha was calculated for each factor and the scale overall. The relations among the factors were calculated through The Pearson Moment Multiplication Correlation Coefficient and all these statistical procedures were carried out with SPSS 15.0 program. The consistence of the data to the factor analysis was tested with Kaiser-Meyer-Olkin (KMO) and Bartlett tests before making factor analysis. By the means of the item analysis solution of the SME and Varimax Factor Analysis, factor rotation was made and four factors were found to be bigger than 1 in factor eigenvalue in the scale. Cattell’s “Scree Plot” (Kline, 1994; cited in Kara, 2008) was used to see this case more clearly. In addition, in the first phase of the validity of the measure, the consistence of the data was found to be at the level of 0.001 KMO= 0.85, Bartlett’s Test of Sphericity = 2899.589 for the sampling group as a result of the application of the scale. The data can be said to be convenient for the factor analysis in the sense that the value of KMO has to be at least 0.60 to make factor analysis on data (Pallant, 2001; cited in Kara, 2008). As a result, the Turkish form of the SME consisting of 12 items, was made ready in terms of being consistent to Turkish, reliable and valid as a result of these procedures.

2.4. The Analysis of the Data

The data in the study were analyzed by the means of SPSS 15.0 statistical package program. Independent samples t-test was used to make comparisons of the points of the SME for the students in the experimental and control groups and a paired samples t-test was used to compare the points of the scale within the groups in this study which is based on pre-test and post-test control group model. The data were analyzed comparing the characteristics of the experimental and control groups and Levene test was used for the normal distribution of the independent samples t-test. When the distribution was not normal, the Mann Whitney U test, which is a non-parametric test,

was applied. One sampling Kolmogorov-Smirnov (K-S) test was used for the normal distribution of the dependent samples t-test. When the distribution for the dependent samples t-test was not normal, a Wilcoxon signed rank test, which is a non-parametric test, was used. Karaatlı (2010) states that Kolmogorov-Smirnov (K-S) and Shapiro-Wilks tests can be used to understand whether the distribution of the points is normal. He also indicates that when the number of data is below 29, Shapiro-Wilks test can be used; and when the number is above 29, the Kolmogorov-Smirnov test can be used. Lilliefors (1967) states that the K-S test is a strong test which can be used for all samples sizes. In this issue, Özdamar (2002; cited in Acar, 2011) underlines that the K-S test can be used for each sample size depending on the normal tests of the magnitude of samples in the usage table. For that reason, the quantitative data of the study was tested through a Kolmogorov-Smirnov (K-S) test and 0,05 was chosen for the meaningful level.

2.5. Treatment

The application phase of the study lasted 15 weeks and covered 7 chapters. While the educational entertaining activities supported with co-operative learning in the context with the acquisitions in the curriculum of the 5th grade English lesson were applied for the experimental group, the activities in the course book were applied for the control group. The educational entertaining activities supported with co-operative learning for the experimental group was applied for 15 weeks and the traditional method was implemented for the control group to compare the applications. The determined scale was applied for each group before and after the application. Some of the examples which were prepared for the experimental group in the context with the educational entertaining activities supported with co-operative learning in the application phase of the study are given below:

The students were asked to prepare questions for the central theme in the chapter (like/dislike) in the context with the co-operative learning technique “Ask and Learn Together” by playing a “word chain game” which enables students to repeat the subjects they have learnt. The students were made to pronounce and learn the animal names, fruit and vegetables by listening to the song “What Animals Like” in the supplementary book named “English through Songs” (Şevik, nd) together with the activities in the course book. Besides, the research aimed to discover whether the students learnt the information in the chapter completely with one of the playing activities in the book called Time for English Grade 5 (Ministry of Education, 2008) being asked to match the animals with the foods they like. That’s why; the teacher enabled the students to make dialogue activity using a Student Team-Achievement Division Co-operative learning technique. Once again, students summarized and shared what they learnt in the context with Jigsaw II technique during the activities in the course book. In addition this, the students were asked to introduce and give information about themselves wearing the clothes of different occupations in the game “Who am I?” (Güneş and Güneş, 2011) . Later on, the questions concerning the occupations were posed to the listening students. At this point, the students were helped to learn the names of the occupations by listening to the song “Numbers and Jobs” (Şevik, nd). Besides, the students were made to grasp the possessives issue including mine, yours,

hers etc. by playing a game called “Whose ... is this?” (Güneş and Güneş, 2011). The students’ attention was attracted to the subject with a song at the beginning of the lesson. The song called “Help Me!” (Şevik, nd) is an example of being used at the beginning of the lesson thereby motivating them to follow the lesson curiously and eagerly.

3. Findings and Comments

The findings were analyzed in the context with the hypothesis formed in the framework of the aims of the study in this section. It was tested whether there was a meaningful difference in the pre-test and post-test SME scores between the experimental and control groups.

Hypothesis 1: There are important differences for the experimental group in the notes taken by experimental group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the post-test applications of SME where educational entertaining activities supported with co-operative learning were applied in the experimental group in contrast to the traditional method applied in the control group.

The homogeneity of the post-test points concerning the sub-dimensions *general and reflected intrinsic motivation* of the motivation was firstly evaluated to test the hypothesis of the study: however it was seen that there was not a significant difference. In other words, the homogeneity hypothesis was found in Levene test in the related sub-dimensions of the scale. According to this, the independent samples t-test was applied to determine the significance level in the points of the post-test concerning the sub-dimension “*general* [F=1.420; p=.238] *reflected intrinsic motivation* [F=.066; p=.798].” of the scale and its results are given Table 3.

Table 3. The Results of the Independent Samples T-Test Concerning the Sub-Dimensions General and Reflected Intrinsic Motivation of the Post-Test Applications of the SME of Experimental and Control Groups

| Sub-dimension | Groups | \bar{X} | Ss | Levene | | t | p |
|----------------------------------|--------|-----------|-----|--------|------|---------|------|
| | | | | F | p | | |
| Reflected Intrinsic Moti. | Exp. | 1.90 | .59 | .066 | .798 | -3.318* | .001 |
| | Cont. | 1.42 | .60 | | | | |
| General | Exp. | 2.42 | .18 | 1.420 | .238 | -3.963* | .000 |
| | Cont. | 2.21 | .25 | | | | |

*p<0.05 Exp.: Experimental Cont.:Control $n_{Exp}=34$ $n_{Cont.}=34$ $sd=66$

It was seen that there were statistically significant differences concerning the sub-dimension *reflected intrinsic motivation* of the points of the post-motivation measure of the groups in the results of the variance analysis. Besides, it is seen that the average of the experimental group is higher than the average of the control group ($\bar{X}_{\text{experimental}}=1.90$; $\bar{X}_{\text{control}}=1.42$). When t and p values are regarded to examine this significance level (0.48) between the groups, t value of the group is seen as (t=-3.318, p=001). The fact that the meaningful level is lower than p=.05 shows that the results of the related

sub-dimension are in favor of the experimental groups. It was seen that there were statistically significant differences concerning the sub-dimension *general motivation* of the points of the post-motivation measure of the groups. Again, it is seen that the average of the experimental group is higher than the average of the control group ($\bar{X}_{\text{experimental}}=2.42$; $\bar{X}_{\text{control}}=2.21$). When the significance level is examined, it is seen that t value of the group is as ($t=-3.963$, $p<.05$) and the significance level is lower than $p=.05$. This difference is understood to be for the experimental group. On the other hand, the results of the Mann Whitney U and t-test concerning the sub-dimensions *identified extrinsic motivation*, *lack of motivation*, *intrinsic motivation* are given in Table 4.

It is seen that the homogeneity hypothesis of the post-test points in Levene test was not validated in the data obtained from the post t-test concerning the sub-dimensions *identified extrinsic motivation*, *lack of motivation*, *intrinsic motivation* to test the related hypothesis of the study. Therefore MWU, which is a non-parametric test, was used to test the related sub-dimensions of the measure.

Table 4. The Results of Mann Whitney U and T-test Concerning the Sub-dimensions Identified Extrinsic Motivation (1), Lack of Motivation (2) and Intrinsic Motivation (3) of the Post-Test Applications of the SME of the Experimental and Control Groups

| Group | \bar{X} | Ss | Levene | | t | p | M.W.U | | MeanRank | Sum of Ranks |
|-------------|-----------|-----|--------|------|--------|------|-------|------|----------|--------------|
| | | | F | p | | | M.W.U | p | | |
| (1) Exp. | 2.97 | .09 | 5.628 | .021 | -1.124 | .265 | 541 | .417 | 35.59 | 1210 |
| Cont. | 2.93 | .18 | | | | | | | 33.41 | 1136 |
| (2) Exp. | 1.81 | .29 | 10.353 | .002 | -2.149 | .035 | 355 | .005 | 41.06 | 1396 |
| Cont. | 1.58 | .57 | | | | | | | 27.94 | 950 |
| (3) Exp. | 2.98 | .08 | 14.859 | .000 | -1.811 | .075 | 507 | .119 | 36.59 | 1244 |
| Cont. | 2.91 | .24 | | | | | | | 32.41 | 1102 |

Exp.: Experimental Cont.:Control $n_{\text{Exp}}=34$ $n_{\text{Cont.}}=34$ $sd=66$

In Table 4, it was determined that there were not significant differences [MWU=541.000; $p=.417$] concerning the sub-dimension *identified extrinsic motivation* of the post-test of the SME of the groups: the mean rank of the experimental group was 35.59 and the mean rank of the control group was 33.41. Even though the average points were in favor of the experimental group, the points of the post-test of the motivation tests of the related sub-dimension could be interpreted not to have been accepted in terms of the hypothesis on account of having shown no significant differences. There were significant differences in the points of the post-test of the SME concerning the sub-dimension *lack of motivation* [MWU=355.000; $p=.005$]. When the obtained findings are compared, the average points of the experimental group is 41.06 and the average points of the control group is 27.94. Besides, the significant differences were not seen in the results of MWU test [MWU=507.000; $p=.119$] concerning the post-test

applications of the sub-dimension *intrinsic motivation* of the measure.

Hypothesis 2: There are important differences for the experimental group where the educational entertaining activities supported with co-operative learning were applied in the notes taken by experimental group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the pre-test and post-test applications of the SME.

The K-S test was applied to determine whether the points of the pre-motivation and post-motivation concerning the sub-dimension *reflected intrinsic motivation* of the SME of the experimental group showed normal distribution. It was determined that the normal distribution concerning the points of the pre-motivation [$K=1.13$; $p=.15$] and the post-motivation [$K=1.16$, $p=.14$] of the experimental group took place. On the other hand, based on the K-S test which is intended to determine the points of the experimental group concerning the normal distribution of the *pre-motivation-general-post-motivation-general*, both the point of the pre-motivation ($K=.89$; $p=.41$) and the point of the post-motivation ($K=.88$, $p=.42$) showed the normal distribution. So, the dependent samples t-test which is a parametric test was used to compare the points concerning the two sub-dimensions.

Table 5. The Results of the Dependent Samples T-Test Concerning the Points of the Pre-Motivation and Post-Motivation Concerning the Experimental Group

| Sub-dimension | \bar{X} | Ss | r | t | p |
|-------------------------------------|-----------|-----|------|---------|------|
| Pre-reflected intrinsic motivation | 1,59 | ,59 | ,370 | -2.745* | .010 |
| Post-reflected intrinsic motivation | 1,90 | ,58 | | | |
| Pre-motivation-general | 2,17 | ,18 | ,194 | -6,306* | ,000 |
| Post-motivation-general | 2,42 | ,18 | | | |

* $p < .05$ $n_{Exp} = 34$ $n_{Cont.} = 34$

When Table 5 is examined, the results of the dependent samples t-test concerning the points of pre-motivation-post-motivation of the sub-dimension of *reflected intrinsic motivation* of the SME of the experimental group. According to these results, there are significant differences in favor of the points of the post-motivations concerning the sub-dimension of the reflected intrinsic motivation of the measure [$t_{(33)} = -2.745$, $p = .010$]. This indicates that the point of the pre-motivation of the pre-experimental treatment ($\bar{X} = 1.59$) increased to the point of the post-motivation of the post-experimental treatment ($\bar{X} = 1.90$). Based on this result, the second hypothesis was confirmed. On the other hand, when the dependent samples t-test concerning the sub-dimension of the pre-motivation-general-post-motivation-general of the measure is considered, there is a significant difference between the point of the pre-motivation of the pre-motivation-general-post-motivation-general ($\bar{X} = 2.17$) and the point of the post-motivation ($\bar{X} = 2.42$) of the experimental group [$t_{(33)} = -6.306$, $p = .000$].

In Table 6, the results of the Wilcoxon signed rank test concerning the points of the pre-motivation and the post-motivation of the sub-dimension of the *identified extrin-*

sic motivation, lack of motivation and intrinsic motivation of the measure of the experimental group are presented. When the normal distribution of the pre-motivation and post-motivation concerning the sub-dimension of the *identified extrinsic motivation, lack of motivation and intrinsic motivation* of the measure of the experimental group is regarded, K-S test shows that there is no normal distribution between the points of pre-motivation and post-motivation of the related sub-dimensions of the measure of the experimental group. For that reason, the Wilcoxon signed rank test, which is a non-parametric test, is used to compare the points.

Table 6. The Results of Wilcoxon Signed Rank Test Concerning the Sub-Dimensions of the Identified Extrinsic Motivation, Lack Of Motivation and Intrinsic Motivation of the Measure of the Experimental Group

| Sub dimension | Pre-motivation | n | Mean rank | Sum of ranks | Z | p |
|---------------------------------|-----------------|----|-----------|--------------|---------|------|
| | Post-motivation | | | | | |
| Identified Extrinsic Motivation | Negative rank | 0 | .00 | .00 | -4.104* | .000 |
| | Positive rank | 21 | 11.00 | 231.00 | | |
| | Equal | 13 | | | | |
| | Total | 34 | | | | |
| Lack of motivation | Negative rank | 13 | 13.42 | 174.50 | -1.149 | .250 |
| | Positive rank | 10 | 10.15 | 101.50 | | |
| | Equal | 11 | | | | |
| | Total | 34 | | | | |
| Intrinsic motivation | Negative rank | 0 | .00 | .00 | -4.728* | .000 |
| | Positive rank | 28 | 14.50 | 406.00 | | |
| | Equal | 6 | | | | |
| | Total | 34 | | | | |

* $p < 0.05$

In Table 6, the results of Wilcoxon signed rank test concerning the sub-dimension of the *identified extrinsic motivation* of the measure indicates that there is a statistically significant difference between the points of the pre-motivation and the post-motivation of the students [$Z = -4.104$, $p = .000$]. The difference is related with the points of the post-motivation of the experimental group. On the other hand, the results of Wilcoxon signed rank test concerning the sub-dimension of *lack of motivation* of the measure shows that there is not a statistically significant difference between the points of the pre-motivation and the post-motivation of the students [$Z = -1.149$, $p = .250$]. An evaluation of the results of the Wilcoxon signed rank test concerning the sub-dimension of the *intrinsic motivation* of the measure shows that there is a statistically significant difference between the points of the pre-motivation and the post-motivation of the experimental group [$Z = -4.728$, $p = .000$].

Hypothesis 3: There are important differences for the control group where the traditional method was applied, in the notes taken by control group in *identified extrinsic motivation, lack of motivation, reflected intrinsic motivation, intrinsic motivation* and general dimensions in the pre-test and post-test applications of the SME.

The points were examined in terms of the normal distribution to compare the points of the sub-dimension of *the lack of motivation* of the measure of the control group. K-S test concerning the sub-dimension of the lack of motivation of the measure indicates that there is a normal distribution in the points of both the pre-motivation ($K=1.18$; $p=.12$) and the post-motivation ($K=1.31$, $p=.06$). For that reason, the dependent sample t-test was used to compare the points of pre-motivation and post-motivation.

Table 7. The Results of the Dependent Sample T-Test Concerning the Points of the Pre-Motivation and Post-Motivation of the Control Group

| Lack of motivation | n | \bar{X} | ss | r | t | p |
|-------------------------|----|-----------|-----|------|-------|------|
| Pre-lack of motivation | 34 | 1,76 | ,45 | ,165 | 1,627 | ,113 |
| Post-lack of motivation | 34 | 1,58 | ,57 | | | |

The statistical treatment concerning the sub-dimension of the lack of motivation of the measure in Table 7 shows that there is no significant difference concerning the sub-dimension of the lack of motivation of the control group between the points of the pre-motivation ($\bar{x}=1.76$) and the post-motivation ($\bar{x}=1.58$) [$t_{(33)}=1.627$, $p=.113$]. According to these data, the significant difference concerning the related sub-dimension did not occur after the empirical treatment. The results of a Wilcoxon signed rank test concerning the sub-dimensions of the identified extrinsic motivation, reflected intrinsic motivation, intrinsic motivation and general motivation of the measure of the control group are given in Table 8.

K-S test was firstly applied to determine which test to be used to compare the points in the pre-motivation and post-motivation of the related sub-dimension of the measure by the control group. It was seen that there was no normal distribution in the points in the pre-motivation and post-motivation in the related sub-dimension of the measure by the control group apart from the points of K-S in the related sub-dimension of the general motivation. For that reason, Wilcoxon signed rank test was selected to compare to the points.

Table 8. The Results of Wilcoxon Signed Rank Test Concerning the Sub-Dimensions of the Identified Extrinsic Motivation, Reflected Intrinsic Motivation, Intrinsic Motivation and General Motivation of the Measure of the Control Group

| Sub-dimension | Pre-motivation | n | Mean Rank | Sum of ranks | Z | p |
|---------------------------------|-----------------|----|-----------|--------------|---------|------|
| | Post-motivation | | | | | |
| Identified extrinsic motivation | Negative rank | 1 | 16.50 | 16.50 | -4.140* | .000 |
| | Positive rank | 25 | 13.38 | 334.50 | | |
| | Equal | 8 | | | | |
| | Total | 34 | | | | |

| Sub-dimension | Pre-motivation | n | Mean Rank | Sum of ranks | Z | p |
|--------------------------------|-----------------|----|-----------|--------------|---------|------|
| | Post-motivation | | | | | |
| Reflected intrinsic motivation | Negative rank | 17 | 13.71 | 233.00 | -2.400 | .016 |
| | Positive rank | 7 | 9.57 | 67.00 | | |
| | Equal | 10 | | | | |
| | Total | 34 | | | | |
| Intrinsic motivation | Negative rank | 4 | 15.38 | 61.50 | -3.618* | .000 |
| | Positive rank | 26 | 15.52 | 403.50 | | |
| | Equal | 4 | | | | |
| | Total | 34 | | | | |
| Overall | Negative rank | 12 | 16.08 | 193.00 | -1.081 | .280 |
| | Positive rank | 19 | 15.95 | 303.00 | | |
| | Equal | 3 | | | | |
| | Total | 34 | | | | |

* $p < 0.05$

The results of Wilcoxon signed rank test concerning the sub-dimension of *the identified extrinsic motivation* in Table 8 show that a statistical significant difference between the points of the pre-motivation and post-motivation by the students was encountered [$Z = -4.140$, $p = .000$]. However, this difference was encountered to be in favor of the points of the pre-motivation. Based on this, the sub-dimension of the related hypothesis was rejected. On the other hand, the results of Wilcoxon signed rank test concerning the sub-dimension of *the reflected intrinsic motivation* of the points of the pre-motivation and post-motivation of the control group show that there is a statistically significant difference in the points of the pre-motivation and the post-motivation of the control groups [$Z = -2.4000$, $p = .016$]. In addition, this difference was found to be in favor of the pre-motivation of the related sub-dimension after the empirical treatment. The results of Wilcoxon signed rank test concerning the sub-dimension of *the intrinsic motivation* of the comparison of the pre-motivation and post-motivation of the measure of the control group are given in Table 8. According to these results, it has been understood that there is a significant difference statistically concerning the points of the pre-motivation and post-motivation of the related sub-dimension of the intrinsic motivation of the control group [$Z = -3.618$, $p = .000$]. Based on these results, the sub-dimension of the 3rd hypothesis was accepted. And lastly, when the results of the dependent samples t-tests are examined in terms of the overall points of the measure, the results of Wilcoxon signed rank test demonstrate that there is no significant difference statistically concerning the overall points of the students in the control group [$Z = -1.081$; $p = .280$].

4. Results and Discussion

The effect of educational entertaining activities supported with co-operative learning on the motivation of the students was examined in this study. Comparative analyses were made determining the differences on the motivation levels of the students in the experimental and control groups as a result of the fifteen week application. The obtained data show that there is no significant difference in the average points of the

sub-dimension of the *general motivation* of the pre-test motivation of the students in the experimental and control groups before the application. According to this result, the groups were formed neutrally. Besides, a significant difference is seen in the favor of the points of the post-test of the experimental group in the motivation points in the same sub-dimension after the empirical treatment. It can be said that educational entertaining activities supported with co-operative learning has a significant effect on the motivations of the student in the experimental group. When the motivation point difference concerning the sub-dimension of the general motivation pre-application and post-application of the students in the experimental group is regarded, the points of the post-motivation points of the students has increased and it can be concluded that the difference is meaningful. When the motivation points taken by the control group in the same sub-dimension before and after the application are considered, a significant difference has not been encountered. In other words, the motivation difference before and after the educational entertaining activities supported with co-operative learning are taken into account, there has been a difference in the motivations of only the students in the experimental groups and the significant difference is concluded. The educational entertaining activities supported with co-operative learning which have a significant impact on the motivation levels of the students is also confirmed with the study by Emeksiz (2006: 101). It is concluded that students are more motivated on account of feeling enthused while learning English with the entertaining activities and for that reason teachers have to apply these sorts of activities in the teaching process in this study. A similar study by Ratnasari (2007) is related to teaching English with songs. The study is in the parallel with the current study in the sense that the former study indicates that songs enable students to learn English faster by having positive effects on the desires and motivation of students. In addition, similar study results including the teaching methods with educational entertaining activities (like games and songs) show parallel results with the current study. That is, it was seen that use of these activities increased the motivations of students (Gömleksiz, 2005; Batdı, 2012; Hsieh, 2006; Millington, 2011).

When the post-test points of the sub-dimension of the identified extrinsic motivation of the motivation measure of the experimental and control groups before the study were examined, it was seen that there was no significant difference statistically between the two groups. On the other hand, there was a significant difference statistically between the points of the pre-motivation and post motivation of the experimental group and this difference was seen to have happened in the points of the post-motivation of the experimental group. A similar case was seen in the study by Wang (2010). In this study, the data was collected through quantitative methods. The effect of the activities including games on teaching English was investigated in the study and it was understood that teaching with the games affected the students' motivation levels positively and the educational outcomes turned out to be effective. Based on the results of Wilcoxon signed rank test in terms of the evaluations concerning the sub-dimension of the identified extrinsic motivation of the measure, it was seen that there was a significant difference statistically between the points of the pre-motivation and post-motivation of the students in the control group.

According to the results of the statistical treatment of the sub-dimension of the

lack of motivation of the post-test application of the motivation measure of the experimental and control group, a significant difference was encountered in the related sub-dimension of the post-test application of the measure of the groups. In addition, according to the results of the Wilcoxon signed rank test which compares the points of the pre-motivation and post-motivation in the related sub-dimension of the motivation measure of the experimental group, it was seen that there was no a significant difference statistically between the points of the pre-motivation and post-motivation of the students. Likewise, there was no significant difference between the points of the pre-motivation and post-motivation of the control group.

In addition, as a result of the statistical treatment concerning the points of the sub-dimension of *the reflected intrinsic motivation* of the post-test application of the motivation measure of the students, a significant difference statistically in the points of the post-motivation of the sub-dimension of the reflected intrinsic motivation. Besides, the difference turned out to be in favor of the experimental group in the sense that the average point of the experimental group was higher than the average of the control group. This case means that the usage of songs and games in English course increase the students' motivations. Furthermore, as a result of the points of the pre-test and post test of the two groups in the study, there was a differentiation in the outcomes. However, the difference in the control group was seen to be in favor of the points of the pre-motivation in the related sub-dimension after the empirical studies. In this context, it is understood that the songs and games which were applied to the students in the experimental group affect the motivation level of the students in a positive way.

Based on the results of the statistical analysis concerning the points of the sub-dimension of *the intrinsic motivation* of the post-test application of the motivation measure of the students of the experimental and control groups, a statistically significant difference in the points of the two groups was not observed. When the points of the pre-motivation before the empirical treatment and the points of the post-motivation after the empirical application concerning the experimental group were compared in terms of evaluating the points of the pre-test and post-test of the two groups, it was seen that there was no significant difference between the points. The difference occurred in the favor of the post-motivation of the experimental and control groups. In a similar study, the effects of entertaining and motivating educational computer games on academic achievement and motivation were investigated. As a result of the study, it was stated that playing games could increase students' motivation without achieving the determined aims easily in the games (Ural, 2009). In another study, the effects of the songs on teaching mathematics were investigated and it was seen that the use of songs in teaching mathematics had a considerable effect on the students' motivation levels and their attitudes concerning mathematics (Bütüner, 2010). When these studies are examined, it is thought that they share similar results with the current study. According to the results of the study, the educational entertaining activities supported with co-operative learning affected the students' extrinsic and intrinsic motivations and academic achievements positively. For that reason, the applications based on the educational entertaining activities supported with co-operative learning have to be included in the curriculum of teaching English to increase the students' motivation, in particular in the first stage of primary education.

5. References

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