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## THE EFFECT OF USING CREATIVE DRAMA METHOD ON STUDENT ACHIEVEMENT IN THE SOCIAL STUDIES COURSE: A META-ANALYSIS STUDY

*Review study*

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# THE EFFECT OF USING CREATIVE DRAMA METHOD ON STUDENT ACHIEVEMENT IN THE SOCIAL STUDIES COURSE: A META-ANALYSIS STUDY

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## Abstract

The aim of this study was to determine the effect of creative drama method on the Social Studies course achievement of students. Within the scope of the research, in Google Academic, EBSCOhost, ERIC, ULAKBİM TR Index, thesis databases of the Higher Education Council in Turkey (YÖK), a search was conducted via the key words “drama, creative drama, role-playing, improvisation, Social Studies lesson, and academic achievement”. As a result of these searches, a total of 19 studies (4 articles and 15 theses) published between the years of 2006 and 2020 were reached. The effect sizes, heterogeneities and publication bias analyzes of the studies were conducted using the “Comprehensive Meta-Analysis” statistical program. It was found that the studies conducted on the creative drama ( $Q=90,019$   $p < 0,05$ ;  $I^2= 78,893$ ) method showed a heterogeneous distribution, and there was no publication bias. According to the results of the study, the creative drama method had a very large effect size ( $d = 1,17061$ ) on the success of the social studies course in favour of the experimental groups which utilized the creative drama method. Regarding the effect size results in terms of the years, type and class level of the studies, the effect size of the studies published between 2006-2012 ( $d=1,208$ ) was higher and was largely positive. Studies published as articles had higher effect size than the theses, and the effect size was perfectly positive. When the effect size of the sample group was examined in terms of the grade levels, it was concluded that the class with the huge effect size was 8th grade ( $d = 2.733$ ) and the class with the lowest effect size was 4th grade ( $d = 0.709$ ).

*Keywords:* Social Studies course, student achievement, creative drama, meta-analysis .

## 1. Introduction

The use of different teaching methods and techniques is seen as a necessity of the modern age to make education effective, efficient and attractive (Avci, Coklar, & Istanbulu, 2019; Yucer, 2011). Making an effort to improve themselves in a versatile way in contemporary societies, individuals try to keep up with the change in the environment where they live (Kartal, 2009; Yilmaz, 2013). This change shows itself in the direction from the teacher-centred education system towards constructive and creative educational approaches that make the student active in the learning process (Kaf, 2000; Kara & Cam, 2007; Yılmaz, 2013). Various methods such as question and answer, discussion (debate, panel, counter-panel, forum, etc.), trip-observation, brainstorming, problem-solving, a drama that will make students active are used in this system that puts the student at the centre (Aylar & Aksin, 2011; Çelikkaya & Kus, 2009; Iltar, 2018; Yazicioglu & Alkan, 2019). The creative drama method, one of the methods that make the individual active, is one of the areas and methods that have been popular in recent years (Ulutas, 2011). There are many definitions in the literature regarding the concept of creative drama (And, 1974; Gonen & Dalkilic, 2002; Heatcote, Dorothy & Herbert, 1985; Lehman, 1986). According to San (1998), this concept, which does not have a fully Turkish equivalent, is derived from the Greek word '*dran*' and means to do, to make and to operate.

Creative drama is named sometimes as method and sometimes as a discipline and field with names such as ‘dramatization in education, dramatization, role-playing, dramatization, pedagogical play’ (Adiguzel, 2006). It is possible to find different uses related to Creative Drama called Creative Drama in the United States of America, Drama in Education in England, and in Germany, School Game, Play and Interaction (Tuluk, 2004). Although the creative drama has different names in the literature, these concepts are not different from each other in terms of purpose, scope and quality (Adiguzel, 2006; Akoguz, 2002). However, the phenomenon of creative drama should not be perceived as staging a play or theatre play. Because in creative drama, volunteerism is essential, there is sharing and togetherness in its essence, it is not based on a written text and is not staged (Adiguzel, 2002; Aksari, 2005; Akyel & Caliskan, 2013; San, 1998). Yalcin and Aytas (2012) express the concept of creative drama as a teaching method within the education program and the improvement of the individual's own skills. Especially when the concept of creative drama is considered in two dimensions, its most important function is its use in the educational environment and its contribution to education. Creative drama is a teaching method and a form of self-expression, and it is an important option for today's educational approaches with its individual-centred structure (Ustundag, 1998; Yenilmez & Uygan, 2010). Creative drama activates students' cognitive, affective and psychomotor learning areas, and provides them with a rich learning space (Onder, 2002). Allowing students to interact more with the environment, the creative drama method has a structure that can be integrated with the modern education system. In Turkey, creative drama supports students' creativity, aesthetic development, collaboration habits, language and communication skills, problem-solving skills, sociability and their development in many more ways (Ustundag, 1998; Yegen, 2003). Also, individuals who receive creative drama education have distinct priorities in coping with problems and adapting to new situations (Adiguzel, 2015). Because of these priorities and advantages, creative drama activities are used by many disciplines today. In the related literature, it is seen that creative drama method is applied in the teaching of disciplines such as Art Education, Turkish Teaching, Foreign Language Teaching, Social Studies Teaching, Life Sciences Teaching, Science and Mathematics Teaching (Akgul & Tanriseven, 2019; Aykac, 2007; Keles & Cepni, 2019; Kirmizi, 2009; Maden & Dinc, 2017; Soyer, 2016; Utkur & Acikalin, 2018). As in other lessons, the creative drama method is frequently used in the Social Studies course teaching process to achieve the goals of the lesson (Ali, 2019). The Social Studies course prepares individuals for the natural and social environment by contributing to their adaptation to the environment they live in (Ozturk & Dilek, 2002). When the Social Studies course curriculum is examined, it is thought that creative drama will affect the achievements of many units. Because in the learning of this lesson, which takes its subject from life, participating in the learning environment, learning by living and interacting are essential (Caliskan & Karadag, 2008; Ozturk & Sari, 2018). Besides, since the Social Studies course includes many historical, political and cultural subjects and it is an interdisciplinary course, its usage area is wide (Ustundag, 2009). In Social Studies and Life Sciences lessons, where abstract concepts are intense, it is possible to concretize, interpret and revive the subject with creative drama method, and it provides positive benefits to students (Caliskan & Karadag, 2008). The positive effect of using the creative drama method in the Social Studies course on the academic success of the students was previously revealed by various researchers (Akkaya, 2020; Ali, 2019; Altikulac & Akhan, 2010; Aykac, 2008; Aysal, 2012; Bingol, 2015; Dogan, 2016; Evin-Gencel, 2009; Gundogdu, 2010; Gunaydin, 2008; Kaf & Yilmaz, 2017; Karatas, 2011; Kartal, 2009; Malbelegi, 2011; Nayci & Adiguzel, 2017; Salur, 2009; Sarac, 2015; Ulubey, 2015; Yilmaz, 2013; Zayimoglu, 2006). Various studies are showing that creative drama method positively affects course success in different disciplines in the related literature (Aydeniz, 2012; Debrelil, 2011; Durusoy, 2012; Kadan, 2013; Karacil, 2009; Karapinarli, 2007; Selmanoglu, 2009; Sahin, 2012; Turkel, 2011). It has been observed

that studies that are independent from each other and that yield different results have been numerous in recent years as the aforementioned experimental studies are examined. However, it is a fact that inclusive and reliable studies are needed to make inferences by interpreting the knowledge accumulated by similar studies on the same subject (Akgoz, Ercan, & Kan, 2004). When the related literature was examined, it was seen that few meta-analysis studies were synthesizing different studies (Akdemir & Karakus, 2016; Batdi & Batdi, 2015; Ozbey, Sarikaya & Ozet, 2017; Ulubey & Toraman, 2015). Depending on increasing the use of creative drama in Turkey in recent years, it has become an indispensable element of education and has been an inspiration to many studies (Akdemir & Karakus, 2016). However, it was observed that the meta-analysis studies conducted were generally examined without being divided into separate disciplines. As a separate discipline, Simsek and Karatas (2020) examined the effect of creative drama method on success in Science Education. Although there are studies examining the effect of creative drama on academic achievement, and reaching different results, and meta-analysis studies that combine these results, no meta-analysis study related to Social Studies course was found. Therefore, it is thought that there is a need for a meta-analysis study that deals with the effect of creative drama method on the academic success of the Social Studies course. In this sense, "What is the effect of creative drama method on Social Studies course achievement?" was determined as the problem statement of the study. The sub-problems are as follows:

- What is the distribution of studies included in meta-analysis according to descriptive variables?
- How is the distribution of the effect size of the creative drama method according to years, the type of study and the grade level of the sample group?

## **2. Method**

### **2.1. Design of the Study**

Meta-analysis method was used in this study in which the effect of drama and creative drama methods on students' Social Studies course success was tried to be determined. Meta-analysis is defined as the statistical reinterpretation by bringing together the findings of quantitative studies conducted independently from each other on the same subject (Dincer, 2014; Ellis, 2012). It is seen that the use of meta-analysis method has become widespread in recent years. Because a method such as a meta-analysis is needed to determine whether the effects of variables measured in the experiments of the researchers' studies will be repeated or not (Radin, 2002).

### **2.2. Data Collection**

The data to be used in the research were reached in June 2020. To reach the studies to be included in the research, the search was made using the words "drama, creative drama, role-playing, improvisation, Social Studies lesson, academic achievement, creative drama, role-playing, improvisation, Social Studies lesson, academic achievement" in Google Scholar, EBSCOhost, ERIC, ULAKBİM TR Index, YÖK Thesis databases. As a result, A total of 27 studies were reached using the creative drama method. 8 studies, which were obtained as a result of the searches to determine the studies, were excluded. 3 articles were produced from the thesis and 5 studies were not included in the meta-analysis because they did not contain the data required to calculate the effect size.

The criteria used to determine the studies included in the study are as follows:

- Research should consist of articles, master's and doctoral theses written in Turkish or English,

- Research should be conducted in Turkey,
- The sample sizes of the groups to be studied should be included,
- Measurement tools used in the study should have validity and reliability information,
- Studies should have experimental and control groups,
- To calculate the effect size, studies should include mean, standard deviation and t-test values.

As a result, in compliance with the criteria listed above, 19 studies were included in the meta-analysis.

### 2.3. Coding of the Data

The coding method was used to classify the studies included in the meta-analysis and to generate data. In the coding form, there were the name of the study, the author of the study, the year the study was published, the type of the study, the sample size (Experimental, Control), The quantitative data required to calculate the effect size ((r, t, F statistics), mean and standard deviation values and p-value). While coding, Microsoft Excel 2010 program was used. After the coding, it was transferred to the Comprehensive Meta Analysis (CMA) program. The coding process was done by two independent coders and the reliability analysis was found to be 0.94 using the Cohen Kappa coefficient (Cohen's  $\kappa$ ). While interpreting the Kappa coefficient, according to Landis and Koch (1977), the following criteria are taken as a basis. These are  $\kappa=0,81-1,00$  (almost perfect),  $\kappa=0,61-0,80$  (substantial),  $\kappa=0,41-0,60$  (moderate),  $\kappa=0,21-0,40$  (fair),  $\kappa=0,00-0,20$  (slight),  $\kappa < 0,00$  (poor). Accordingly, it can be said that the reliability level (= 0,94) was almost perfect.

### 2.4. Analysis of the Data

The data were analyzed in two different ways: descriptive statistics (frequency-percentage) and meta-analysis. In the descriptive analysis, the data in the study were classified according to various variables and presented in a table. While using the meta-analysis method, the effect sizes of the studies were found by the heterogeneity test. Cumming (2012) proposes the random-effects model for studies in the field of social sciences. The heterogeneity of the effect sizes was decided by the Q and  $I^2$  statistics in the study where the calculations were made with fixed and random effects models. Three methods were used to test publication bias: Funnel plot, Orwin Safe N Number, Duval and Tweedie's trim and fill method. The effect size of each study included in the meta-analysis was calculated using the Comprehensive Meta Analysis (CMA) program. Hedges' g coefficient was used to calculate the effect size. In the analyzes, the confidence level regarding the effect size was determined as 95%. In calculating the effect sizes, Thalheimer and Cook's (2002) classification was used. According to this;

- $-0.15 \leq \text{effect size} < 0.15$  negligible,
- $0.15 \leq \text{effect size} < 0.40$  small,
- $0.40 \leq \text{effect size} < 0.75$  medium,
- $0.75 \leq \text{effect size} < 1.10$  large,
- $1.10 \leq \text{effect size} < 1.45$  very large,
- $1.45 \leq \text{effect size}$ , huge levels,

Positive effect size indicates that the study is in favour of the experimental group, and a negative one indicates that it is in favour of the control group (Wolf, 1988).

### 3. Findings

In the research, descriptive data belonging to the studies included in the meta-analysis were included.

Table 1. *Descriptive statistics on the researches involving the effects of drama and creative drama methods on social studies course achievement*

Drama Method	f	%
Year of the Study		
2006	1	5,26
2008	2	10,53
2009	3	15,79
2010	2	10,53
2011	2	10,53
2013	1	5,26
2015	3	15,79
2017	2	10,53
2019	2	10,53
2020	1	5,26
Type of the Study	f	%
Article	4	21,05
Thesis	15	78,95
Grade Level of the Sample Group	f	%
4th Grade	5	23,81
5th Grade	4	19,05
6th Grade	5	23,81
7th Grade	5	23,81
8th Grade	2	9,52

When Table 1 was examined, it was seen that 15 (78,95%) of the studies conducted with the creative drama method were theses and 4 (21,05%) were articles. Examining the distribution of the studies by years, it was seen that three theses were written in 2009 and 2015 (15,79%), and no studies were conducted in experimental design and measuring academic achievement in 2007, 2012, 2016 and 2018. When the grade level of the sample group was examined, it was determined that there were 4 (19,05%) studies at the 5th-grade level, 5 (23,81%) at the 4th, 6th and 7th grade, and 2 (9,52) at the 8th-grade level. Although there were 19 studies conducted with the creative drama method, when the class level was examined, it was seen that the total number of the study was 21 because the sample group of two study was at both 4th and 5th-grade levels.

### 3.1.1. Publication bias of studies conducted with creative drama method

In the research, before starting the meta-analysis, it was checked whether there was publication bias. According to Kış (2013), it is important to check publication bias before conducting meta-analysis. In studies in which the meta-analysis method is used, the inclusion of only studies containing significant results into the analysis affects the process negatively (Long, 2001). Therefore, publication bias of the research was tested using Funnel plot, Orwin Safe N-Number, and Duval and Tweedie's trim-fill method. In order to decide that there is no publication bias in the meta-analysis, the effect size of the studies should be distributed symmetrically within the funnel lines (Dincer, 2014). In addition, it is expected that the standard error value will be scattered more densely towards the upper part of the graph, that is, towards zero. Funnel scatter plot results regarding the publication bias are given in Figure 1.

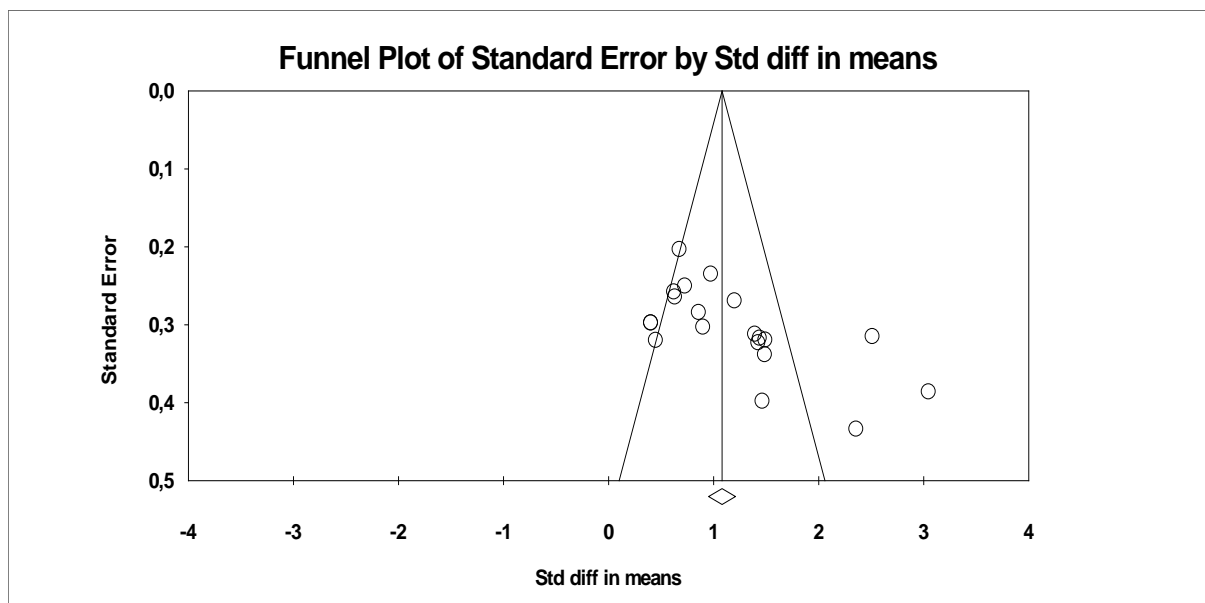


Figure 1. Funnel scatter plot of studies examining the effect of drama method on social studies course achievement

As Figure 1 shows, it was found that the studies included in the meta-analysis showed a symmetrical distribution, but there was a concentration mostly in the middle part. Although this result showed that there was no publication bias, it revealed the necessity of examining other analyzes. The analysis results are given in Table 2.

Table 2. Statistical analysis regarding publication bias

Orwin's fail safe N	Number of studies required for 0.01, (N = 19) reliability level= 1535	
Trim and fill method by Duval and Tweedie	Observed Effect Size	Adjusted Effect Size
	1,17061	1,17061

Table 2 shows the results of the analysis regarding the publication bias of the studies examining the effect of the creative drama method on Social Studies course achievement. The Orwin Safe N number is used to determine the number of studies that may be lacking in the analysis of studies conducted with the meta-analysis method (Borenstein, Hedges, Higgins, &

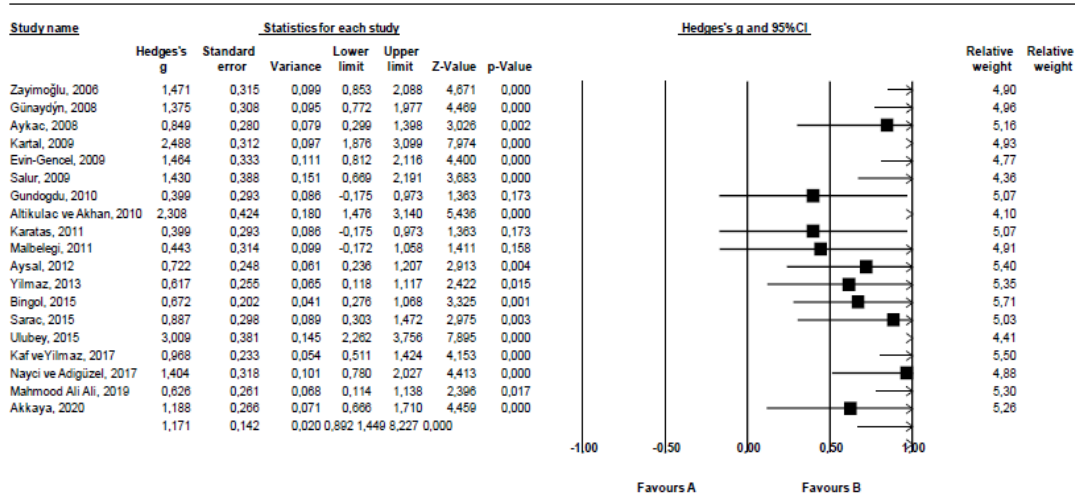
Rothstein, 2013). The general effect size obtained from this test ( $d = 1.18849$ ) at the level of 0.01, namely, the number of studies required to reach almost zero level is 1535. It is generally recommended that the number obtained should be at least 5-10 times the number of studies included in the study (Avcı, Coklar, & Istanbulu, 2019). However, this result ( $1535/20 = 76.75$ ) is far above the recommended criterion. It can be said that the study does not have publication bias, since it seems impossible to reach 1535 studies. According to the results of the analysis performed with the Duval and Tweedie trim-fill method, the absence of difference between observed and corrected effect size values is another indicator that there is no publication bias. After examining the results of publication bias of the studies included in the meta-analysis, the effect size value, heterogeneous distribution value and confidence interval value of the studies were examined. The results obtained are as in Table 3.

Table 3. Average effect sizes and confidence interval values in terms of the effect model

Model	n	Average Effect Size	Z	Standard Error	95% Confidence Interval		sd	Q	p	I <sup>2</sup>
					Lower Limit	Upper Limit				
Fixed Effects Model	19	1,065	16,50	0,065	0,939	1,192				
Random Effects Model	19	1,171	8,227	0,142	0,892	1,449	18	90,019	0,000	78,893

In this study in which the random-effects model was used, the average effect size value was calculated as 1.171, standard error as 0.142, the lower limit of the confidence interval of the average effect size as 0.892 and the upper limit as 1.449. In terms of the results of the homogeneity test conducted to determine whether there was a significant difference between effect sizes, it was determined that there is a statistically significant difference between the groups formed according to the experimental and control groups ( $Q = 90.019$ ,  $p < .05$ ). In other words, it was determined that the effect size distribution had a heterogeneous structure. The value of  $I^2$  shows the ratio of the total variance for the effect size. Unlike the Q statistic, the  $I^2$  statistic is not affected by the number of studies. In the interpretation of  $I^2$ , 25% indicates low heterogeneity, 50% moderate heterogeneity and 75% high heterogeneity (Cooper, Hedges, & Valentine, 2009). In terms of the random effect model,  $I^2$  value for 1,171 effect size value indicates a high level of heterogeneity with 78,893%. According to Thalheimer and Cook (2002), it can be said that the drama method has a wide effect on increasing social studies course achievement. The positive average effect size value (+1,171) indicates that the applied method causes a change in favour of the experimental group. The forest plot showing the distribution of the effect size values of the studies in terms of the random-effects model is given in Figure 2.





Meta Analysis

Figure 2. Forest plot showing effect size values of studies

When the effect size values of the studies were examined in terms of Figure 2, it was seen that 3 studies had a small positive effect (Gundogdu, 2010; Karatas, 2011; Malbelegi, 2011), 4 studies had a moderate positive effect (Aysal, 2012; Bingol, 2015; Mahmood Ali, 2019; Yilmaz, 2013), 3 studies had a large positive effect (Aykac, 2008; Sarac, 2015; Kaf & Yılmaz, 2017), 4 studies had a very broad positive effect Akkaya, 2020; Gunaydin, 2008; Nayci & Adiguzel, 2017; Salur, 2009), and 5 studies had a perfect positive effect (Altikulac & Akhan, 2010; Evin-Gencel, 2009; Kartal, 2009; Zayimoglu, 2006; Ulubey, 2015). Based on the random-effects model of the average effect size values of the studies, the effect size value was calculated as 1.171, the standard error of the average effect size was 0.142, the lower limit of the confidence interval of the mean effect size was 0.020, and the upper limit was 0.892. t Regarding the weight of the research, it was found that the study with the smallest (4.10%) weight percentage belonged to Altikulac and Akhan (2010), and the study with the largest weight percentage belonged to Bingol (2015). In the study, it was found that the weight percentages generally had similar values. The effect sizes of the studies conducted with the creative drama method according to the years, types and class levels are as in Table 4.

Table 4. Effect sizes in terms of the year, type and class level of the studies

Variable	Frequency	Effect Size	Standard Error	Variance	95% Confidence Interval
Year of the Research					
2006-2012	10	1,208	0,216	0,047	0,784- 1,632
2013-2020	9	1,168	0,203	0,041	0,770- 1,565
Type of the Study					
Article	4	1,486	0,267	0,071	0,963-2,003
Thesis	15	1,113	0,166	0,028	0,787-1,440

Grade Level of the Sample Group					
4th Grade	5	0,709	0,115	0,013	0,484-0,935
5th Grade	4	1,019	0,254	0,064	0,522-1,516
6th Grade	5	1,446	0,340	0,116	0,780-2,113
7th Grade	5	0,900	0,160	0,026	0,586-1,214
8th Grade	2	2,733	0,344	0,118	2,060-3,407

In terms of the analysis results given in Table 4, the effect size of the studies published between 2006-2012 ( $d = 1.208$ ) was higher. When the type of studies was examined, it was seen that the effect size of the studies written in the article type ( $d = 1,486$ ) was higher. When the effect sizes of the sample group according to the class levels were examined, it was determined that the class with the huge effect size was the 8th grade ( $d = 2,733$ ) and the class with the lowest effect size was the 4th grade ( $d = 0,709$ ).

#### 4. Conclusion, Discussion and Suggestions

The first finding of this study, in which the effect of creative drama method on Social Studies course achievement was examined, was the description of the frequency and percentage distributions for the moderator variables. It was seen that the studies included in the scope of the research were mostly thesis ( $f = 15, 78,95\%$ ). The studies conducted vary between the years 2006-2020, and it was determined that most studies were carried out in 2009 and 2015 ( $f = 3, 15,79\%$ ). Looking at the grade level of the sample group, it was determined that more studies were conducted at the 4th, 6th and 7th ( $f = 5, 23,81\%$ ) grade levels.

In order to determine the effect of creative drama method on Social Studies course achievement, individual effect sizes and overall effect size of 19 studies were calculated. Also, a comparison was made between groups by calculating effect sizes according to moderator variables. In the study, three methods were used to determine the publication bias. These were Funnel plot, Orwin N number, Duval and Tweedie's trim and fill method. Hedges'g coefficient and the classification made by Thalheimer and Cook (2002) were used in calculating the effect size. When the effect size value was positive as a result of the analysis, the study was interpreted as in favour of the experimental group, and when it was negative, it was interpreted as in favour of the control group (Wolf, 1988).

In the study, it was concluded that the studies conducted with the method of creative drama ( $Q = 90,019$   $p < 0,05$ ;  $I^2 = 78,893$ ) showed a heterogeneous distribution and there was no publication bias. According to the results of the research, the creative drama method had a very wide effect size ( $d = 1,171$ ) on social studies course achievement in favour of the experimental group. When the effect size value obtained was compared with other studies conducted in the literature, it was understood that similar results were obtained. In their study examining the effect of creative drama method on academic achievement, Ulubey and Toraman (2015) made a meta-analysis of 65 experimental types of research, including 23 articles, 37 master's theses and 5 doctoral dissertations. As a result of the analysis, it was determined that the creative drama method had a very wide ( $d = 1,255$ ) positive effect size on the achievement of the course. Similarly, Batdı and Batdı (2015) found that creative drama had an huge effect ( $d = 1.68$ ), a positive effect on academic achievement. And also, Akdemir and Karakus (2016) tried to determine the effect of creative drama method on academic achievement, and analyzed 27 theses in this context, and concluded that creative drama had an huge effect ( $d = 1,648$ ) on academic achievement. In the study conducted by Ozbey and Sarikaya (2019), the effect level of the studies carried out through drama method in Turkey was analysed in terms of different

variables, and it was found that the effect of these studies on academic achievement was positive at a very large level ( $d = 1.24$ ). Apart from the meta-analysis study conducted in Turkey, Conard (1992) and Lee, Patall, Cawthon and Steinguth (2015) found that the drama method had a medium and positive effect on student achievement. As a result, the effect sizes of all the mentioned studies were found to be medium or higher and positive. The results obtained from the studies largely were in line with the results obtained from this study.

In the literature, meta-analysis studies about the creative drama method are generally not limited to a discipline or a course. It was observed that the determined content was created by including all the studies. Similar to the results of this study, which is limited to Social Studies course achievement, there are different studies investigating the effect of creative drama on a variety of lessons. In 17 studies in which Şimşek and Karatas (2020) investigated the effect level of creative drama method in Science Education, the effect size was found to be positive at a large level ( $d = 1,109$ ). Canturk and Gunhan (2016) concluded that the effect of the drama method on mathematics achievement was strong and positive ( $d = 0.931$ ). When the results of the research are compared in general, it is seen that creative drama method is more effective in Social Studies course success. The drama method is more suitable for verbal courses in terms of the structure and application of the lesson (Lee et al., 2015). Considering the studies conducted in general, it was found that it had a broad and positive effect in terms of academic success in courses such as Social Studies, Turkish, English and Informatics, and it had a moderate, positive effect in quantitative courses such as Mathematics, Science and Technology (Özbey & Sarıkaya, 2019).

The third finding of the study is to examine the effect level of the effect of creative drama on Social Studies course success in terms of moderator variables (the year the research was conducted, the type of the study, the grade level of the sample group). When the effect sizes of the studies were calculated based on the year the research was conducted, it was determined that the effect size values were very wide and positive. The effect size of the studies conducted between 2006-2012 was higher than the studies conducted in 2013 and after. When the effect of the creative drama method was examined in terms of the type of the study, it was observed that the effect size of the studies conducted in the article type was huge, positive ( $d = 1,486$ ), and the effect sizes of the studies conducted as thesis were very large and positive ( $d = 1,113$ ). However, this difference was thought to be due to the number of studies. When the effect size was calculated in terms of the grade level of the sample group, 4th grade ( $d = 0.733$ ) had the lowest effect size level, and 8th grade ( $d = 2,709$ ) students had the huge effect size level. While creative drama had a moderately positive effect on social studies course success at the 4th-grade level, the effect it created at the 8th-grade level was huge and positive. Ozbey and Sarikaya (2019) found the overall effect level by grade level as having a broad and positive effect in kindergarten, primary school, secondary school and higher education, and only small, positive effect at the secondary level. When the studies conducted at the 8th-grade level were examined, it was seen that only 2 studies had been conducted. Also, the reason for the moderate effect of the method applied at the 4th-grade level may be due to the lack of development of abstract thinking skills of the students in this age group. When the method is applied, it can be perceived as a game by the students rather than its teaching.

When the research results are evaluated in general, it is understood that the creative drama method has a wide and positive effect on the achievement of the course. Therefore, activities related to the creative drama method should be encouraged to be used in the education and training process, and efforts should be made to improve their quality. Apart from this suggestion, the following suggestions have been made considering the results obtained in the study.

- In the study, it was tried to determine the effect of creative drama on lesson success. In future studies, its effect on students' attitudes, motivation and self-efficacy can be investigated.
- The effect of creative drama method applied in Social Studies course was tried to be determined. It is seen in the related literature that meta-analysis studies on creative drama are not limited to a course or a topic. For this reason, it can be tried to determine the effect of creative drama method on different lessons.
- The year the research was published, the type of the studies and the grade level of the sample group was determined as the moderator variable in the study. In future studies, moderator variables can be diversified and their number can be increased.
- When the effect size was calculated according to the class level of the sample group, it was found that the effect of creative drama method at the 4th-grade level was medium and positive. At this grade level, the quality of the work to be done to improve the effectiveness of creative drama method can be increased or alternative teaching methods can be used.

### **5. Conflict of Interest**

The author declares that there is no conflict of interest.

### **6. Ethics Committee Approval**

The author confirms that the study does not need ethics committee approval according to the research integrity rules in their country.

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