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### Effects of Drama Method on Social Communication Skills: A Comparative Analysis

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## Effects of Drama Method on Social Communication Skills: A Comparative Analysis

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<b>Article Info</b>	<b>Abstract</b>
<p><i>Article History</i></p> <p>Received: 11 February 2020</p> <p>Accepted: 18 June 2020</p> <hr/> <p><i>Keywords</i></p> <p>Drama Thematic analysis Meta-analysis Pre-service teachers Communication skills</p>	<p>This study aims to determine the effect of drama on social communication skills through the use of quantitative and qualitative research methods in a holistic approach. In the quantitative part of the research both the meta-analytic method and descriptive study were used. In the meta-analysis phase, 24 studies (2 articles, 19 MA theses and 3 Ph.D. dissertations) related to drama and its effect on communication skills and met the inclusion criteria were analyzed using the Comprehensive Meta-Analysis and the MetaWin programs. In the descriptive phase of the study, Social Skills Evaluation Scale was used to assess social skill levels of the preservice teachers (N = 386). In the qualitative part of the study, the data collected via documentary review through the thematic examination of the articles and theses were analyzed using the Maxqda 11 program. Additionally, in an action research design, the data related to the views of the preservice teachers (N= 60) and selected by maximum variation sampling were collected through semi-structured interviews and analyzed through the Maxqda 11 program. Both qualitative and quantitative findings indicated that drama has a positive effect on social communication skills.</p>

### Introduction

Teaching has a significant importance in social, historical, cultural, and political webs. Therefore, it is fundamental to bring about social, economic, technological and political arrangements of the role of teachers and teacher education (Cochran-Smith, 2004). Teacher training programs are mostly exposed to criticism regarding the deficiency in training of future teachers. On the other hand, there does seem to be some agreement among educators that critical reflection and students' controlling their learning by actively can be taught as learning strategies (Greenman & Kimmel, 1995). Drama, which enables critical reflection and active participation, plays an important role on the development of an individual's self-confidence, and self-expression when used in education (Gönen & Dalkılıç, 2003), and therefore, although drama is essentially a social art, it is an important educational tool used in teaching (Johnson & O'Neill, 1984) as a part of teaching methodology that involves the creation of a dramatic environment in which students learn the subject by a topic-related acting and using other dramatic techniques (Genç, 2005). There are different approaches related to use of drama in education. For some educators, drama is one of the most significant models of learning. Some claim that since drama includes aesthetics training, social, emotional and physical wellbeing is enhanced through drama activities when used in education (Booth, 1994; Landy, 1982; O'Neil, 1995). However, the most common approach for the use of drama in education is that drama enables students to have a rich learning experience by contributing to their personal and social development positively (Bowell & Heap, 2006). Moreover, drama forms the basis of effective learning as well due to its requirement that students use their imagination and engage in pretend play. As long as teachers provide a safe, supportive environment for learning in drama, students will reach the higher developmental stages at the time appropriate for them (Heikkinen, 2004). Drama puts teachers in the role of supporter in a learning process and enables them to teach at their best, therefore, students can take more responsibility for their own learning and they can be more motivated to learn (Bowell & Heap, 2013; Clipson-Boyles, 1998; Heikkinen, 2004; Krashen, 1982; Neelands & Goode, 2000).

Social competence which is defined by Spence (2003) as "the successful management of the social world" (p. 84) with the capacity of interpersonal problem solving and effective social skills is indicative of both social functioning and academic success (Romano, Babchishin, Pagani, & Kohen 2010). Social skills facilitate interaction and communication with others and encompass thoughts, actions, and emotional activities enabling someone to achieve personal or social goals in a harmony with their social partners (Shaffer, 2005). According to Zsolnai (2002), these skills are learned through experiences and mastering them brings about social

competence. If teachers are more knowledgeable in social skills, they may feel a greater sense of agency to help children and can encourage fellow teachers to work harder to connect with students with whom they may not easily connect. Therefore, educating preservice teachers on the importance of the teacher-child relationship in building social competence can help them understand their students on a deeper and more meaningful level (Boucher, 2012). On the other hand, according to the model of “the European teachers”, three domains of teacher competencies are recognized by Ogienko and Rolyak (2009) as key competences, basic competences and special competences. Teachers’ communication competence is the part of both key and basic teachers’ competence. Thus, it is important to develop general communication knowledge, skills, and attitudes in pre-service teacher education both at the initial education level for the teaching profession and continually in the professional domain (Zlatic, Bjekic, Marinkovic, & Bojovic, 2014). On the other hand, since social skills influence social and family relationships, academic performance of individuals they demonstrate more appropriate and respectful behavior for the rights of others (Kaf, 1999). Drama, which comes first among the methods used for the development of social communication skills (Barton & Hamilton, 2000), functions as a way of making the world simpler and more understandable due to its being a kind of playing out of living in real life situations. In this context, it enables children to be equipped with social skills (Önder, 2007). There are various techniques that may be employed during drama activities, including improvisation, role play, interview, hot seat, pantomime, gossip ring, dull image, writing in role, inner voice, role cards, rituals- ceremonies, phone calls (Adıgüzel, 1993; Ackroyd & Barter-Boulton, 2012; Howell & Heap, 2013). Through these activities it is aimed students to develop communication and problem-solving skills, creativity, imagination, observation, collaboration, and self-understanding skills (Kandır, 2004; Solmaz 1997; Walker, McFadden, Tabone, & Finkelstein, 2011). Students involved in drama activities: (a) are better at problem solving, coping with stress, participating in public issues, (b) feel more confident in reading and understanding tasks and in communication, (c) are more creative (d) enjoy going to school and doing school activities, (e) feel more empathy for others, (f) are assessed highly in all aspects by their teachers (Drama Improves Lisbon Key Competencies in Education Consortium, 2010).

Drama is the best vehicle for the development of social skills because it involves students in concrete, hands-on practice of behaviour (Bailey, 1997) and due to being only able to operate through active cooperation, it is inevitably learner-centred (Fleming, 2006). Because of including the principles of being student-centred and activity-based, drama has been transferred into the field of education (Bolton, 1985). However, in teaching, the use of drama in schools is not a new concept. Drama in education has been defined by some professionals. For example, Dewey (1963) defined it as “learning by doing”, According to Bolton (1985), the way of using drama to teach is “dramatic playing” (Ulldemolins, 2014). In sum, drama which offers many advantages as a teaching method is suitable for all students and can be integrated to all the subjects (Ulldemolins, 2014).

A review of related literature revealed many studies concerning drama method conducted at national and international level. Most of these studies have discussed the one-way effect of drama. For example, the effect of drama on academic achievement of students (Bıyıklı & Yağcı, 2015; Kariuki & Humphrey, 2006; Kılıçaslan & Vural, 2018), on the affective traits (Aykaç, Ulubey, Çelik & Korkut, 2019), on the attitudes of students toward verbal communicative skills (Aydeniz, 2012; Kılıç, 2009), on learning a foreign language (Göktürk, Çalışkan & Öztürk, 2020; Iamsaard & Kerdpol, 2015; Kılıç, 2009). This study aims to evaluate the views of preservice teachers studying in education faculties of two different universities on the efficacy of drama method both qualitatively and quantitatively. Therefore, within the scope of this research, it is expected that using a combination of research methods- namely documentary analysis, meta-analysis and, descriptive analysis-will help to improve this study’ confirmability.

### **The Aim and Significance of the Study**

This study aims to determine the effect of drama on social communication skills through the use of quantitative and qualitative research methods in a holistic approach. In order to fulfil the purpose of this study, the following key research questions were addressed.

Within the scope of Meta analytic framework:

1. How is the effectiveness of drama on social communication skills in terms of the effect sizes (*g*) calculated from the recent research?
2. Is there a meaningful difference between the effect sizes of the internal variables considered as the grade level, subject area, and implementation period?
3. What are the participants’ views, taking part in the meta analytic studies included in this research, regarding the effect of using drama on social communication skills?

Within the scope of descriptive research framework:

4. What level of social communication skills through drama do preservice teachers have?
5. Do preservice teachers' social communication skills through drama differ in terms of gender and department variables?
6. What are the views of the preservice teachers, participating in this research concerning the effect of using drama on social communication skills?

## Method

This research is a mixed methods study, both quantitative and qualitative methods were used to determine the effect of drama method on communication skills. The methodological process is based on a holistic approach, a combination of methods to enrich the methodology of the research (Batdı & Batdı, 2015). According to methodologists, using quantitative and qualitative research together can maximize the strengths of each approach and understandings (Creswell & Plano Clark, 2011).

Methods and programs used in this research included a four-phase process. The first phase involved the theoretical structure of research results and relations among them. The combination of research results based on the documentary analysis was conducted through the meta-analytic method using MetaWin and Comprehensive Meta-Analysis (CMA) programs. In the second phase, content analysis was performed through the Maxqda program. Third phase involved a qualitative research pattern, action research design. In the fourth phase, a relational screening model, one of typical descriptive study designs, was employed.

### Quantitative Study: Meta-analysis Phase of the Study

The meta-analytic method includes steps such as examining theoretical relationships amongst study results, examining studies to collect data, coding studies, calculating effect size ( $g$ ), interpreting results and analyzing their distribution and their effect according to variables and reporting (DeCoster, 2004).

### Literature Search Procedure

It was attempted to include all studies related to drama method and its effect on communication skills carried out at a national level. In this context, the key words "drama", "drama method" "drama and communication skills" in both Turkish and English were searched for within the Higher Education Council National Thesis and Dissertation Center (YOK), Google Scholar, Ebscohost-Eric, Ebscohost-Professional Development Collection, Web of Science, ScienceDirect, Emerald Management, Oxford Journals Online, and Sage Journals Online search engines. As a result of the literature review, 24 studies (2 articles, 19 MA theses and 3 Ph.D. dissertations), where pre-test and post-test in particular were implemented and comparisons were made amongst groups using the selection criteria of the study, were selected out of 540 studies.

### Introducing a Set of Inclusion Criteria

A set of inclusion criteria which was established to examine the effect of drama method on communication skills included:

1. Studies using experimental and control groups in pretest-posttest control group model
2. Studies including sample sizes, means and standard deviations or t-test values.
3. Studies written in Turkish or English
4. Studies that were available with the full text

Studies that do not meet the inclusion criteria were excluded.

### Coding Process

A detailed coding form was developed to show the general characteristics of the research included in the study before the statistical analysis was conducted. The coding form developed in this study consisted of three parts. The first part, "study identity", presented the study code, study title, author information and study year. The second part included information about the courses, in which the teaching was carried out, as well as the education levels and teaching period. The third part, "study data", provided information such as population size,

mean and standard deviation values. The characteristics of the research were determined as students' education level, the courses in which the teaching was carried out, the implementation period, population size, standard deviation and mean values.

In this meta-analysis study, while the effectiveness of the drama method on social communication skills was examined, it was aimed to evaluate not only the average effect size, but also the effectiveness of some moderators determined as subgroups in the context of this method. In addition, while the data were processed into the coding form, variables such as grade level, subject area, and implementation period were observed in the studies. The heterogeneous distribution of average effect sizes in these studies shows that there is a differentiation in the data, that is, it is necessary to conduct a moderator analysis. Another value that shows heterogeneity more clearly is  $I^2$ . Cooper, Hedges and Valentine (2009) stated that 75% and above value of  $I^2$  show high heterogeneity. According to Rosenthal (1984), if an effect size distribution is heterogeneous in a study, the meta-analyst should then look for moderator variables. The  $I^2$  value calculated for the current study is 86.238. Therefore, in this study, which shows high heterogeneity, a moderator analysis was conducted according to the relevant codes. Moderators used in the current study were grade level (Preschool, Primary school, Secondary school and High school), subject area (Science, Mathematics, Social Sciences, Foreign Language) and implementation period (certain week intervals).

### **Data Analysis**

The data were analysed statistically through the Comprehensive Meta-Analysis (CMA) program and the MetaWin program. For the estimation of effect size, Hedges'  $d$  formula was used (Hedges & Olkin, 1985) and in order to test whether there is heterogeneity between the studies, the (Q-statistic) chi-square ( $\chi^2$ ) heterogeneity test with degree of freedom (k-1) was used as well. Additionally, in meta-analysis, fixed effect models (FEM) and random effects models (REM) are normally used to determine the effect sizes. However, in REM, the actual effect size may vary from one study to another due to some intermediate variables such as the participants' ages, grade level or class size. For example, the effect size may be higher (or lower) when participants are older, educated, or healthier than others, or where a more intensive form of intervention is used (Cooper, 2017). In addition, Field (2003) argued that the use of a direct REM should be made as a standard rule in the calculation of the effect sizes in the social sciences without determining the heterogeneous distribution. On the other hand, Schmidt, Oh and Hayes (2009) stated that the conditions of FEM were very limited. Therefore, REM was decided to be used for this research.

Finally, in order to interpret all the statistical data which were converted into a common effect size, Cohen's (1992) guidelines suggesting that  $\leq 0.20$  is a small effect size, 0.50 is a moderate effect size and  $\geq 0.80$  is a large effect size were used. On the other hand, the coding reliability value was calculated to obtain a certain level of reliability of the research outcomes in the meta-analytic part of the research. For this aim, another reader who is academically reliable was asked to examine all the review research and note down the results to the final evaluation form. Then, the consistency in the form was examined comparing two readers' evaluations following this process and calculated as 99% which indicated that the reliability between the researchers and coder was very high according to Miles and Huberman's (1994) formula.

### **Qualitative Study: Thematic analysis**

In the second phase, thematic analysis was performed through a document review based content analysis of the articles and theses concerned with the effectiveness of drama on social communication skills at a national level using the Maxqda program.

### **Data Analysis**

Five of the 24 studies that were available within the scope of this research and including participants' opinions concerning drama method were examined in order to obtain data from document analysis. Five studies (4 MA theses and 1 article) out of 19 were utilized to reach the qualitative data for thematic analysis. These studies, which were coded, for example, as T3p.37 (T Thesis- 3 thesis number -p37 The page number of the quotation in the PDF), A1p6 (A article-1article number-p6 The page number of the quotation in the PDF), were transferred into the computer and the studies included in the thematic analysis were arranged and saved as [(Yıldız-Duban, Evşen- Düzgün, 2012)A1p.5, (Başkan, 2006)T23p.63, (Ormancı, 2011)T110p.114, (Akkaya, 2012)T124p.83,

(Yassa, 1997)T4p.69]. Then, the texts which were entered verbatim into a computer file entitled “Drama Method Thematic Construct”, taking into account the code numbers. Then, the texts were checked for accuracy and spelling, but not edited in any way. Later, themes from the distribution of the participants’ responses on drama method were generated to identify the studies’ thematic constructs.

In the analysis of the qualitative data, categorical analysis technique, one of the techniques used in content analysis, was used. During the categorical analysis process, the stages include; a) data coding b) creation of themes, c) arranging the codes and the themes d) identification and interpretation of the findings (Corbin & Strauss, 2007). First, in parallel with the examination of the thematic content of the studies that were involved in the sample group, initial codes from the content of the entire data set were generated in order to develop themes within the raw data by rereading and familiarizing with the data. The process of coding is a part of analysis when you organize your data into meaningful groups (Tuckett, 2005).

After all data were initially coded and collated, and the list of the different codes was identified across the data set, the codes were sorted into themes, which were outlined the study findings. In this stage some initial codes may go on to form main themes, while others may form sub-themes, and others still may be discarded. Moreover, researchers may also have a set of codes that do not seem to fit into the main themes or to belong anywhere (Braun & Clarke, 2008). Then, the emerged themes were reviewed by the researchers in detail and arranged again. After defining what the themes were, and what they were not, the scope and content of each theme were clarified and working titles were given in order to reflect a sense of what the theme was about. While data collection, the analysis of the documents and the linking of the result to one another and interpretation of the findings, in short, research design, data collection and data analysis in detail are indicators for external validity (LeCompte & Goetz, 1982; Miles & Huberman, 1994), internal validity of the study is associated with creating the integrity of the consistency and meaningfulness amongst the themes and codes and ensuring the consistency of the findings (Miles & Huberman, 1994).

On the other hand, direct quotations from the typical examples of sentences said by the participants were originally given with no comment by the researchers for the internal reliability as well. For a possible future examination, records and analyzes that were transferred to the computer environment were kept by the researchers. Additionally, interrater reliability, tested by Cohen’s kappa statistical measure, was established for examining the degree of agreement between the two researchers (Cohen, 1960). Cohen's kappa coefficient of each theme was calculated separately and aligned as: .813 for the theme “Contributions of the Social Domain”; .786 for the theme “Contributions of the Delivery of Course”; .793 for the theme “Contributions of the Cognitive Domain”; .861 for the theme “Contributions of the Affective Domain”; and, .847 for the theme “Negative Aspects of Using Drama”.

### **Qualitative Study: Action Research Design**

The third phase also involved a qualitative research pattern, action research design, to reveal the views of the preservice teachers (N= 60) studying at education faculty of a state university in Turkey and selected by maximum variation sampling were collected through semi-structured interviews. Action research is regarded as “systematic and orientated around analysis of data whose answers require the gathering and analysis of data and the generation of interpretations directly tested in the field of action” (Greenwood & Levin, 1998, p.122). Therefore, action research design ensures investigating, discovering, planning, implementation, monitoring and, evaluation stages (Atay, 2003). An interview form for the data collection tool was developed by the researchers in the light of review of literature and experts (2 Associate Professors and 1 Assistant Professor of Educational Sciences, 3 lecturers who teach drama courses, 1 Turkish teacher and 3 primary school teachers).

The validity of the questions in the form was obtained by getting the opinions of the experts in their fields and by examining the studies related to the drama conducted in this regard. Reliability in the research was provided by giving direct quotations of the participants’ opinions in the results section. In addition to personnel information such as gender, department and grade, open-ended questions were included in the interview form. With the open ended questions, preservice teachers were asked to indicate positive or negative aspects of the activities in drama method, difficulties encountered in practice and, their suggestions. The form was applied to the participants after the drama application. The opinions of the participants were examined by two researchers and they were transferred in the electronic format for data retention.

### **Data Analysis**

The analysis process began with the examination of the transcribed text in MAXQDA, a software for qualitative analysis, with the aim of identifying categories of statements reflecting preservice teachers' views on drama method. First phase of the analysis included reading the transcribed preservice teachers' comments from beginning to end two times by the researchers to obtain categories from particular words and phrases of the participants. Then, the categories entitled as "Social Domain"; "Learning Environment"; "Cognitive Domain", and "Affective Domain" were identified. Following this, the transcribed document was loaded into MAXQDA for analysis.

### **Quantitative Study: Descriptive Study**

In the fourth phase, a relational screening model, one of typical descriptive study designs, was employed. Descriptive research is used to describe a current situation that existed in the past or exists now in the way it is (Karasar, 2009). A relational screening model aims to determine the existence of co-changing between two or more variables and establish the degree of change (Karasar, 2009). In this sense, the preservice teachers studying at Education Faculties of two state universities in Turkey were asked to complete "Social Skills Evaluation Scale" developed by Kara & Çam (2007).

### **Population & Sample**

The population of the study consisted of preservice teachers studying at Education Faculties of two state universities in Turkey. However, the sample of the study comprised 386 preservice teachers who were selected voluntarily accepted to participate in the study. Distribution of the sample according to variables is given in Table 1.

Table 1. The Distribution of the Preservice Teachers Taking Part in the Sample According to Variables

Variables		N	%
<i>Gender</i>	Male	91	23.6
	Female	295	76.4
<i>Departments of Faculty of Education</i>	(1) Primary School Teaching	81	21.0
	(2) Social Sciences Teaching	52	13.5
	(3) Preschool Teaching	93	24.1
	(4) Science Teaching	50	13.0
	(5) Turkish Language Teaching	57	14.8
	(6) English Language Teaching	53	13.7
Total		386	100

### **Data Collection Tool**

In the research, "Social Skills Evaluation Scale" developed by Kara and Çam (2007) was used to assess social skill levels of the participants. Social Skills Evaluation Scale (SSES) is a 15 -item instrument for measuring the social skills that young adults, aged 17-25, must have for social interaction. This 5- point Likert scale ranging from 1 (Completely Disagree) to 5 (Completely Agree), consists of three subscales which are "The skills related to making and executing a work with a group", "The skills of beginning and maintaining a relationship", and "Gaining social skills of self - control" (Kara & Çam, 2007).

Each subscale consists of five items which are not reverse scored. While the lowest score obtained from the overall scale is 15, the highest score is 75. Cronbach's alpha coefficient was .84 for overall scale; .79 for the first subscale, namely, the skills related to making and executing a work with a group; .71 for the second subscale, namely, the skills of beginning and maintaining a relationship; and, .71 for the third subscale, gaining social skills of self - control (Kara & Çam, 2007).

## Data Analysis

In the analysis of data, the SPSS 18.0 package program was used focusing on frequencies, percentages, arithmetic mean, standard deviation, independent sample t-test, and ANOVA: Scheffe for the analysis of parametric Likert type items and the Mann Whitney U test for the non-parametric items test.

## Results

The findings obtained in a research process are important in terms of showing how they affect the research as well as revealing the objective data. Therefore, the results of the current study conducted in four phase regarding the effectiveness of drama on social communication skills were presented separately.

### Results of Meta-analysis Phase of the Study

The general effect size results of the 24 studies (2 articles, 19 MA theses and 3 Ph.D. dissertations) that met the inclusion criteria of this study concerning the effect of drama on social communication skills in the meta-analysis were given in Table 2. Related to FEM calculation, the standard error was 0.057 and the upper limit for 95% of the confidence interval was 0.963, the lower limit was 0.740 and the effect size was 0.852, positive and significant according to Cohen's (1992) classification. Additionally, Z test calculations revealed statistically significant at .01 level ( $z= 15.020$ ;  $p< .05$ ). As a result of the homogenous test, the Q statistical value was calculated to be 167.128. In a 95 percent significance level from the chi-square table, the approximate critical value of 35.17 and 23 degrees of freedom were accepted. Thus, Q statistical value of 167.128 was found to exceed the critical value of chi-square distribution at 23degrees of freedom ( $\chi^2(0.95) =35.17$ ) and therefore, the analyses were carried out according to REM (see Table2).

Table 2. The Distribution of Homogeneous Values, Average Effect Sizes and Confidence Intervals for the Studies Included in the Meta-Analysis Based on the Effect Models

Model Type	n	Z	Q	g	SE	I <sup>2</sup>	95% Confidence Interval	
							Lower Limit	Upper Limit
FEM	24	15.020	167.128	0.852	0.057	86.238	0.740	0.963
REM	24	6.022	22.514	0.929	0.154		0.627	1.231

PFEM: 0.00    PREM: 0.50

As seen in Table 2, according to REM calculation, the standard error was 0.154 and while the upper limit for 95% of the confidence interval was 1.231, the lower limit was 0.627. The effect size was 0.93, positive and large according to Cohen's (1992) classification, and therefore, it can be remarked that drama method had a positive effect on social communication skills. When the statistical significance was calculated according to the z-test, it was found to be 6.022 ( $p=0.50$ ). The Q statistical homogenous test value for the 24 studies according to REM was calculated as 22.514. Therefore, as the distribution of  $\chi^2$  with regard to 23 degrees of freedom with Q statistical value of 22.514 did not exceed the critical value of 35.17 with 23 degrees of freedom, the homogeneity of effect-size distribution was accepted according to the REM.

### The Efficiency of Drama Considering Education Level of the Studies

The studies were separated into four different groups (preschool, primary school, secondary school, and high school) in order to investigate the total effect sizes of the studies including drama and its efficacy on social communication skills in relation to educational levels. According to the analysis results, given in Table 3, the highest effect size ( $g=1.177$ ) was in the primary school group and the lowest effect size ( $g= 0.731$ ) was in the preschool group. The total effect size for the groups occurred at 0.906 which is a large effect size according to Cohen's (1992) classification.

As seen in Table 3, the studies were grouped according to educational levels. When the homogenous test for the inter groups were examined, the Q value occurred at 1.164. In the 95% significance level from the  $\chi^2$  table, the value for 3 degrees of freedom was 7.815( $\chi^2(0.95) =7.815$ ). As the Q statistical value ( $Q=1.164$ ) with 3 degrees of freedom was lower than the critical value in  $\chi^2$  ( $\chi^2(0.95) =7.815$ ), this value can be said to have a homogeneous distribution. When the effect size ( $Q=1.164$ ;  $p=0.762$ ) of the inter groups are considered, it can be



said that there are no significant differences amongst the inter groups. This result shows that the efficiency of drama on social communication skills does not change according to education levels ( $Z= 6.250$ ;  $p>.05$ ).

Table 3. The Efficiency of Drama Considering Education Level of the Studies

Mixed Effect Analysis	n	g	SE	95 Confidence Interval		Test of Mean		Test of heterogeneity in effect size		
				Lower	Upper	Z-value	p-value	Q-value	df (Q)	p-value
				Preschool	5	0.731	0.355	0.036	1.427	2.060
Primary school	7	1.177	0.299	0.590	1.763	3.933	0.000			
Secondary school	10	0.865	0.258	0.359	1.371	3.351	0.001			
High school	2	0.830	0.273	0.296	1.364	3.046	0.002			
Total	24	0.906	0.145	0.622	1.190	6.250	0.000	1.164	3	0.762

### The Efficiency of Drama Considering Subject Area of the Studies

The lessons were separated into four different groups as Science, Mathematics, Social Sciences, and Foreign Language to investigate the total effect sizes of the meta-analytic studies, including the efficiency of drama on social skills in relation to subject area and presented in Table 4. The analyses revealed that except for Mathematics ( $g_{\text{Mathematics}}=0.734$ ), all the groups had a large effect size ( $g_{\text{Total}}=1.025$ ).

Table 4. The Efficiency of Drama Considering Subject Area of the Studies

Mixed Effect Analysis	n	g	SE	95 Confidence Interval		Test of Mean		Test of heterogeneity in effect size		
				Lower	Upper	Z-value	p-value	Q-value	df (Q)	p-value
				Science	3	1.113	0.174	0.773	1.454	6.407
Mathematics	6	0.734	0.455	-0.159	1.626	1.611	0.107			
Social Sciences	12	0.964	0.206	0.560	1.368	4.679	0.000			
Foreign Language	3	1.012	0.400	0.227	1.796	2.528	0.011			
Total	24	1.025	0.122	0.787	1.263	8.437	0.000	0.756	3	0.860

When the homogenous test for the inter groups given in Table 4 was examined, the Q value was seen to occur at 0.756. In the 95% significance level from the  $\chi^2$  table, the value for 3 degrees of freedom was found to be 7.815 ( $\chi^2(0.95)=7.815$ ). As the Q statistical value ( $Q=0.756$ ) with 3 degrees of freedom was lower than the critical value  $\chi^2$  ( $\chi^2(0.95)=7.815$ ) in  $\chi^2$  distribution, this value can be said to have a homogenous distribution. Based on this, it can be stated that there were no significant differences amongst the inter groups in terms of subject area of the studies included in the meta analysis ( $Z= 8.437$ ;  $P= 0.860$ ).

### The Efficiency of Drama Considering Implementation Period of the Studies

The studies were separated into five different groups as 2-4 week, 5-6 week, 7-8 week, 9+ week, and a non-specified implementation period in order to investigate the total effect sizes of the meta-analytic studies, including the efficiency of drama on social skills regarding the implementation period and the results were given in Table 5. While the "not specified" group had the lowest effect size ( $g=0.252$ ), the "2-4 week" period had the highest one ( $g= 1.193$ ).

Table 5. The Efficiency of Drama Considering Implementation Period of the Studies

Mixed Effect Analysis	n	g	SE	95 Confidence Interval		Test of Mean		Test of heterogeneity in effect size		
				Lower	Upper	Z-value	p-value	Q-value	df (Q)	p-value
				2-4 week	9	1.193	0.169	0.862	1.525	7.050
5-6 week	6	1.078	0.380	0.333	1.823	2.835	0.005			
7-8 week	4	0.460	0.118	0.228	0.692	3.883	0.000			
9+ week	3	0.853	0.691	-0.501	2.207	1.235	0.217			
Not specified	2	0.252	0.895	-1.502	2.006	0.282	0.778			
Total	24	0.721	0.093	0.540	0.903	7.784	0.000	13.831	4	0.008

According to the results of the homogenous test for the inter groups, given in Table 5, the Q value was found to be 13.831. In the 95% significance level from the  $\chi^2$  table, the value for 4 degrees of freedom was indicated as 9.488. As the Q statistical value with 4 degrees of freedom was higher than the critical value ( $\chi^2(0.95)=9.488$ ) in  $\chi^2$  distribution, the homogeneous hypothesis concerning the effect size distribution was rejected. In other words, there was a significant difference amongst the inter groups in terms of implementation period of the studies included in the meta analysis ( $Z=7.784, p=0.008$ ).

### The Qualitative Results of the Study: Thematic Analysis Phase of the Study

It is aimed to identify the effect of drama method on social communication skills of preservice teachers through examining national studies. Therefore, the participants' responses that are available in the included studies related to drama method were examined using document analysis of the studies. The responses were categorized into theme and code models by the researchers (Figure1). The themes were as follows: (1) Contributions of the Affective Domain, (2) Contributions of the Cognitive Domain, (3) Impact on the Social Domain, (4) Contributions of the Delivery of Course, and (5) Negative Aspects of Using Drama. Codes related to these themes were generated according to quotations that were available in the studies within the scope of this study by the researchers and represented in Figure1 and Figure 2.

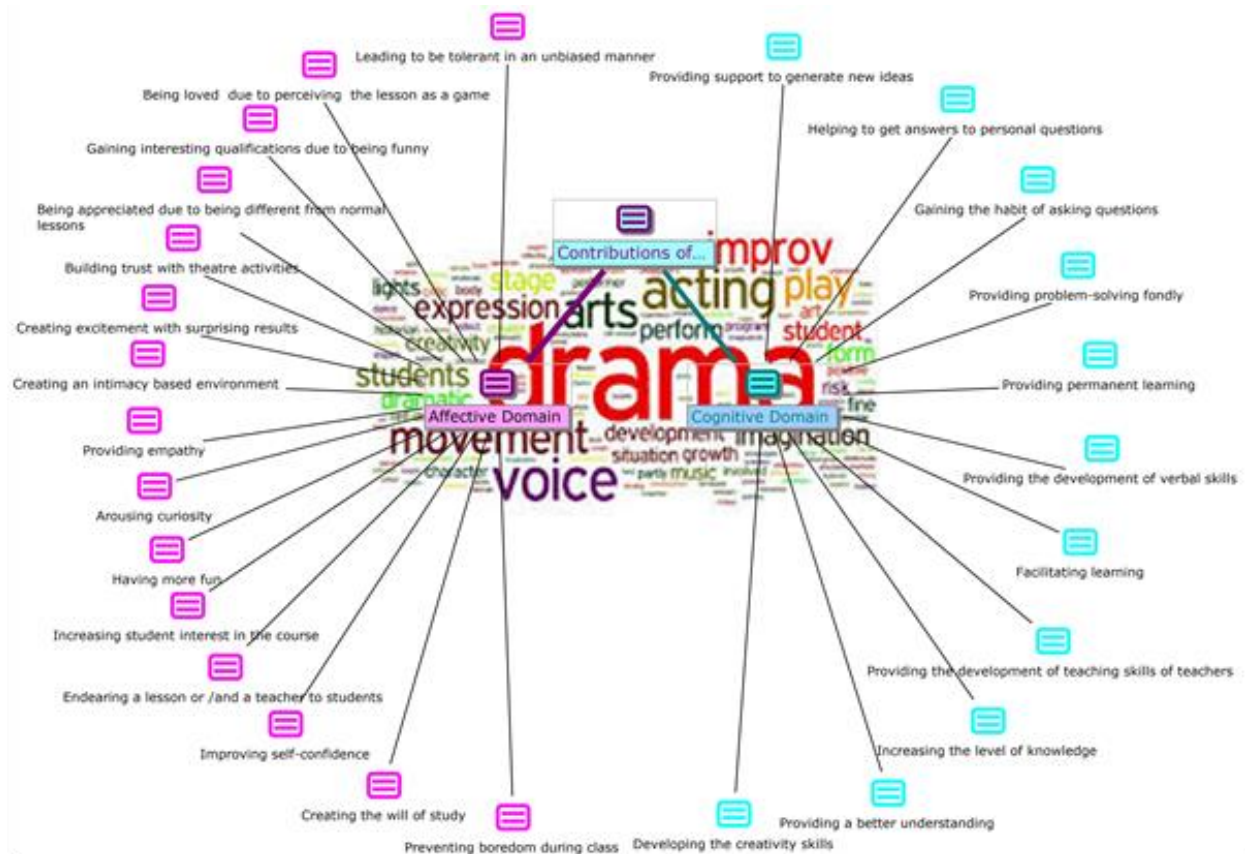


Figure1. Contributions of the Affective and Social Domain

In this context, the code “having more fun” was formed under the heading Contributions of the Affective Domain. The Ddp.98 coded study noted that, *When conducting activities using drama method, we are not only having more fun but also learning more permanently*. To me, enabling a fun environment allows us to express and communicate our own ideas without shame... The code “providing empathy was generated with the support of a quotation from the Dcp.62 coded study, which noted *We take on different roles in drama lesson and by expressing oneself in a character, we learn how to show empathy for others*. Additionally, the codes “preventing boredom during class” (Ddp.102), “increasing student interest in the course” (Ddp.50), “improving self-confidence” (Ddp.50), “endearing a lesson or /and a teacher to students” (Ddp.50), “creating the will of study”, “creating an intimacy based environment” (Dcp.63), “creating excitement with surprising results” (Dcp.63), “arousing curiosity” (Dcp.63), “building trust with theatre activities” (Dcp.63), “being appreciated

due to being different from normal lessons” (Dcp.63), “being loved due to perceiving the lesson as a game”(Dep.74), “leading to be tolerant in an unbiased manner”(Dep.74), “gaining interesting qualifications due to being funny” (Dep.74) were generated from the participants’ views taking part in the included studies by the researchers and aligned in the theme of Contributions of the Affective Domain (see Figure 1). The codes such as “increasing the level of knowledge” (Ddp.98), “providing problem-solving fondly”( Ddp.101), “facilitating learning”(Dbp.50), “providing a better understanding”(Dcp.62), “helping to get answers to personal questions”(Dcp.63), “providing the development of verbal skills”(Ddp.102), “providing the development of teaching skills of teachers”(Dbp.50), “developing the creative thinking skills”(Dbp.50), and “providing support to generate new ideas”(Dcp.62) were formed for the theme *Contributions of the Cognitive Domain*. On the other hand, the quotation taking part in the Dcp.63 coded study, *In my opinion, drama enables students to participate in the lesson and to learn by doing, asking and questioning; that’s why, it enables permanent learning* led to form the codes “gaining the habit of asking questions” and “providing permanent learning” (see Figure 1).

For the theme *Impact on the Social Domain*, while the codes such as “creating discussion based democratic learning environments”, “providing someone to express themselves effectively”, “providing empathy”, and “gaining tolerant approaches to events” were quoted from the Dap.63 coded study, the codes such as “improving relationships with friends”, “providing opportunities to form groups”, “providing friends to recognize each other”, and “providing solutions to friendship problems” were quoted from the Ddp.102 coded study. Additionally, with the support of a quotation from the Dbp.50 coded study, which noted, *Drama enables us to break out of our shells by taking responsibility in a group cooperation or an individual participation and therefore, it helps us build positive social relationships and develop self-confidence...* the codes such as “providing participants to express themselves comfortably”, “increasing social integration” were generated by the researchers. On the other hand, the codes such as “making the experience of role change” and “providing the establishment of solidarity-based learning environments” were quoted from the Dcp.63 coded study and reported under this theme as well and illustrated in Figure 2.

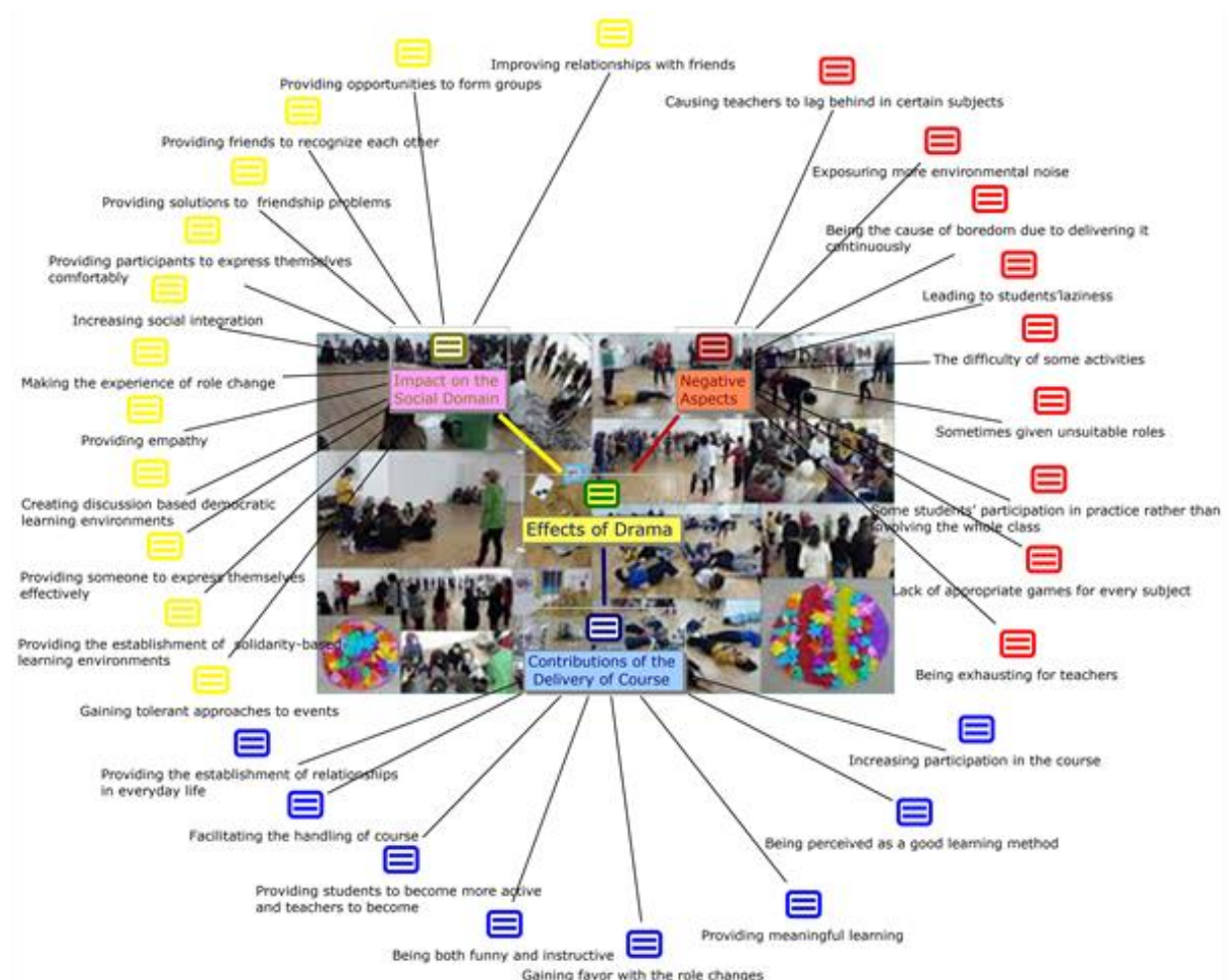


Figure 2. Contributions of the Social Domain and Delivery of the Course and Negative Aspects of Using Drama

For the theme *Contributions of the Delivery of Course*, while the codes such as “increasing participation in the course”, “being both funny and instructive” “providing meaningful learning” were generated from Ddp.102 coded study, the code “being perceived as a good learning method” was from Dap.63, the code “gaining favour with the role changes” was from Dep.74, and the code “providing the establishment of relationships in everyday life” was from the Ddp.104 coded studies. On the other hand, a quotation from the Dbp.50 coded study, *Through drama, a teacher should provide opportunities for her/his students not only to become more active than teachers but also to work positively within a group setting to facilitate the delivery of course...* enabled to generate the codes such as “facilitating the delivery of course” and “providing students to become more active and teachers to become more passive” (see Figure 2).

The last theme *Negative Aspects of Using Drama* included the codes such as “causing teachers to lag behind in certain subjects”, “exposure more environmental noise”, “being the cause of boredom due to delivering it continuously” (from the Ddp.101 coded study) , “some students’ participation in practice rather than involving the whole class”, “being exhausting for teachers”, “lack of appropriate games for every subject” (from the Dbp.50 coded study), “leading to students’ laziness” (from the Ddp.101 coded study), and “the difficulty of some activities”(from the Dbp.50 coded study). A quotation taken from the Dbp.50 coded study.... *However unsuitable roles in a role play can discourage students to participate actively and perform the character adequately...*was coded as “sometimes given unsuitable roles” by the researchers and took part in the last theme (see Figure 2).

**The Qualitative Results of the Study -- Action Research Phase of the Study-**

The views of the preservice teachers (N=60) studying at the Education Faculties of two state universities in Turkey and selected by maximum variation sampling concerning the effect of using drama on social communication skills were collected through semi-structured interviews, then coded, analysed, modelled and illustrated in Figure 3 and 4 with related codes.

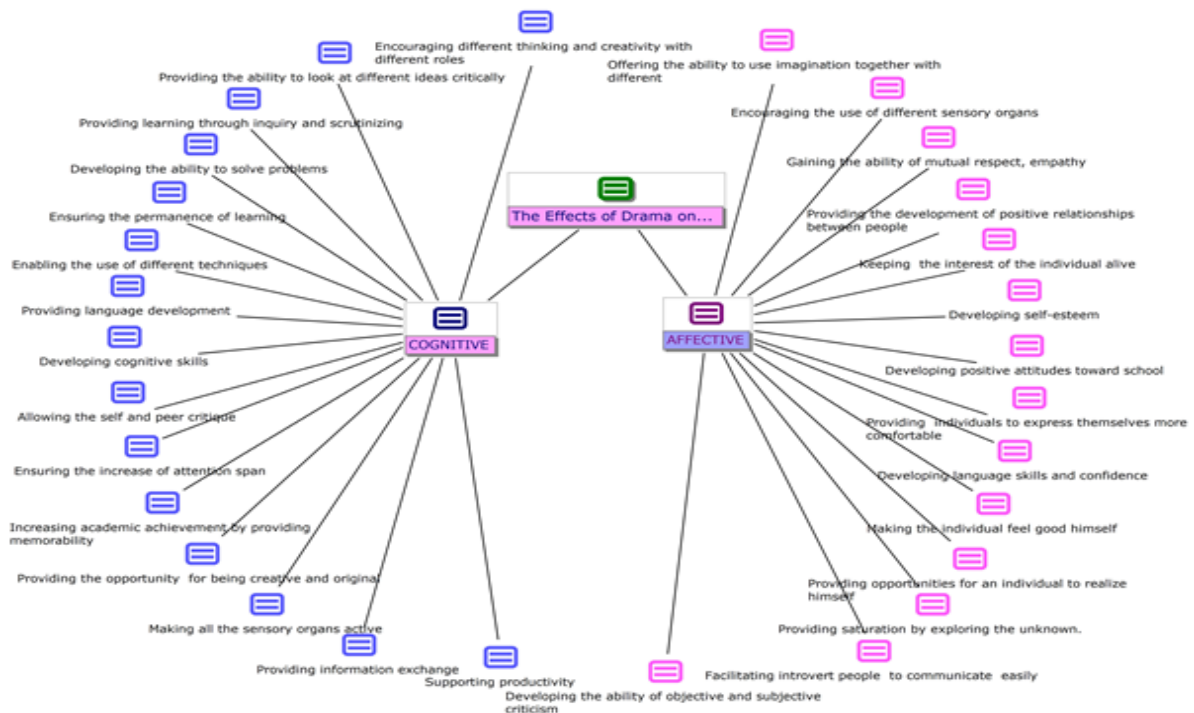


Figure 3. The Effects of Drama on the Cognitive and Affective Domain

The first theme emerging from the data was related to the effects of drama on affective domain. The comments such as *For some students drama is the way even though it is the last thing they want to do, namely, to go on stage, expose themselves, to let go of what other might be thinking about themselves. But in fact performing a play not only makes us feel good and increases self- esteem but also provides opportunities to realize the skills inside us. No matter how hard to display a play in front of people for shyness people, I'm sure that the easy way*

of overcoming shyness is drama.... were coded as “providing individuals to express themselves more comfortable”, “making the individual feel good himself”, “facilitating introvert people to communicate easily”, and “providing opportunities for an individual to realize himself”. From the quotations ... *By integrating drama into the class, teaches help us feel like we are real experts as seeing something from another's perspective and appreciating others' experience through empathy and mutual respect*, the code “gaining the ability of mutual respect, empathy” was formed. On the other hand the codes such as “developing self-esteem providing saturation by exploring the unknown”, “developing the ability of objective and subjective criticism”, “offering the ability to use imagination together with different roles”, “encouraging the use of different sensory organs”, “providing the development of positive relationships between people”, “developing language skills and confidence”, “keeping the interest of the individual alive”, and “developing positive attitudes toward school” were formed under this theme and illustrated in Figure 3 as well.

The second theme was related to the effects of drama on cognitive domain. Some comments such as, *In my opinion, the most important thing is to enable students to participate in the lesson by using different techniques. Through using different techniques, we get the opportunity to understand the subject meaningfully and appropriately, while the monotony of a conventional class is broken and the syllabus transformed* led to generate the codes “enabling the use of different techniques” and “supporting productivity”. The quotations which revealed the code “providing the opportunity for being creative and original” were.... *Sometimes it may seem to the resistant students toward a creative thought or an action. They say they can't do that or they are not creative. Therefore, they thought that they can't act or can't be in a play. But every human being needs their creative skills revealed. I think drama enables to reveal these creative skills.*

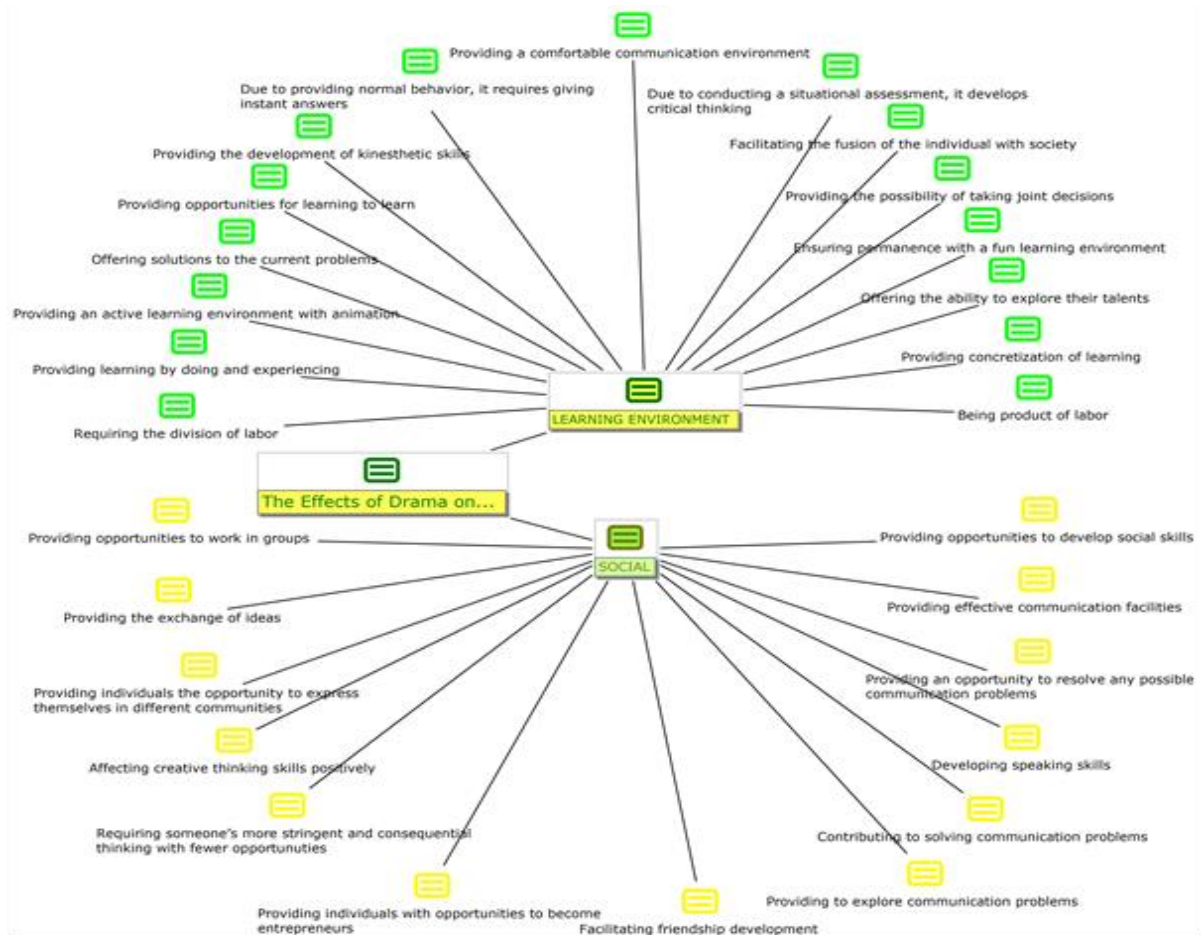


Figure 4. The Effects of Drama on the Social Domain and Learning Environment

On the other hand, the codes such as “providing information exchange”, “providing the ability to look at different ideas critically”, “encouraging different thinking and creativity with different roles”, “providing learning through inquiry and scrutinizing”, “increasing academic achievement by providing memorability”, “providing language development”, “developing the ability to solve problems”, “developing cognitive skills”,

“ensuring the permanence of learning”, “ensuring the increase of attention span”, “allowing the self and peer critique”, “making all the sensory organs active” were generated under this theme as well (see Figure3).

The third theme emerged from the views of preservice teachers was regarding the effects of drama on learning environment. The codes “providing a comfortable communication environment”, “facilitating the fusion of the individual with society” and “offering the ability to explore their talents” were constituted based on the quotes such as *I think drama means communication, namely, it is an act of communication. Therefore, it enables a communicative environment when pretending to be someone we are not in direction of our talents...It also enables us to interact our friends positively and warmly....* The codes such as “providing learning by doing and experiencing” and “providing opportunities for learning to learn” were generated from the quotations *Drama enables learning by performing and doing rather than sitting passively and listening or reading...* The other codes that were formed and took part in this theme were “providing the possibility of taking joint decisions”, “being product of labour”, “requiring the division of labour”, “providing the development of kinaesthetic skills”, “providing concretization of learning”, “offering solutions to the current problems”, “due to providing normal behaviour, it requires giving instant answers”, “due to conducting a situational assessment, it develops critical thinking”, “ensuring permanence with a fun learning environment”, “providing an active learning environment with animation” (see Figure4).

The last theme was related to the effects of drama on social domain. The codes such as “providing opportunities to develop social skills”, “providing the exchange of ideas”, “providing individuals the opportunity to express themselves in different communities”, “providing effective communication facilities”, “providing an opportunity to resolve any possible communication problems”, “developing speaking skills”, “providing to explore communication problems”, “requiring someone’s more stringent and consequential thinking with fewer opportunities”, “contributing to solving communication problems”, “providing individuals with opportunities to become entrepreneurs”, “facilitating friendship development” were generated and took place in this theme (see Figure 4). On the other hand, based on the quotation *Working collaboratively is an important part of drama....* the code “providing opportunities to work in groups” was formed. The quotation *.. I believe that there is a close connection between drama and creativity. To me, drama promotes students to discover their creativity and reflect it on every aspect of their lives* revealed the code “affecting creative thinking skills positively.”

### The Quantitative Results of the Study: Descriptive Analysis Phase of Study

After performing the statistical analysis of the SSES, the results of the scale items with significant differences were included in this part and given in in Table 6. p-values that were  $\leq 0.05$  considered to be significant. Arithmetic mean and standard deviations of the items obtained from this study regarding the SSES are given in Table 6.

As given in Table 6, the participants’ views on the item 7, namely, *I stubbornly approach my friends who are sad and backed into a corner and try to solve their difficulties* are at the Agree Level on the 5 –point Likert scale, with a mean of 3.44 ( $SD = 1.12$ ). This result indicates that the participants are pretty good at sharing their friends’ difficulties. Additionally, there is a significant difference between the views of the participants in terms of gender variable ( $t=2.000$ ;  $p<0.05$ ) favouring male preservice teachers. According to the results, male preservice teachers ( $Mean=3.65$ ), are more likely to give support to their friends in need than do their female counterparts ( $Mean=3.38$ ).

Regarding the same item, there is a significant difference among the views of the participants in terms of the departments of Faculty of Education ( $F=2.773$ ;  $p<0.05$ ). According to the results of the Scheffe test, the difference is between the participants studying in the Science Teaching ( $Mean= 3.02$ ) and Turkish Language Teaching ( $Mean= 3.78$ ) Departments favouring those studying in the Turkish Language Teaching Department. Therefore, the participants studying in the Turkish Language Teaching Department are more likely to be around their friends when they need help than those who are in the Science Teaching Department.

The level of the participants related to the item 10, namely, *I take the first step in making friends* is at the Neither Agree nor Disagree Level with a mean of 3.26 ( $SD= 1.10$ ). This shows that the participants are uncertain about taking the first step in making friends. Additionally, regarding this item, there is a significant gender difference ( $t= 2.338$ ;  $p<0.05$ ) favouring the male participants. The results reveal that the male participants ( $Mean= 3.49$ ) are better than their female counterparts ( $Mean= 3.19$ ) regarding making friends easily.

Table 6. Arithmetic Mean and Standard Deviations Obtained for Each Item

Item No	ITEMS	Mean	SD
1	Helping and asking for help comes natural to me when I seek appropriate solutions to the problems I encounter	4.41	.81
2	I comply with the work sharing procedure and I try to fulfill my duty	4.64	.61
3	I like being together, discussing together, deciding and sharing the responsibility together.	4.30	.82
4	Consultation with someone and asking their opinions is a requirement to value my friends.	4.36	.80
5	I attended the public activities that held within and outside the university.	3.41	1.09
6	I socialize with people quickly, make friends easily and, when I get into a new group I feel like a part of that group.	3.61	1.12
7	I stubbornly approach my friends who are sad and backed into a corner and try to solve their difficulties	3.44	1.12
8	I'm popular among my friends. When I join a group, I bring joy to the group.	3.89	.93
9	My friendship is usually long-term. I explore some features of everyone that I like and accept easily	3.94	1.00
10	I take the first step in making friends.	3.26	1.10
11	I like jokes and humor. I like making and taking jokes which are not unkind and cynical for me and my friends.	3.92	1.11
12	I'm not unkind to my friends. I give value for all my friends.	4.11	.95
13	I keep myself in balance both intellectually and emotionally. I'm not jealous, I dislike tattling or denigrating someone.	4.13	1.04
14	I don't like resentment. I'm friendly.	4.18	.92
15	When I have problems with others, I prefer solving them by talking. I have a conciliatory manner	4.17	.88

As presented in Table 6, the participants' views related to the item 6, namely, *I socialize with people quickly, make friends easily and, when I get into a new group, I feel like a part of that group* are at the *Agree Level*, with a mean of 3.61 ( $SD= 1.12$ ). This result indicates that the participants tend to be friendly and sociable in all aspects of their lives. Regarding this item, there is a meaningful difference among the views of the participants in terms of the department where they study ( $F=3.781$ ;  $p<0.05$ ). The Scheffe test results show that this difference is among the participants studying in the departments of Science Teaching ( $Mean= 3.06$ ), Primary School Teaching ( $Mean= 3.74$ ), Social Sciences Teaching ( $Mean= 3.80$ ) and Turkish Language Teaching ( $Mean = 3.86$ ) favouring those studying in the Department of Turkish Language Teaching.

The participants' views regarding the item 11, namely, *I like jokes and humour. I like making and taking jokes which are not unkind and cynical for me and my friends* are at the *Agree Level*, with a mean of 3.92 ( $SD= 1.11$ ), indicating that they have a good sense of humour. There is a meaningful difference among the views of the participants in terms of the department where they have studied ( $F=6.241$ ;  $p<0.05$ ). According to the Scheffe test results, the difference is among the participants studying in the departments of Science Teaching ( $Mean= 3.54$ ), Social Sciences Teaching ( $Mean= 4.27$ ) and Turkish Language Teaching ( $Mean = 4.28$ ) favouring the participants studying in the Department of Turkish Language Teaching. By the same token, between Social Sciences Teaching ( $Mean= 4.27$ ) and English Language Teaching ( $Mean= 3.50$ ) favouring those studying in the Department of Social Sciences Teaching.

## Discussion

In general, the purpose of this study, conducted in four phases, was to determine the effect of drama on social communication skills. The first phase encompassed the meta analytic study and aimed to investigate the effects of drama on social communication skills. When the data concerning the drama and its effect on social communication skills were evaluated according to the random effect models, in the meta-analytic procedure, the effect size value was found to be 0.929. This value was interpreted as at a large level, positive and significant according to Cohen's (1992) classification and therefore, it can be inferred that the effect size level of drama on social communication skills is high. This positive and significant result was consistent with the effect coefficients of the studies included in the analysis (i.e., Akdağ, 2010; Akkaya, 2012; Akyüz, 2009; Akyüzlüer, 2007; Altıkulaç, 2008; Cömertpay, 2006; Çelen & Akar-Vural, 2009; Çokadar & Yılmaz, 2009; Dege, 2008; Demirel Erdil, 2007; Erdoğan, 2006; Esen, 2008; Göncüoğlu, 2010; Karapınarlı, 2007; Köylüoğlu, 2010;

Maden, 2010; Sezer, 2008; Soner, 2005; Sözer, 2006; Şirin Akbaş, 2011; Taşkiran, 2005; Türkkuşu, 2008; and Yalım, 2009). Additionally, the results of the study also showed consistency with those that were conducted nationally and not included in the analysis (i.e., Aslan, Erbay & Saygın, 2010; Bakkaloğlu, 2011; Bayrakçı, 2007; Erbay & Yıldırım-Doğru, 2010; İnal, 2006; Kahrıman, 2014; Kamaraj, 2004; Sevim, 2014; Yaman, Danacı & Eran, 2014).

When the studies in the meta-analysis were examined to investigate the effect sizes in terms of education levels, four different levels as preschool, primary school, secondary school, and high school were generated. The results revealed that while the primary school group had the highest effect size, the preschool group had the lowest one. According to the results, all the education levels, except for the preschool group (effect size level: medium), had a large effect size. Moreover, there were no significant differences amongst the inter groups concerning education levels. This can be interpreted that using drama has a large effect almost on all education levels, apart from the preschool group. As Yaman et al., (2014) have suggested all kinds of formal and non-formal education institutes should contain drama activities to support the children's development in early childhood.

In terms of the distribution of the studies included in the meta analysis according to subject area, the lessons were separated into four different groups as Science, Mathematics, Social Sciences, and Foreign Language. While Mathematics had the lowest effect size, Science had the highest effect size. On the other hand, there were no significant differences amongst the inter groups regarding subject area. In other words, drama had a similarly considerable effect on all groups. Similarly in Batdı and Batdı's (2015) meta analytic review of computer based teaching, the largest effect size was seen with Science and no significant differences were observed amongst the inter groups regarding subject area. Additionally, in Gözüyeşil's (2012) and Öner-Armağan's (2011) meta analytic studies, no significant differences were observed in the effect sizes in terms of subject area. When the samples of 24 studies were analyzed regarding implementation period of the studies, the largest effect size value was found for the two-four-week period while the lowest was for the not specified group. On the other hand, there was a significant difference amongst the inter groups in terms of implementation period of the studies included in the meta analysis. This result showed consistency with Batdı's (2015), Batdı and Batdı's (2015), Elaldı's (2016), Öner – Armağan's (2011) and Özdemirli-Çapar's (2011), meta analytic studies. In the thematic analysis phase of the study, the effect of using drama on students' social communication skills was determined through document analysis by generating the themes and codes from the included studies involving the views of the participants' views on drama and its effectiveness on social communication skills. The contributions of drama to the affective, cognitive and social domains; to the delivery of course and its negative aspects were considered separately as different themes. On the other hand, the emerging themes and codes in action research phase of the study based on the views of the preservice teachers studying at the Education Faculties of two state universities in Turkey and selected by maximum variation sampling were consistent with the second qualitative results. Apart from the themes regarding the effect of drama on the affective, cognitive and social domains, this qualitative part also included the effect of drama on learning environment. The codes related to these themes including both qualitative parts of the study were generated from the quotations that were either available in the studies within the scope of the current research or collected through semi structured interviews by the researchers. The results obtained from the views, in general, revealed that drama has a positive effect on not only developing social communication skills of the participants but also becoming aware of themselves by discovering their own talents. Similarly, Batdı's (2015), Elaldı and Yerliyurt's (2016), and Erdoğan's (2013) studies revealed significant and agreeable experience and attitudes from the views of the participants toward the impact of drama on affective, cognitive, and social domains. According to Erdoğan (2013), it is expected that drama should involve the cognitive, affective and physical dimensions in a learning process. Related to the effect of drama on affective domain, the most remarkable codes were stated as "providing empathy", "increasing student interest in the course", "being loved due to perceiving the lesson as a game", "having more fun", and "providing individuals to express themselves more comfortable" which were consistent with previous research results (Aykaç, 2008; Duban & Düzgün, 2013; Gaudart, 1990; Rosler, 2008; Sawyer, 2004; Özdemir & Çakmak, 2008; Yamamoto, 2015). In this regard, Goldstein and Winner (2012) and Özer (2004) emphasized in their experimental studies that the developmental differences in empathy existed in students' behaviours, particularly, they became more aware of others emotions.

The most prominent codes associated with the cognitive domain was, "developing the creative thinking skills", "providing the opportunity for being creative and original", "providing the development of verbal skills", "providing support to generate new ideas" "providing permanent learning", and "gaining the habit of asking questions". These emergent codes showed the consistency with the literature regarding the effects of drama on the cognitive domain in terms of developing creative thinking skills (Baykal, Sayın & Zeybek, 2019; Can Yaşar & Aral, 2012; Demir, 2019; Dönük, 2018; Freeman, Sullivan & Fulton, 2003; Moore & Russ, 2008;



Yıldız, Özkal, & Çetingöz, 2003), critical thinking skills (Fisher 2008; Kuhn, 2008; Pekdoğan & Korkmaz, 2016; Saçlı, 2013), verbal skills (Aldavero, 2008; Morris, 2001; Ömeroğlu, 1990; Philips, 2003), active and permanent learning (Bertiz, 2005; Duban & Düzgün, 2013; Durusoy, 2012; Lindberg, 2015; Masoum, Rostamy-Malkhalifeh & Kalantarnia, 2013; Özdemir & Çakmak, 2008; Umar & Okka, 2012).

The most striking codes regarding the social domain were “improving relationships with friends” “providing opportunities to form groups”, “providing opportunities to develop social skills”, “increasing social integration”, and “providing participants to express themselves comfortably”. Similarly, in Kelly’s (2006) study, the author observed the positive impact of groupings on the students’ experience in drama. Additionally, Moore and Russ (2008) and Morris (2001) emphasized social interaction, namely the importance of being a member of a group or communicating with friends, through drama that offers multi-dimensional perspectives to students. On the other hand, the impact of drama that was shared by most of the views obtained from the included studies regarding the social domain was on building self-confidence. In this regard, Phillips (2003) remarked that even the shy students gain more confidence and abandon their embarrassment and shyness due to social qualities of drama.

The most prominent codes emerged from the views of the preservice teachers regarding the effect of drama on learning environment such as “providing a comfortable communication environment”, “providing learning by doing and experiencing” and “providing opportunities for learning to learn” were supported in previous research results (Bertiz, 2005; Durusoy, 2012; Özdemir & Çakmak, 2008; Sawyer, 2004 ). On the other hand, the codes that were formed regarding the delivery of course revealed positive effects of drama on the student engagement. Similarly, Cawthon, Dawson, and Ihorn’s (2011) study revealed that drama-based courses promote student engagement and develop positive social interaction (e.g. helping peers, complimenting or encouraging other students, working together to solve problems). However, despite its numerous positive aspects, drama also has its negative aspects. “Exposure more environmental noise” and “being exhausting for teachers” were the codes that were most remarkable in the negative aspects of drama. Similarly, Philips (2003) emphasized noise stemming from learners fully participation as one of the obstacles encountered when using drama activities. Additionally, in Shu-Chin’s (2014) study regarding a drama play, the participants complained about the teacher’s emotional problems and difficulty communicating, however, in the teacher’s position; she tried to make the performance better by her own professional experience.

The descriptive analysis phase of the study attempted to analyse the views of pre service teachers studying at Education Faculties of two state universities in Turkey regarding their social skill levels in three sub-dimensions which are “The skills related to “making and executing a work with a group”, “The skills of beginning and maintaining a relationship”, and “Gaining social skills of self - control” in terms of gender, and the department where they study. The results have revealed that the participants almost all have a high level of social skills related to making and executing a work with a group, beginning and maintaining a relationship and self- control skills that indicated drama to be effective on social skills. Similarly, Kara and Çam (2007), who developed and used this scale in their study, found that drama was effective on not only making and executing a work with a group but also beginning and maintaining a relationship and gaining social skills of self - control. According to the results of the study conducted by Abacı, Tepeli and Erbay (2015), who utilized the same scale used in the current research, drama is an effective method on making and executing a work with a group, beginning and maintaining a relationship and gaining social skills of self - control in adolescents. In this vein, the current study supports the results of both researches. However, the views of the participants on the item I take the first step in making friends were at a moderate level. According to the findings obtained from Shu-Chin’s (2014) study, weak cooperation or poor communication occurring among friends may stem from shyness or having a withdrawn personality. The results regarding the variables are as follows: a) Gender difference is mostly observed favouring the male teachers (see Appendix), b) department difference is usually seen favouring the department of Turkish Language Teaching. In this regard, Underwood (2004) emphasized that gender difference can stem from cognitive and, even more, individual’s personality features, e.g. openness, agreeableness although differences were statistically significant. Therefore, gender level can only account for a limited range of variability in students’ social skills.

## **Conclusion and Recommendations**

Based on the research results obtained from the four phases, drama method seems to have a positive impact on not only social communication skills but also social, cognitive, and affective domains, learning environments and delivery of the course. In meta analytic phase, the results revealed a positive and significant level of drama on social communication skills with a large effect size according to Cohen’s (1992) classification. According to

the results of descriptive analysis phase, drama was effective on not only making and executing a work with a group but also beginning and maintaining a relationship and gaining social skills of self - control. These quantitative findings were supported with the qualitative outcomes of the research. Although the findings of current research can only be generalized in the context wherein the study was conducted, it can have important implication and insights on drama and its effect on social communication skills not only in Turkey but also in other countries. Within the frame of methodology and results of this study, it is suggested further studies that will have been carried out in methodological pluralism based on the choosing suitable methods for the nature of the problem being researched. Since the results revealed a positive effect of drama on developing social communication skills, it is also suggested that drama course should be perceived as a necessary way to prepare himself/herself for the teaching profession by both authority and preservice teachers in teacher education

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### Appendix. t-Test Results of the Items 9 and 12 in Terms of Gender Variable

Table 1. t-Test Results of the Item 9 Regarding Gender Difference

Gender	n	Mean	ss	sd	Levene		t	p
					F	p		
Male	91	3.65	1.05					
Female	295	3.38	1.14	384	2.590	.108	2.000*	.046
<b>Total</b>	386							

Table 2. t-Test Results of the Item 12 Regarding Gender Difference

Gender	n	Mean	ss	sd	Levene		t	p
					F	p		
Male	91	3.49	1.09					
Female	295	3.19	1.10	384	.181	.670	2.338*	.020
<b>Total</b>	386							