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Pre-service and in-service preschool teachers' views regarding creativity in early childhood education

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This research investigated the views of pre-service and in-service preschool teachers concerning the developing of children's creativity in early childhood education by determining the similarities and/or differences among their views. The data were gathered from 10 pre-service and 11 in-service teachers through focus group meetings, and then from the participants' views four basic themes were constituted consisting of their opinions on 'creativity', 'creative people', 'importance of creativity in early childhood education', and 'obstacles to creativity in early childhood education'. The findings indicated that although the subjects had their own creativity definitions, they also had some common ideas. The subjects also shared their ideas about some of the essential characteristics of creative individuals. Furthermore, although the participants were aware of the value of creativity for young children's development and the need to implement activities that would nurture children's creativity, they still face many obstacles preventing them from achieving this crucial goal.

Keywords: creativity; early childhood education; in-service teachers; pre-service teachers; teachers' views

Introduction

Based on the dynamic changes that transpire from the effects of social, technological, environmental, and economic developments, individuals across the globe should be prepared to adjust to as well as keep pace with these changes in order to succeed in the rapidly developing world (Craft & Jeffrey, 2008). In this developing world, creativity is a characteristic that has such a crucial role that Florida and Tinagli (2004) regarded this era as the creative age of information, collaboration, and communication. Indeed, creativity has been regarded as one of the basic skills and an inseparable part of individuals' success within this current era (Eckhoff, 2011). Although the term creativity is commonly used in the field of education (Beghetto, 2005), there is no universally accepted definition; however, there are many different descriptions of the term (Craft, 2005; Kaufman & Sternberg, 2006; Sternberg, 1988).

Two groups of authors addressed creativity from different perspectives. For instance, while Grainger and Barnes (2006) described creativity as a process of playing with ideas and possibilities, other researchers (Lubart, 2000; Mumford & Gustafson, 1988; Perkins, 1988; Sternberg & Lubart, 1996) emphasised the importance

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of the end product or outcome in their creativity definitions. The most fitting definition for the current research is the view held by Robinson (2001) that creativity is a type of imaginative process that results in original and valuable consequences.

Based on those definitions of creativity, Fritsch and Rusakova (2010) stated that there are cultural creativity and personal creativity. The reason for this separation into two types can be explained by the fact that creativity is necessary for both socio-cultural and individual development (Sternberg & Lubart, 1999). Primarily, when creativity introduces or brings unprecedented elements into existence which have a great impact on society, it can be considered as cultural creativity. On the other hand, personal creativity can be seen as the creation of something new that has never been achieved before (Isbell & Raines, 2007). Personal creativity can also be encountered in the educational area in which problems are solved in a different and meaningful way (Beghetto & Kaufman, 2009). Thus, personal creativity could be seen as a first step to the development of cultural creativity. In fact, it is known that if a child's creativity is supported by giving them various opportunities from a very young age, they will be both personally and culturally creative individuals in their present and future lives (Lassig, 2009; Liu, 2000).

In the literature, many researchers presented their ideas about creativity by focusing on different dimensions such as process, product, and environment (Taylor, 1988). For instance, while Russ (1966) emphasised the importance of the creative product considering many aspects, such as newness or aesthetic appreciation, Rothenberg (1990) highlighted originality as a basic characteristic of the creative product. On the other hand, Isbell and Raines (2007) concentrated on the process of any work rather than end product since they believed that focusing on end products might be one of the obstacles that prevented the nurturing of creativity. Additionally, there are many researchers who identified creativity with the environment (Diakidoy & Kanari, 1999; Kampylis, Berki, & Saariluoma, 2009; Sawyer, 2006). To illustrate, Diakidoy and Kanari (1999) associated creative performance with environmental factors and several researchers (e.g. Aslan & Cansever, 2009; Chien & Hui, 2010) explained how an appropriate environment could be prepared to increase creative potential of children. While some authors agreed with the importance of an appropriate environment prepared as a result of the effective collaboration among parents, school administrators, and teachers to make children reach their highest level of creativity (Aslan & Cansever, 2009; Hunt & Parakevopoulos, 1980; Singh, 1987; Torrance, 1962; White, 1968), others emphasised the positive impact of the use of stimulating and rich materials within such kind of environments on children's creativity (Burnard & Younker, 2002; Chien & Hui, 2010; Wilson, 2001).

Regardless of the dimensions of creativity, many researchers agreed on the reasons why children's creativity should be fostered from the early years via early childhood education (Craft, 2002; Kemple & Nissenberg, 2000). Lowenfeld and Brittain (1975) stated that creativity is one of the basic supporters which facilitates the whole development of children, which is the primary goal of early childhood education. Moreover, Torrance (1976) pointed out that promoting children's creativity is so important in that it could have long-term effects on children in terms of their academic and occupational success, personality, and social competencies (Freund & Holling, 2008). In addition to those positive as well as long-standing effects, creativity is also important for language development, imagination, decision-making, novelty, and envisagement (Runco, 2007).

Several authors have emphasised the role of teachers in creating an environment in which children can achieve creativity and benefit from the positive effects (Burnard & Younker, 2002; Chien & Hui, 2010; Kampylis, 2010; Kowalski, 1997; Saracho, 1992; Wilson, 2001). Diakidoy and Kanari (1999) highlighted the key role of teachers in determining and supporting children's creative potential by providing them with the opportunity to produce creative products. Additionally, Craft (2002) asserted that teachers could create opportunities for children to extend their boundaries for creating original ideas as well as presenting challenging new situations (Craft, 2002).

When analysing the specific research related to teachers' roles in the framework of creativity, many studies can be found in the related literature that emphasise the importance of understanding teachers' conceptions about the creativity of children. For example, Runco (2003) stated that if we want to comprehend teachers' understanding of creativity or their efforts to foster it, first, we should explore what their own conceptions of creativity are. Furthermore, Cecil, Gray, Thornberg, and Ispa (1985) as well as Runco and Johnson (2002) asserted that teachers always have the opportunity to observe children's creative behaviours as well as facilitate those behaviours in educational settings; therefore, as a first step, it is necessary to have a deep understanding of the teachers' conceptions of creativity.

In order to do that, Fryer and Collings (1991) worked with a total of 1028 British teachers to explore their perceptions of creativity including how creativity could be promoted, and which teaching methods are preferred by teachers. They concluded that although teachers believed that children's creativity could be promoted, they did not mention any specific method to facilitate it. On the other hand, in another study Fleith (2000) found that teachers could effectively promote children's creativity in educational settings by providing them with a relaxing classroom atmosphere in which each child could present his/her ideas without any pressure from the teacher. In addition to the participants' reports about the characteristics of the classroom environment to foster children's creativity in Fleith's (2000) study, Diakidoy and Kanari (1999) emphasised the art activities as the most preferred type of activity by the teachers to nurture children's creativity in educational settings. Thus, it is necessary to understand the teachers' conceptions of creativity in early childhood education because according to Chien and Hui (2010), these conceptions have an impact on the teachers' ideas about the ways of improving children's creativity and tackling with the obstacles to creativity as well as the ways in which teachers improve children's creativity.

In addition to the research mentioned above, there are also many studies exploring primary school teachers' views concerning children's creativity (Aslan & Cansever, 2009; Kampylis et al., 2009; Lee & Seo, 2006). The findings of these studies demonstrated that the participants were aware of the importance of creativity and their role in nurturing it (Aslan & Cansever, 2009; Kampylis et al., 2009; Lee & Seo, 2006). The teachers also highlighted many problems arising from different sources as a barrier to nurturing children's creativity. For example, Aslan and Cansever (2009) stated that problems restricting children's creativity emerged from school administrators and parents because of their lack of support for the teachers. Furthermore, Kampylis et al. (2009) highlighted a lack of insufficient undergraduate education received by their participants as the reason for the failure to nurture young children's creativity. Lee and Seo (2006), however, looked at the issue from a different perspective and concluded that teachers might have a bias regarding creativity in terms of merely concentrating on one side of creativity, the cognitive domain; therefore, they could hinder children's creativity.

Other researchers proposed that there is a paradoxical issue in terms of teacher's perceptions about creative children and their actual behaviours. For example, Aljughaiman and Reynolds (2005) investigated teachers' conceptions about creativeness and creative pupils, again within a primary school framework. According to the results, there was a conflict between the teachers' reports and their actual practices in classroom settings in terms of supporting the creativity of children. In keeping with that result, many researchers stated that although teachers value the creative behaviours of the children in their reports, their favourite children are those who are less disruptive and show fewer creative behaviours in classroom settings (Cropley, 1992; Dawson, D'Andrea, Affinito, & Westby, 1999; Raina & Raina, 1971; Scott, 1999; Westby & Dawson, 1995). At this point, understanding teachers' implicit theories could be a way to prevent the contradiction between teachers' self-reports and their behaviours. In other words, individual definitions and beliefs of the teachers about creativity could form their ideas as well as direct their behaviours in classroom settings (Saracho, 2002).

Although there have been several studies regarding teachers' views about or conceptions of creativity, all the research mentioned above focused on a relatively one-sided investigation of creativity, such as the way of nurturing creativity, the barriers to the development of creativity, the meaning of creativity, or the characteristics of creative individuals. Thus, in the current research the researchers aimed to investigate creativity as a whole and have attempted to draw together the various separate parts of the related literature.

Furthermore, to the best of our knowledge there has been no research investigating the characteristics of creativity as given in the current study within the framework of early childhood education in Turkey. In order to take a more holistic approach, it is necessary to consider both the views of the pre-service teachers and those of the in-service teachers (Diakidoy & Kanari, 1999). For the former, the outcome of this research could provide the basis of enhanced training and preparation. For the in-service teachers, an understanding can be gained as to how their classroom practices foster or forestall creativity in children (Beghetto, 2006). In the light of the above-mentioned information, the following research questions were formed:

(1) What are the pre-service and in-service early childhood teachers' views on creativity?
(2) What are the pre-service and in-service early childhood teachers' views on creative people?
(3) What are the pre-service and in-service early childhood teachers' views on the importance of creativity in early childhood education?
(4) What are the pre-service and in-service early childhood teachers' views on the obstacles to creativity in early childhood education?

Methodology

Subjects

There were two groups of subjects in this research: the first group consisted of 10 senior (4th-year) pre-service teachers pursuing their degrees in the field of early childhood education at different public universities and the second group comprised 11 in-service teachers with 1–9 years of experience as preschool teachers in Ankara, Turkey. The subjects had a similar age range (81.8% were 23 years old and the remainder were from 24 to 27 years old). While selecting participants from both pre-service

and in-service teachers, the researchers aimed to form groups in which the members had similar experiences and educational backgrounds in order to obtain heterogeneous points of view (Bloor, Frankland, Thomas, & Robson, 2001). In addition, the researchers considered accessibility of the participants as well as their schedules when arranging meeting times (Weathington, Cunningham, & Pittenger, 2010).

Instrument

Research data about pre-service and in-service preschool teachers' views on creativity in early childhood education were gathered using a focus group technique and the interview questions were adapted from Aslan and Cansever's (2009) study. The original questions aimed to gather elementary school teachers' ideas about the importance of creativity in education; therefore, before conducting the current study, two early childhood education experts evaluated the questions for preschool teachers. Both experts agreed that the content and language were appropriate, and then the questions were finalised for the pilot study.

Pilot study

The pilot study was conducted with eight graduate students (five females and three males) from the department of early childhood education at a public university in Ankara, Turkey. Five of the participants had one year's experience or less in the field, and the remaining participants had no work experience in preschool settings.

The initial purpose of the pilot study was to test the clarity of the questions. Although there was no need for the researchers to change the content of the existing questions, some of the questions were reorganised to improve the clarity. Furthermore, to gain in-depth information from the participants, three questions were added.

The pilot study assisted the researchers in terms of testing the comprehensibility of the interview questions which increased the validity of the instrument. In addition, by assessing the effectiveness of the research questions, it was ensured that the required responses could be obtained from the participants in a group atmosphere. The pilot study also allowed for the creation of a logical sequence of the questions and tested the duration of the focus group protocol for the main study.

Data collection and analysis

The data were gathered from the subjects through four different sets of focus group interview protocols; two sets for each group were administered by the first author of the current research. As suggested by Greenbaum (1998), each group contained maximum six subjects (first Pre-S group: five; second Pre-S group: five; first In-S group: five; and second In-S group: six subjects). At the beginning of each session, the participants were informed about the topic, aim, process, and duration of the study. Then, during the focus group meetings, one by one the participants were asked the interview questions and, if necessary, additional questions were asked based on the revisions that had been made after the pilot study (see Table 1 for the research questions). Each group interview took one and a half to two hours.

In the data analysis procedure, first, the interview audio-records were transcribed. The data analysis was undertaken by two independent experts from the field of early childhood education. Both coders read all responses from the subjects and they summarised the essential issues concerning the teachers' views on creativity. Then they

Table 1. The summary of key results of the study.

Examples of the interview questions	Main themes	Key words of subjects' expressions and number of subjects
What does creativity mean to you in general?	Views on creativity	Originality of something (10 Pre-S, 11 In-S), Social dimension of creativity (2 Pre-S), Importance of first-hand experiences (2 Pre-S)
What are the characteristics of creative people?	Views on creative people	Essential characteristics of creative people such as self-confidence, advance problem solving skills (10 Pre-S, 11 In-S)
Do you implement any activities that require children to be creative in your educational settings? If yes, please give an example showing how you implement these activities	Views on the importance of creativity in early childhood education	Awareness of importance of creativity and value it (10 Pre-S, 11 In-S), No connection between creativity and memorization (5 Pre-S, 6 In-S), Possible connection between already existing knowledge and creativity (5 Pre-S, 7 In-S), Importance of age (3 Pre-S), Teachers' capability to deal with the problems (6 Pre-S, 3 In-S)
Do school administrators support or hamper use of creative activities in your classroom settings? Please give an example illustrating how the school administrators support or hamper use of creative activities in your classroom settings?	Views on creativity obstacles in educational settings	Aim of school administrators: displaying parents with children's products (6 Pre-S, 9 In-S), School administrators' product-oriented approach (4 Pre-S, 9 In-S), Different point of views between parents and teachers as well as parents and school administrators (5 Pre-S, 3 In-S), Adults'/societies' strict rules/obligations (4 Pre-S, 4 In-S), Recommendations to cope with obstacles (6 Pre-S)

Note: The abbreviations Pre-S and In-S refer to pre-service teachers and in-service teachers, respectively. Also, the numbers represent the number of the participants who expressed that idea.

compared the responses and identified common phrases, words, and sentences and after which, they created the codes. The coded line segments and codes of the coders were the same; thus, there was a full consensus between the two researchers. At the end of this process, the subjects' ideas were specified as teachers' views on 'creativity', 'creative people', 'importance of creativity in early childhood education', and 'obstacles to creativity in early childhood educational settings'.

In the following sections, the symbols 'Pre-S' (pre-service teacher) and 'In-S' (in-service teacher) followed by a number were used to describe answers or part answers given by a particular participant. For instance, Pre-S18 accompanies the responses from the 18th participant in the pre-service teachers' group and In-S8 identifies the responses from the 8th participant in the in-service teachers' group.

Main findings and discussion

In Table 1, a summary of the key results of the study is given together with examples of interview questions as well as the main themes which were formed after analysing all

responses of the subjects to the research questions. Also included are the prominent common words in both pre-service and in-service teachers' responses. The numbers after each key phrase show the number of subjects who mentioned that particular phrase.

Teachers' views on creativity

According to the findings, all the 21 subjects had similar ideas about the definition of creativity. In general, they mostly focused on the originality of something while defining creativity. Some subjects defined creativity as 'thinking out of the box' (Pre-S18), 'producing original ideas for a situation' (Pre-S20), and 'noticing the difference that could be recognized by anyone and representing it in a unique way' (In-S4). Additionally, one in-service teacher defined creativity as 'to interpret life or experiences in a completely different manner, to express them in a different way, and to approach them from a different viewpoint' (In-S5). Similar definitions were expressed in the related literature (Coleman & Colbert, 2001; Cropley, 1999; Feist, 1998; Mackinnon, 1962; McCrae, 1987; Rothenberg, 1990). For example, Cropley (1999) associated creativity with originality in all kinds of works; furthermore, new and valuable products were considered as creative by Rothenberg (1990) and Coleman and Colbert (2001).

Moreover, unlike the in-service preschool teachers, a few pre-service teachers (2 of 10) expressed their ideas related to the social dimension of creativity. They claimed that 'creativity is to be an individual that is beneficial for society' (Pre-S17), and 'creativity is producing something new for society' (Pre-S20). Two pre-service teachers also emphasised the importance of first-hand experiences in supporting young children's creativity by stating that 'children can discover something by developing their own techniques and using the five senses' (Pre-S16) and 'children create different methods and solve problems easily when they actively participate in activities' (Pre-S19).

The lack of reports from the in-service teachers about the social dimension of creativity as well as the importance of the impact of first-hand experiences on children's creativity could be explained by their closeness to a single-perspective approach in which the focus is mostly on individual creativity excluding the effect of the sociocultural background on children's creativity (Liu, 2000). The in-service teachers' explanations could also be based on their acceptance of creativity as individuals' isolated work only seeing the social environment as facilitating communication and interaction among individuals (Sternberg, 1988). Furthermore, the in-service teachers' lack of explanations associated with the effects of first-hand experiences of children's creativity could be based on the lack of hands-on experiences in the teachers' own early education (Park, Lee, Oliver, & Cramond, 2006). As stated by Garet, Porter, Desimone, Birman, and Yoon (2001), the teachers' own hands-on experiences help to form their knowledge as well as practical skills in educational settings.

Teachers' views on creative people

When expressing their ideas about creative people, all the subjects concentrated on the individual characteristics. They mostly emphasised a high level of self-confidence, thinking ahead and problem-solving skills, generating original ideas, and being able to look at a situation from different perspectives as some of the essential characteristics of creative people. Some of the subjects described creative people as 'having self-confidence and expressing himself/herself very well' (Pre-S21), 'having the ability to

engage in a repartee and having the ability to solve problems' (Pre-S18 & Pre-S19), 'a person who could easily cope with challenges' (In-S8), and 'an individual who thinks in a different way from others and generates original ideas. For instance, using a car wheel as a flowerpot or as a swing might be considered as indicators of creativity' (In-S11).

Similar ideas exist in the related literature. For instance, Hui (2003) emphasised that the essential characteristics of creative people were producing original and innovative ideas, deep thinking skills, and self-confidence. In particular, having a high level of self-confidence is seen as one of the prior desirable characteristics of creative individuals by many authors (Barron & Harrington, 1981; Kaufman & Sternberg, 2006; Ohuche, 1986; Rudowicz, 2003; Sungur, 1999). Considering the results of previous research, the similarity of the ideas presented by both the pre-service and in-service teachers might be explained by their frequent observations of products produced by some individuals that are labelled as 'creative products' by the society they inhabit. From that perspective, the common views about the characteristics of creative people could be thought as existing within a socio-cultural context rather than an individual context (Csikszentmihalyi, 1996).

Teachers' views on the importance of creativity in early childhood education

When explaining their thoughts about the importance of creativity in early childhood education, all the subjects stated that they valued creativity and they were aware of the importance of creativity in nurturing children's development. This is supported by two sample excerpts:

> Since I give importance to support children's creativity in classroom settings, I encourage children to create original products without giving them any specific framework for an activity. (Pre-S16)

> I believe that the creativity of each child should be supported starting from a very early age; therefore, I do not force children to undertake an activity in the same way in classroom settings. (In-S11)

Moreover, the pre-service and in-service early childhood teachers' views on the importance of creativity were explored based on their responses in relation to the relationship between creativity and rote learning. Half the participants (5 Pre-S, 6 In-S) who stated that they believed in the importance of creativity mentioned that there was no relationship between creativity and rote learning stating: 'memorization means to accept the existing things, on the other hand creativity means being original or innovative. Therefore, there is no similarity between them' (Pre-S14) and

> memorization requires too much repetition, exact understanding, and thinking; however, creativity requires creating new and novel things. In memorization, because there is no query, everything is accepted by individuals exactly as it is. Moreover, nothing can be internalized during memorization process. (Pre-S20)

The related literature also included similar views about the relation between rote learning and creativity. For example, Dündar (1999) asserted that rote learning restricts children's creativity. Similarly, Beetlestone (1998) explained rote learning as an inefficient and senseless method in children's education. In essence, these researchers claimed that educational programmes should be developed to support children's

discoveries about every kind of knowledge on their own rather than pushing children to learn parrot fashion.

While 11 participants saw no relationship between rote learning and creativity, other subjects (5 Pre-S, 7 In-S) considered that existing knowledge or repetition might infer that there is some sort of relation between rote learning and creativity. The following comments illustrate that idea:

> … in conclusion, nobody can be creative without using his/her prior knowledge. (Pre-S13)

> creativity means the alteration of existing knowledge to produce different viewpoints. (In-S2)

Supporting those views, the relationship between the already existing knowledge and creativity was explained in a study by Cropley (1999) in association with Piaget's theory of cognitive development. According to Piaget (1960), background information or previous experiences (assimilation) help young children to comprehend new concepts in new environments (accommodation). Also, he stressed that creative results can occur through the interaction between the processes of assimilation and accommodation. Similarly, Ward, Smith, and Vaid (1997) also supported the findings of the current study and emphasised that children's previous knowledge helps them to be more creative and the authors also paid attention to the role of combination of already existing knowledge in the development of new and creative knowledge.

In terms of the importance of creativity, three of the pre-service preschool teachers stated that age is one of the important factors which can have a direct influence on children's creativity. They considered that children become more creative at older ages rather than when they are younger: 'creativity develops as children become older, this is based on the individuals' life experiences and prior knowledge' (Pre-S17).

Looking at the in-service teachers' responses, we realised that none had mentioned the possible connection between a child's age and his/her creativity. The reason why none of the in-service teachers connected age with creativity could be explained by the evidence in the literature that there are two different views about the relationship between children's creativity and their age. Starko (2005) stated that children's creative thinking skills increase as they become older. In the study by Wu, Cheng, Ip, and McBride-Chang (2005), the participating pre-service teachers pointed out that students of older ages were more creative due to the effects of having had more experience, higher thinking skills, higher motivation, and better language ability. On the other hand, the lack of correlation by the in-service teachers concerning the relationship between creativity and age could be based on the idea that individuals could be creative at any age as asserted by Lubart and Sternberg (1995). Furthermore, many other researchers support the idea that each child, at any age, can be creative by his/her own nature (Robinson, 2001; White, 1968).

Teachers' views on the obstacles to creativity in early childhood education

In their explanation of the obstacles to creativity in early childhood education, the subjects mostly stressed negative effects of the school administrators, parents, and teachers on the children's creativity. More than half of the teachers (6 Pre-S, 9 In-S) emphasised the school administrators' lack of support for their endeavours to boost the children's creativity. In fact, participants indicated that the only target of the school administrators

is to display the work from the classroom activities to the parents. In the words of two of the pre-service teachers:

> The thing that should be exhibited is the creative products of children. However, the school administrators demand that teachers make creative products themselves instead of the children in order to present beautiful products. (Pre-S14)

> If an activity is interesting and results in a beautiful product, the school administrators like it but creativity is not a criterion for them. They only focus on the product. The exhibition at the end of the semester is very important for the school administrators and enhancing the development of young children is not as valuable as their products. (In-S2)

Also, they believed that 'the administrators' chiefly aim to please parents when those attend the end of year exhibitions' (Pre-S11).

Additionally, some of the participants stated that school administrators perceive parents as 'a source of income for their schools' (In-S7); therefore, they want to show them well-prepared products which appeared to have been made by the children (In-S9). According to Aslan and Cansever (2009), such kind of responses could be related to the participants' lack of knowledge about the value of creativity in young children's development. In addition, those participants' concerns about having beautiful presentable products could be related to their views of creativity as a product rather than a process (Isaksen, Dorval, & Treffinger, 2000; Sternberg & Lubart, 1999).

In addition to the barriers mentioned above, the participants in the current study also reported that even though the school administrators do not support teachers in fostering children's creativity, the teachers could manage that situation and were able to nurture children's creativity. Almost half of the participants (6 Pre-S, 3 In-S) indicated that since they believed in the importance of creativity they could deal with the obstacles related to the school administrators. The following two comments illustrate this view:

> I could exhibit bilateral behaviors. That is to say, while I am meeting the requirements of the school administrators, I can also prepare and design creative activities for children. (Pre-S15)

> When I am confronted with the strict and stereotyped school management system, I might use my creativity to manipulate the administrators' demands in such a way that I can encourage the children's creativity. (In-S10)

It can be seen that the subjects in this study use their own creativity. According to Craft (2003), supporting children's creativity could be related to the way the curriculum is implemented or the subjects are presented by the teacher in classroom settings and it is highly dependent on teachers' own creativity. Moreover, the participants' responses might also be associated with their beliefs about creativity. Some researchers (Hofer & Pintrich, 1997; Pajares, 1992) asserted that teachers' beliefs could form their perceptions as well as the teaching methods implemented in their practices. So, teachers with a positive belief in creativity could facilitate children's creativity not only by implementing creative activities but also by arranging their teaching environments in line with the fostering of the children's creativity (Fleith, 2000). However, even if teachers have a positive belief about creativity, they may still not implement the activities that are consistent with their beliefs due to the feeling that the school administrators put pressure on them (Stipek & Byler, 1977).

Furthermore, according to the findings, some of the subjects (5 Pre-S, 3 In-S) expressed their concern about the obstacles to creativity in terms of the different points of view held by parents, teachers, and school administrators regarding the children's school experiences related to creativity.

These findings can be seen more clearly in the following comments:

> Supporting children's creativity is a process. If children's activities are not accepted as creative by their parents, parents come to school administrators and call teachers to account for the activities that the children engage in. Based on this behavior on the part of the parents, the school administrators might terminate the teachers' contract. (Pre-S15)

> A teacher might direct children to flexible thinking, which is one of the requirements of creativity; however, a child's parents might not support their child's flexible thinking; and therefore, this child's creativity could not be well-supported. (In-S9)

In the literature, there are many studies presenting different points of view on children's creativity from the teachers, school administrators, and parents. Aslan and Cansever (2009) gave a reason why school administrators do not facilitate children's creativity as being the conflict with parents concerning their way of understanding the creativity of children; this is based on inadequate communication between the school and the parents about the children's creative activities. Furthermore, Zimiles (1986) mentioned the pressure of parents on teachers' classroom practices; in fact the researcher highlighted the influence that the parents exert on teachers to support children's intellectual development rather than creative thinking. Moreover, Delpit (1995) claimed that while teachers might promote creative activities of children and determine their educational objectives in terms of preparing those kinds of activities, parents might support different educational approaches focusing on teaching only the basic skills necessary for the children's future academic success.

In the current study, the participants also commented on another possible reason that hinders the development of creativity in children. More than half of the teachers (4 Pre-S, 8 In-S) expressed that the strict rules in the classroom set by teachers and the children being forced to follow them might repress children's creativity. One pre-service teacher commented:

> in class, if a teacher prepares different interest areas but implements strict rules and does not allow children to use the materials freely and also does not let them mix all those materials based on their wishes, s/he will handicap the young children's creativity. (Pre-S14)

An in-service teacher also stated that the

> rules set by adults, whether formed from the interior dynamics of the parents or set by the teacher, are something that first comes to my mind when I think of creativity in the social dimension. Setting rules, even in the simplest way, for children from a young age adversely affects their creativity. (In-S6)

This finding is in line with other studies (Cole, Sugioka, & Yamagata-Lynch, 1999; Fleith, 2000) stating that a relaxed and free classroom environment in terms of having no strict rules would help children to feel comfortable as well as feeling able to express themselves freely. In this way, children's creativity might be fostered more successfully. In a flexible classroom atmosphere having no strict disciplinary rules, children's

creative characteristics, such as independent thinking and risk-taking can be stimulated (Kampylis et al., 2009). Additionally, Moran (1988) indicated that creative aptitude is encouraged in educational settings where there is a tolerant and playful environment which stimulates the children's creativity. Saracho (1992) extended that idea and indicated that along with encouraging children to generate original ideas, accepting children's those innovative ideas could help to stimulate their creativity and make them more enthusiastic to develop their creative potentials to produce such kinds of ideas.

Additionally, the findings of this research demonstrated that unlike in-service teachers, pre-service teachers (6 Pre-S) provided many recommendations for coping with creativity obstacles. They suggested that parents, school administrators, and teachers should maintain close relationships. This result can be associated with the participants' theoretical knowledge gained during undergraduate years as well as their experiences in the field. In fact, pre-service teachers possessed fresh knowledge about the importance of collaboration with people around children (Graue & Brown, 2003). For example, they took parental involvement course as a part of the compulsory curriculum and during that course they became familiar with the importance of the concept of consistency and interaction between parents and teachers in terms of fostering the children's creativity. Furthermore, pre-service teachers had the opportunity to observe different school administrators and they could understand the difference between poor and good administration practices. On the other hand, the participants' learned helplessness about the barriers to children's creativity based on their awareness of, or experiences in, school settings could be a basis for their lack of responses concerning effective communication among parents, teachers, and administrators (Davies, 1993; Davis, 2006; Moles, 1993). According to Henry (1996) even though teachers know how to work with parents in an effective way, they might not want to strengthen their relationships with parents due to the pressure from the school administrators.

Implications and recommendations

The pre-service and in-service preschool teachers' views with regard to creativity in early childhood education explored in the current study might have implications for future educational practices in fostering creativity in young children.

With regard to the dichotomous views of the participants on the social dimension of creativity, the importance of first-hand experiences on children's creativity, and the impact of the age factor on children's creativity, necessary importance should be given to pre-service early childhood teacher training programmes as well as in-service training programmes. In fact, Robinson (2001) stated that training programmes should focus on the concept that children at all ages have creative potentials to different degrees. Additionally, Craft (2003) underlined that a creative act should be considered as a continuum. It could begin with individual creativity but end with social or extraordinary creativity. Moreover, the importance of practising hands-on experiences with children to encourage them to be more imaginative and creative could be emphasised via such kinds of training programmes for teachers (Duffy, 2006).

In addition, since most of responses of the participants about the obstacles to creativity of young children were related to insufficient support from the school administrators as well as their focus on the end products of children's activities, it might be meaningful to concentrate on how to tackle these obstacles within a framework of practical implications. In fact, it is more important especially for school administrators to

gain a greater understanding about the significance of creativity in young children's learning. Basadur, Runco, and Vega (2000) suggested that supporting the divergent thinking skills of individuals could help them to learn basic creative thinking processes: one of the important steps should be to develop school administrators' divergent thinking skills through creativity training programmes that provoke creative thinking. Therefore, this study suggests that systematic in-service training courses, workshops, and seminars can be both practically and theoretically effective increasing the administrators' awareness of the importance of creativity in the early years. Additionally, according to Töremen (2001) if school administrators were more knowledgeable about the crucial role of nurturing creativity in early ages, they could have a leadership role for parents and teachers which could sustain an effective and continuous partnership with them concerning the promotion of children's creativity to give recommendations associated with this process. In other words, both parents and teachers would equally benefit from the school administrators taking on a supportive role in terms of the development of children's creativity.

Moreover, with regard to nurturing the creativity of young children, the participants in this study indicated that parents, teachers, and school administrators had different viewpoints. Thus, by the administrators taking a leadership the conflict between the three groups would diminish. As a result, this finding reminded us that young children's creativity cannot be supported only by the work of one specific group of people; it depends on the effective collaboration between teachers, parents, and school administrators (Töremen, 2001). Therefore, regular meetings would increase the collaboration among the three groups and this would provide a channel for sharing information about children's development as well as the way of boosting children's creativity.

Alternatively, once teachers' creativity is promoted, the achievement of other educational goals will follow (Cheung, Roskams, & Fisher, 2006; McCarthy, 2001; Safran, 2001; Woods & Jeffrey, 1996). For instance, according to Cheung et al. (2006), developing teachers' creativity can have positive impacts on children's creativity in an indirect way. Therefore, the administrators could use different strategies to encourage teachers to be more creative and help them to increase their intrinsic motivation to deal with the obstacles to the development of creativity (Akande, 1997; Amabile, 1996; Shalley & Oldham, 1997). For example, according to Fang, Baba, Zhang, and Davies (2011), it would be meaningful for the school administrators to allow teachers to have more autonomy in their educational implementations with children to increase their performance to support children's creativity. Moreover, it is advisable for the school administrators to create an atmosphere of discussion and exchange of ideas which would increase the teachers' collaboration with others since as suggested by Lieberman and McLaughlin (1992) such kind of environments in school settings help to maintain a high level of teacher motivation.

Additionally, according to the findings of the current study, one of the obstacles for promoting children's creativity was associated with strict rules in the classroom. This is mostly related to the teachers; therefore, it is suggested that together with theoretical information, more practical and concrete examples or recommendations about classroom rules can be added into the Turkish national early childhood curriculum in order to raise teachers' awareness about the importance of flexible classroom environment in which children are offered many opportunities to express themselves (Esquivel, 1995). Thus, teachers could benefit from those practical additions in terms of developing children's creative thinking strategies (Basadur et al., 2000). In other words, it would be easier to raise creative individuals who are creative thinkers, problem-solvers, and have

independent personalities in many areas in order to adapt to today's rapidly changing world (Gürgen, 2006).

Based on the implications of the findings, further research within the same framework using a larger sample is recommended to verify and extend the findings of the current study. Moreover, the findings of the study further suggest the need for cross-cultural studies to examine potential variations across cultures regarding preschool teachers' views about creativity. Also, as future research, it would be meaningful to explore teachers' views of creativity accompanied by their actual classroom practices to see the consistency between teachers' reported views and their practices.

Lastly, in addition to pre-service and in-service teachers' views, the parents and school administrators' views about young children's creativity could be investigated and from the results the researchers could propose ways in which parents and administrators could be encouraged to develop a more positive attitude to nurturing young children's creativity.

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