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Being Creative for Teaching Creativity: Teachers' and Instructors' Self-Assessments Regarding Creativity

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ABSTRACT. This study examined teachers' and instructors' self-assessments regarding their own creativity which is thought to be helpful in understanding their needs to become more creative teachers to foster creativity in classroom. The data were collected in 2015 through a questionnaire developed by the researcher. Creativity-related self-assessments of teachers and instructors were analyzed with respect to gender, parents' educational status, and specialty by using chi-square (χ^2) tests. Descriptive analysis was used to reveal participants' responses to the open-ended items on their expectations from their teachers and parents in terms of behaviors they had exhibited in the past that could have supported the enhancement of creativity. The findings revealed that self-assessments of creativity are not found to be statistically significant in terms of participants' specialties and gender; however, as the educational level of fathers' gets higher, the self-perceptions of creativity tend to be more positive. Considering the qualitative analysis, it was found out that participants expected their parents to encourage them to get engaged in more activities, have freedom of the mind, not impose restrictions, and be respectful and sensitive to children's interests, talents and differences. The attitudes expected from teachers provided students with the opportunity to think freely, flexibly and originally, not imposing limitations and rules, and adopting an instructional approach that integrates into the learning environment a wide range of materials. Results have been interpreted to arise through the cultural issues and it is suggested that new generations need to be trained in more universal education and training systems to be more creative teachers, where cultural limitations affecting social, emotional and personal development areas are minimized.

Key words: Creativity, teaching creativity, creative teacher, self-assessments on creativity

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Yaratıcılığı Öğretmek için Yaratıcı Olmak: Yaratıcılıklarına İlişkin Öğretmenlerin ve Öğretim Elemanlarının Öz-Değerlendirmeleri

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ÖZ. Bu çalışmada, öğretmen ve öğretim elemanlarının, öğrencilerinin yaratıcılıklarını geliştirebilmeleri için öncelikle kendilerinin yaratıcı eğitimciler olmaları gerekliliğinden hareketle, kendi yaratıcılıklarına ilişkin öz-değerlendirmelerinin belirlenmesi ve bu değerlendirmelerin katılımcıların cinsiyeti, ebeveynlerinin eğitim durumu, uzmanlık alanları ve ebeveynlerinden ve geçmiş yıllardaki öğretmenlerinden beklentileri açısından incelenmesi amaçlanmıştır. Araştırma verisi, 2015 yılında, araştırmacı tarafından geliştirilen bir anket ile elde edilmiştir. Katılımcıların öz-değerlendirmelerinin cinsiyet, ebeveynlerinin eğitim durumu ve uzmanlık alanları ile ilişkisi ki-kare (χ^2) bağımsızlık testi ile incelenmiştir. Katılımcıların, ebeveynlerinden ve geçmiş yıllardaki öğretmenlerinden, yaratıcılıklarını geliştirebilecek nitelikteki davranışlarına ilişkin beklentileri ise ankette yer alan açık uçlu sorulara verdikleri yanıtlar ile elde edilmiş, bu nitel veriler, betimsel analiz tekniği ile çözümlenmiştir. Katılımcıların kendi yaratıcılıklarına ilişkin öz-değerlendirmelerinin, cinsiyet ve uzmanlık alanlarıyla manidar bir ilişki göstermediği, diğer taraftan babanın eğitim durumu yükseldikçe, katılımcıların yaratıcılıklarına ilişkin olumlu öz-değerlendirmeler yapma eğilimi gösterdiği belirlenmiştir. Bununla birlikte, katılımcıların ebeveynlerinden özgürlükçü düşünce yapısı, kural ve yasakları dayatmama, daha fazla sayıda etkinliğe yönlendirme ve ilgi, istek, yetenek ve farklılıklara duyarlı olma yönünde; geçmişteki öğretmenlerinden ise özgür ve esnek düşünme fırsatı verme, kuralları dayatmama, araştırma, uygulama, tartışma, eleştirme, farklı

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materyallerle tanışma fırsatı veren yaşam becerileri odaklı eğitim-öğretim gerçekleştirme yönünde beklentileri olduğu belirlenmiştir. Araştırma sonuçlarına dayalı olarak, katılımcıların yaratıcılıklarına ilişkin öz-değerlendirmelerinin, içinde yaşadıkları kültürün bir yansıması olduğu ve yaratıcı bireyler yetiştirmede öncelikli olarak öğretmenlerin, özgür ve esnek düşünebilen, problem çözebilen, yaratıcı bireyler olarak mesleklerine başlayabilecekleri, sosyal, duygusal ve kişisel gelişim alanlarına etki eden kültürel sınırlılıkların en aza indirildiği, evrensel eğitim-öğretim sistemlerinde yetiştirilmesi gerektiği düşünülmektedir.

Anahtar sözcükler: Yaratıcılık, yaratıcılığı öğretmek, yaratıcı öğretmen, yaratıcılığa ilişkin öz-değerlendirme

ÖZET

Amaç ve Önem

Öğrencilerin yaratıcılığını geliştirmenin, düşünebilen ve üretebilen bireyler yetiştirme hedefine ulaşmanın önemli bileşenlerinden biri olduğu göz önünde bulundurularak, bu çalışmada, öğrencilerin yaratıcılığını geliştirmede kılavuz rolüne sahip öğretmen ve öğretim elemanlarının kendi yaratıcılıklarına ilişkin öz-değerlendirmelerinin belirlenmesi ve bu değerlendirmelerin katılımcıların cinsiyeti, ebeveynlerinin eğitim durumu, uzmanlık alanları ve ebeveynlerinden ve geçmiş yıllardaki öğretmenlerinden beklentileri açısından incelenmesi amaçlanmıştır.

Yöntem

Araştırma verileri, Güzel Sanatlar, Eğitim Bilimleri, Fen Bilimleri ve Sosyal Bilimler alanlarında öğretmen ve öğretim elemanı olarak görev yapan 254 katılımcıdan elde edilmiştir. Veriler, araştırmacı tarafından geliştirilen, katılımcıların yaş, cinsiyet, eğitim durumu, uzmanlık alanı, ebeveynlerinin eğitim durumu ve yaratıcılığı öğretebilmenin temelinde yaratıcı düşünebilen bir birey olma gerekliliğinin bulunduğu varsayımından hareketle, yaratıcı olup olmadıklarına ilişkin öz-değerlendirmelerini sorgulayan yedi kapalı uçlu madde ile ebeveynlerinden ve geçmiş yıllardaki öğretmenlerinden, yaratıcılıklarının gelişimini destekleyebilecek nitelikte davranışları açısından beklentilerini sorgulayan iki açık uçlu maddeden oluşan bir anket ile 2015 yılında elde edilmiştir. Katılımcıların öz-değerlendirmelerinin cinsiyet, ebeveynlerinin eğitim durumu ve uzmanlık alanları ile ilişkisi ki-kare (χ^2) bağımsızlık testi ile incelenmiştir. Katılımcıların, ebeveynlerinden ve geçmiş yıllardaki öğretmenlerinden beklentilerine ilişkin elde edilen nitel veriler ise betimsel analiz tekniği ile çözümlenmiştir.

Bulgular

Katılımcıların kendi yaratıcılıklarına ilişkin öz-değerlendirmelerinin, cinsiyet ($\chi^2_{(1)}$=1.640, p>.05) ve uzmanlık alanlarıyla ($\chi^2_{(4)}$ =7.566, p>.05) manidar bir ilişki göstermediği, diğer taraftan babanın eğitim durumu ($\chi^2_{(2)}$ =20.195, p<.05) ve katılımcıların kendi ebeveynlerinden ve öğretmenlerinden beklentileri ile ilişkili olduğu belirlenmiştir.

Tartışma ve Sonuçlar

Elde edilen katılımcı görüşleri, yaratıcılığın temellerinin okul öncesi eğitim, ilkokul, ortaokul ve lise yıllarında atıldığına ve bu süreçte ana-baba ve öğretmenlerin, yaratıcı nesiller yetiştirmede kritik rol oynadığına ilişkin

bilgiler içermektedir. Katılımcıların kendi yaratıcılıklarına ilişkin öz-değerlendirmelerinin, ebeveynlerinin eğitim düzeyleri ve ebeveynleri ile temel eğitim aldıkları yıllardaki öğretmenlerinin geçmiş yıllardaki davranışları ile ilişkili olabileceği belirlenmiştir. Nitekim yaratıcılık konusundaki her yaklaşım, içinde yaşanılan kültürle bağlantılıdır ve katılımcıların yaratıcılıklarına ilişkin öz-değerlendirmeleri de içinde yaşadıkları kültürün bir yansımasıdır. Bireyler, geleneksel değerleri benimsemiş bir toplumun beklentileri doğrultusunda yetiştirildiği kültürlerin parçası olduklarında, bireyin topluma uyumu, ilgi, yetenek ve tercihlerinden daha öncül bir değer olmaktadır. Uyma davranışının, yenilik için gerekli olan yaratıcı kıvılcımları söndürebileceği de bilinmektedir. Öncül değerleri koruma sürecini, yalnızca anne-baba-çocuk ilişkisi değil öğrenci-öğretmen ilişkisi de desteklemekte; bunun sonucu olarak katılımcıların ebeveynlerinden özgürlükçü düşünce yapısı, kural ve yasakları dayatmama, daha fazla sayıda etkinliğe yönlendirme, ilgi, istek, yetenek ve farklılıklara duyarlı olma, toplumsal beklentilerden bağımsız olma yönündeki beklentileri; geçmişteki öğretmenlerinden ise özgür ve esnek düşünme fırsatı verme, kuralları dayatmama, araştırma, uygulama, tartışma, eleştirme, farklı materyallerle tanışma fırsatı verme ve kişisel/duyuşsal gelişim ve yaşam becerileri odaklı eğitim-öğretim gerçekleştirme yönündeki beklentileri ön plana çıkmaktadır. Buna dayalı olarak, yaratıcı bireyler yetiştirmede kritik role sahip öğretmenlerin öncelikli olarak, özgür ve esnek düşünebilen, sorgulayan, eleştiren, problem çözebilen, nesnel davranabilen, yaratıcı bireyler olarak mesleklerine başlayabilecekleri, sosyal, duygusal ve kişisel gelişim alanlarına etki eden kültürel sınırlılıkların en aza indirildiği, evrensel eğitim-öğretim sistemlerinde yetiştirilmesi gerektiği düşünülmektedir.

INTRODUCTION

For half a century, the interest towards fostering creativity through education has been growing up further and it is still one of the crucial issues in education. Beyond a variety of definitions, as a common point on which researchers compromise, creativity involve a combination of cognitive (information processing), conative (personality traits, motivational aspects), and emotional factors (affective state, trait) that are interacting dynamically with the environment and creativity thus refers to the complex human capacity to produce novel ideas, original and relevant responses or products, generate new solutions, and express oneself in a unique manner (Abraham, 2016; Barbot, Besançon & Lubart, 2011; Runco & Jaeger, 2012). Furthermore, Craft (2008) states that this complex human capacity - creativity - is not only defined as a needed feature in being an educated but also in economic success. In other words, this fundamental life skill can be seen as an economic imperative because the future of a competitive national economy depends on flexibility and problem solving skills of workers and managers. It is for this reason that creativity cannot be ignored or suppressed through schooling (Poole, 1980). Hence, The European Council agreed in declaring 2009 the year of creativity and innovation. The Communication of March 2008 (European Commission, 2008, 2) states: "Europe needs to boost its capacity for creativity and innovation for both social and economic reasons" and the objective of the year is "to promote creativity for all as a driver for innovation and as a key factor for the development of personal, occupational, entrepreneurial and social competences through lifelong learning" (European Commission, 2008, 5). Thus, any attempt that may improve creativity is considered as crucial in social and cultural context. Based on this idea, the theme of creativity is still being discussed in a wide range of pedagogical studies all over the world, while the attempts to enhance it through the fundamental components of education are limited.

The most important elements in the educational context are the structure of the educational settings, the instructional program, the teaching methods and techniques applied, and especially an encouraging learner-teacher relationship, as emphasized by many researchers (Emir & Bahar, 2003; Tezci & Gürol, 2003; Torrance, 1995; Yenilmez & Yolcu, 2007). Teachers, who have the core responsibility to guide learning-teaching processes and to build up an encouraging learner-teacher relationship, are primarily those for fostering or hindering learners' creative potential. Besides, fostered skills and abilities in the students which could nurture creativity can only be developed and promoted under the guidance of the teachers who are demonstrative of creative abilities; who have a fluent, flexible and original thinking power, are capable of solving problems and are able to meet the needs of students by

bringing materials and ideas into the classroom environment (Norton, 1994; Savage & Fautley, 2007). Thus, as supported by the statements of Rhodes (1961) and Torrance (1963) stressing the importance and urgency for teachers to be creative, Gowan and Bruch (1967) emphasizes that one of the stock answer to the question "What can be done in the classroom to make children more creative?" is "creative teachers".

Even though the importance of facilitating creativity has been widely recognized through a number of surveys focusing on the techniques and strategies of creative teaching and the definition of the creative teacher (such as; Freitas, Lantz & Reed, 1991; Gowan & Bruch, 1967; Hallman, 1967; Lucas, 2001; Torrance, 1965) or focusing on teachers' views, suggestions and awareness about the definition of creativity and the importance of promoting creativity development in the classroom (such as; Aljughaiman & Mowrer-Reynolds, 2005; Aslan & Arslan Cansever, 2009; Bramwell, Reilly, Lilly, Kronish & Chennabathni, 2011; de Souza Fleith, 2000; Diakidoy & Kanari, 1999; Emir & Bahar, 2003; Fryer & Collings, 1991; Kampylis, Berki & Saariluoma, 2009; Yenilmez & Yolcu, 2007), little attention has been paid to the issue of teachers' perceptions of a "creative teacher" or teachers' self-assessments regarding their own creativity (Morais & Azevedo, 2011), which is thought to be helpful in understanding their needs to become more creative teachers to foster creativity in classroom.

Considering that developing students' creativity during their education is the first step for achieving the goal of producing individuals that are able to think and generate, understanding teachers' self-assessments regarding creativity is, no doubt, essential for any development of policy lines on teaching creativity and innovation for education. Based on this premise, in this study, it is asked teachers and instructors to assess their own creativity, seeking an answer to an underlying question "Do you think that you are creative enough to teach creativity?". Creativity-related self-assessments of teachers and instructors were analyzed with respect to gender, parents' educational status, and specialty. Furthermore, qualitative methods were used to reveal those teachers' and instructors' expectations from their parents and their past teachers, regarding their behaviors that could have supported the enhancement of creativity.

METHOD

Participants

Research data were gathered from 254 teachers and instructors in total who have a degree in Music and Drama, Fine Arts, Education, and Science and Letters from 35 Turkish universities. Table 1 presents the distribution of the participants by gender and age.

Table 1. *Distribution of teachers and instructors by gender and age*

Age Intervals	Gender				Total	
	Female		Male			
	N	%	N	%	N	%
25 and below	87	34.3	19	7.5	106	41.7
26-30	60	23.6	27	10.6	87	34.3
31-35	26	10.2	14	5.5	40	15.7
Above 35	18	7.1	3	1.2	21	8.3
Total	191	75.2	63	24.8	254	100.0

Table 1 shows that a great number of participants (76.0%) is composed of young teachers and instructors aged 30 or below. The total number of more experienced participants, i.e. those aged above 30, constitutes 24.0% of the group. Distribution of the sample by the specialties is given in Table 2.

Table 2. *Distribution of teachers and instructors by specialty*

Specialty	N	%
Pictorial Art	66	26.0
Music*	42	16.5
Preschool Education	33	13.0
Traditional Turkish Arts**	28	11.0
Sculpture, Ceramics,& Plastic Arts	27	10.6
Musical Instruments***	13	5.1
History	11	4.3
Dance (Folk &Modern Dances)	7	2.8
Mathematics	7	2.8
Curriculum Development & Instruction	6	2.4
Linguistics	5	2.0
Interior & Environmental Design	3	1.2
Art History	3	1.2
Sociology	2	0.8
Philosophy	1	0.4
Total	254	100.0

* This item includes musicology, voice training, opera, chorus, musical theories, composition, popular singing and traditional Turkish music.

** This item includes carpet and fabric design, tile-making, old tile restoration, illumination, miniature and calligraphy.

*** This item includes viola, piano, contrabass, flute, percussion, string instruments, instrument manufacturing, and musical technologies.

The distribution presented in Table 2 shows that participants, who are working as teachers in preschools, secondary schools or high schools or working as instructors in several fine arts or performing arts programs (N=183, 72%), constitute the greatest proportion of the total. A smaller number of participants (n=39, 17.4%) are professionals of educational sciences (i.e. Preschool Education, and Curriculum Development and Instruction), who are working "on" or "with" students (e.g. organizing and/or performing art activities for students, supervising preschools, primary or secondary schools, doing research on instructional programs, or supervising preschools, primary or secondary schools with respect to curriculum development), professionals of social sciences (i.e. History, Sociology, Philosophy, etc.), and linguistics or basic sciences (i.e. Mathematics).

Data Collection Instruments and Application

Research data were collected through a questionnaire developed by the researcher in 2015. The questionnaire was composed of six close-ended items on demographical variables, including gender, age, educational background, educational status of their parents, and specialty, a dichotomous close-ended item asking whether the participants considered themselves creative (i.e. Do you think you are a creative person?), and two open-ended items, inquiring the participants' views on past behaviors they expected from teachers and parents that were likely to support the enhancement of their creativity. In order to ensure content validity, expert opinions were received from several domain experts of educational sciences for the questionnaire. Data were collected between February-May 2015 and approximately a half of the questionnaires were administered in face-to-face sessions while the other half was administered electronically, depending on the location of participants.

Data Analysis

Within the scope of the study, the teachers and instructors were asked to make self-assessments of whether they are creative or not. These assessments were analyzed with regard to gender, parents' educational status and specialty, by using chi-square (χ^2) tests. SPSS 20.00 was used for data analyses.

In addition, descriptive analysis was used to examine the participants' responses to the open-ended items on their expectations from their teachers and parents in terms of behaviors or attitudes they had exhibited in the past, which could have supported the enhancement of their creativity. Descriptive

analysis is a technique in which direct quotations from the responses are provided to ensure an in-depth investigation of content. The objective of this analysis is to present findings to the reader in an organized and interpreted manner. In order to achieve this goal, the data are described clearly and systematically. Then, the descriptions are presented and interpreted to obtain final results (Yıldırım & Şimşek, 2009). For the purpose of this study, the qualitative data gathered through the teachers' and instructors' views were presented and interpreted either by summarizing their opinions in consideration of survey variables or providing direct quotations.

FINDINGS

Teachers' and Instructors' Self-Assessments of Creativity by Gender

Based on the educators' response to the question "Do you think you are a creative person?", the first analysis was conducted to find out the correlation between self-assessment of creativity and gender. Table 3 demonstrates the results of χ^2 test.

Table 3. *Chi-square test results for teachers' and instructors' self-assessments of creativity and gender*

Gender	Are you creative?					
	Yes		No		Total	
	N	%	N	%	N	%
Female	154	80.6	37	19.4	191	100.0
Male	46	73.0	17	27.0	63	100.0
Total	200	78.7	54	21.3	254	100.0
$\chi^2=1.640$	*df=1*		*p=.200*			

According to Table 3, the rate of Turkish educators defining themselves as creative is 78.7% whereas the rate of educators thinking the opposite is 21.3% in the sample. However, the percentages of men (80.6%) and women (73.0%) that have a positive self-assessment of creativity, and the percentages of men (19.4%) and women (27.0%) that have negative self-assessments of creativity are quite close to each other. Thus, the differences in percentages of creativity self-assessments of male and female teachers and instructors are not statistically significant ($\chi^2_{(1)}=1.640$, $p>.05$), as well. In other words, it may be concluded that teachers' and instructors' gender and self-assessments of creativity are independent/uncorrelated variables.

Teachers' and Instructors' Self-Assessments within Their Parents' Education Status

Within the scope of the research, the educational status of teachers' and instructors' parents was also taken as a variable for categorical comparison of the participants' self-assessment of creativity. However, the observed distribution (in terms of descriptive statistics based on crosstabs for mothers' and fathers' educational status and participants' self-assessments) showed that 28.6% of the cells have expected count less than 5 in the total distribution of mothers' education status and 16.7% of the cells have expected count less than 5 in the total distribution of fathers' education status. Considering the situation, it is decided that it would not be accurate to interpret the results of the χ^2 test which would be carried out to examine the significance of the correlation between participants' self-assessments and their parents' educational status. Thus, the categories were combined and redefined as follows for mother's status of education:

1) "Illiterate",

2) "Literate but uneducated" and "primary school degree",

3) "Secondary school degree" and "high school degree", and

4) "College graduate/undergraduate" and "postgraduate", in order to reduce below 20% the cells in the total distribution of mothers' educational status which have expected counted less than 5.

On the other hand, considering that there is no "illiterate" father in the sample, a similar re-categorization was done for fathers' educational status:

1) "Literate but uneducated" and "primary school degree",

2) "Secondary school degree" and "high school degree", and

3) "College graduate/undergraduate" and "postgraduate".

The redefined categories and the results of the χ^2 tests are presented in Table 4.

Table 4. *Chi-square test results for teachers' and instructors' self-assessments of creativity and their parents' educational status*

Educational Status of Parents	**Are you creative?**											
	Mother						**Father**					
	Yes		**No**		**Total**		**Yes**		**No**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Illiterate	11	57.9	8	42.1	19	100.0	-	-	-	-	-	-
Literate or primary school degree	75	77.3	22	22.7	97	100.0	45	62.5	27	37.5	72	100.0
Secondary school or high school degree	90	84.9	16	15.1	106	100.0	106	89.8	12	10.2	118	100.0
College graduate, undergraduate or postgraduate	24	75.0	8	25.0	32	100.0	49	76.6	15	23.4	64	100.0
Total	200	78.7	54	21.3	254	100.0	200	78.7	54	21.3	254	100.0
	$\chi^2=7.723$		*df=3*		*p=.052*		$\chi^2=20.195$		*df=2*		*p=.000*	

Data related to mother's status of education in Table 4 suggests that the total percentage of teachers' and instructors' with positive self- assessments of creativity is 57.9% in the group of participants whose mothers are illiterate, and that this percentage increases up to 75.0% in the group of participants whose mothers have minimum college degree, to 77.3% in the group of participants whose mothers are literate or have a primary school degree, and to 84.9% in the group of participants whose mothers have a secondary or high school degree. On the other hand, when the percentage of teachers' and instructors' with negative self-assessments of creativity is considered, the greatest accumulation (42.1%) was at the category of illiterate mothers. It is also an interesting result that this accumulation is followed by the category of participants whose mothers have a graduate, undergraduate or postgraduate degree (25.0%). The difference between these two categories seems too large in terms of "the nature of the educational level". In contrary to the participants who consider themselves creative, the teachers and instructors who defined themselves as noncreative tend to accumulate on the category of "illiterate mothers" (42.1%) while the other categories have much closer percentages. Overall it is observed that there is a difference between creativity-related self-assessments of teachers and

instructors whose mothers are at least literate and the teachers and instructors whose mothers are illiterate. However, the results of the χ^2 test do not present a significant correlation ($\chi^2_{(3)}$ =7.723, p>.05) between these two variables.

Data related to father's status of education in Table 4 show that the majority of a total of 118 participants (n=106, 89.8%) whose fathers have a secondary or high schools degree defined themselves as creative. This proportion also constitutes the greatest number of 200 participants in total, who consider themselves creative. On the other hand, the fathers of a total of 54 participants who consider themselves noncreative are mostly (n=27, 37.5%) only literate or have a primary school degree. It is observed that this percentage is followed by the participants (23.4%) whose fathers at least have a college, undergraduate or postgraduate degree, and by participants (10.2%) whose fathers have a secondary or high school degree. This situation is respectively more severe than the situation observed for the mothers' educational status. Table 4 shows that there is a significant correlation ($\chi^2_{(2)}$ =20.195, p<.05) between the teachers' and instructors' self-assessments of creativity and their fathers' educational status.

Teachers' and Instructors' Self-Assessments within Expectations from Their Parents and Teachers

The participants were also asked "What should your parents and teachers have done in the past in order to make you more creative?" in order to seek their expectations from their parents and teachers, regarding manners which could be supportive in enhancing creativity. The participants' relevant views were analyzed separately for positive and negative self-assessments of creativity and presented respectively.

In the sample, 19 out of 200 participants, who had positive self-assessments of creativity and eight out of 54 participants, who had negative self- assessments of creativity did not present any opinions on expectations. In addition, it was observed that 35 (19.3%) out of 181 participants with positive self-assessments of creativity stated that their parents provided them with all opportunities and environments required to support their creativity, while no similar opinions were obtained from the participants who had negative self-assessments of creativity. Some examples are provided below from the statements of 35 participants who reported to have received all sorts of contribution and support from their parents:

> *"I wanted a dollhouse when I was a child. My mother gave me a plastic shoe cabinet, and 'if you want a dollhouse, do it yourself,' she said."*

"My parents read me books different from the books read to other children, and made me play with materials that were different. When I was growing up, I met works of art from different fields. I was engaged in drama, ballet… This was probably because my father was a person that you can call an inventor. Knowing that he produced a water heater from a large vessel made me see things from a larger perspective."

Table 5 presents the distribution of categories of teachers' and instructors' expectations from their parents by whether they defined themselves creative.

Table 5. *Teachers' and instructors' expectations from their parents*

Expectations from Parents	Are you creative?				Total	
	Yes		No			
	N	%	N	%	N	%
Having freedom of the mind, not imposing rules and prohibitions	40	27.4	8	17.4	48	25.0
Encouraging children to get engaged in scientific, artistic, cultural and nature activities	36	24.7	10	21.7	46	24.0
Being sensitive and respectful to interests, wishes, talents and differences	23	15.8	6	13.0	29	15.1
Being independent of social expectations, social pressure and financial concerns	15	10.3	6	13.0	21	10.9
Being knowledgeable and conscious about child development, education and psychology	13	8.9	5	10.9	18	9.4
Raising children as individuals that are able to inquire, discuss and solve problems, and have self-confidence	10	6.8	6	13.0	16	8.3
Having financial power and sources	6	4.1	2	4.4	8	4.2
Being creative	3	2.1	3	6.5	6	3.1
Total	146	100.0	46	100.0	192	100.0

As seen in Table 5, participants' expectations from their parents are categorized into eight groups. In the group of participants that have positive self-assessment of creativity, the greatest expectation is with regard to having freedom of mind and not imposing rules and prohibitions (27.4%). The rate of this expectation is relatively high (17.4%) in the group of participants that have negative self-assessment of creativity, but the greatest expectation in this group is related to the encouragement of participation in scientific, artistic, cultural and nature activities (21.7%). There are also teachers and

instructors believing that their creativity would have developed more if their parents had had better financial sources or if their parents had been creative; however, the proportion of such teachers and instructors is quite small in the groups that defined themselves as creative and uncreative. Below are quotations from the teachers and instructors, selected from each category.

Some examples from the statements of teachers and instructors who expected their parents "to have had freedom of the mind and not to have imposed rules and prohibitions":

> *"The family is a world of impositions. I would have been more creative if they had given up warning me continuously not to break down or not to spill over, or had played or entertained with me rather than see me as a hard drive. I did not get opportunities thanks to my family, I mostly created them myself."* (From a participant with positive self-assessment of creativity)

> *"Parents generally prevent their children from gaining experience so as to be protective. In Turkey, children do not have chance to spend time on their own, they cannot step outside without parents. We behave in a harsh, authoritarian and oppressive way to our children. Even letting children break down and reassemble an object can support their creativity, but we punish them in such a case."* (From a participant with positive self-assessment of creativity)

> *"If only they had permitted naughtiness rather than obedience, disorder rather than order, messiness rather than cleanliness…"* (From a participant with negative self-assessment of creativity)

> *"I would have been a more creative individual if my creative products had not been criticized for being isolated from the real world, if I had not been expected to produce concrete products, and if there had not been limitations."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their parents "to encourage children to get engaged in scientific, artistic, cultural and nature activities (reading, watching movies, visiting museums, attending courses and workshops, performing drama and dance, playing instruments, travelling and so on)":

> *"Seeing new places more frequently, traveling, meeting new cultures, people and their works, and contacting more frequently with art and music would have certainly enhanced our creativity. The more you see creative products, the more you produce new ideas."* (From a participant with positive self-assessment of creativity)

> *"We would have been more creative, if rather than providing us with ready answers, they had let us spend more time in nature, think about questions and feel the answers, or take us to more cultural and artistic events and leave us on our own, and hence let us find our own answers."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their parents "to be sensitive and respectful to interests, wishes, talents and differences":

> *"I wish my parents had been aware that I was happier and more peaceful when I did what was interesting for me, and had been aware of such moments in my life. They had never seen this, but I continued to create such moments with whatever I had."* (From a participant with positive self-assessment of creativity)

> *"They never observed what drew my interest and never guided me in my early childhood. I was always interested in music, but my family never paid attention to this. I have still interest in music. And my family still has an interest in what I am not interested in."* (From a participant with negative self-assessment of creativity)

> *"They never gave up giving importance to what others said about us. That is why they always compared me with others. They trusted neither me nor themselves. They always chased other people's ordinary ideas on my interests and wishes, and what I wanted to produce, and never defended original ideas. I would have been more creative if they had supported me."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their parents "to be independent of others' expectations, social pressure and financial concerns":

> *"Parents tend to impose restrictions on their children because of financial concerns. To exemplify, when a young person wants to study arts, they prevent him from doing this and orient him to a profession for which they easily find a job. When parents decide on behalf of children, saying that 'no, you cannot make a living and bring home the bread if you become an artist, so be a doctor', you cannot expect the child to think freely and creatively."* (From a participant with positive self-assessment of creativity)

> *"I and a lot of children like me had to choose another field of study because of parents' oppression, although we were interested in arts, a field that would develop our creativity. Of course, creativity is in every field, not only in arts. But once you are blocked, your ambition fades away, and does not reappear in the field you are forced to choose."* (From a participant with negative self-assessment of creativity)

An example from the statements of teachers and instructors who expected their parents "to be more knowledgeable and conscious about child development, education and psychology":

> *"Children should be provided with extraordinary and disassembled materials that they can assemble or reshape, rather than readily available toys. Children should be in contact with natural materials such as stones, soil, leaves, etc. However, parents need to be knowledgeable and conscious to be able to provide such materials to children."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of educators who expected their parents "to raise children as individuals that are able to inquire, discuss and solve problems, and have self-confidence":

> *"I have always been in need of thinking, discussing and sharing more. However, my family did not give me the chance to think more and to take more responsibility, because they were thinking on my behalf. I did not need to*

> *share. And my curiosity and ambition to discover died out. Problem solving is a part of creativity. Even today, I am not very good at producing original solutions to problems."* (From a participant with negative self-assessment of creativity)

> *"They should have left me in a problem situation so that I could take responsibility and develop analytical thinking and problem solving skills. But they never let me have problems; they tried to keep me away from all problems. I do not think that creativity can develop when we do not experience problems."* (From a participant with negative self-assessment of creativity)

An example from the statements of teachers and instructors who expected their parents "to have financial power and sources":

> *"If my family had been richer, I would have had the chance to enhance my creativity and get engaged in more creative practices rather than do worldly things to earn money for them and myself."* (From a participant with negative self-assessment of creativity)

An example from the statements of teachers and instructors who expected their parents "to be creative":

> *"How can you be creative if you do not have a creative family? Who will teach you to think creatively, freely and originally? You know, we have the proverb 'twig is bent, so is the tree inclined'. It is your family's responsibility to bend the twig."* (From a participant with negative self-assessment of creativity)

The participants were also asked to mention their expectation from teachers. Nine out of 200 participants, who had positive self-assessments of creativity and six out of 54 participants, who had negative self-assessment of creativity did not present any opinions on their expectations. In addition, it was observed that six (3.1%) out of 191 participants with positive self-assessments of creativity stated that teachers supported them sufficiently for the enhancement of creativity, while no similar opinions were obtained from the participants that defined themselves as noncreative. Table 6 presents the distribution of categories of teachers' and instructors' expectations from their teachers by whether they defined themselves as creative.

Table 6. *Teachers' and instructors' expectations from their teachers*

Expectations from Teachers	Are you creative? Yes		Are you creative? No		Total	
	N	%	N	%	N	%
Providing the opportunity for free, flexible and original thinking, not imposing rules	56	30.3	11	22.9	67	28.8
Providing the opportunity for research, analysis, application, thinking, discussion, criticism and working with different materials	52	28.1	17	35.4	69	29.6
Offering education and instruction based on personal/affective development, exchange of interdisciplinary knowledge and improvement of life skills	30	16.2	9	18.8	39	16.7
Encouraging students to get engaged in scientific, artistic, cultural and nature activities	16	8.6	1	2.1	17	7.3
Being creative	15	8.1	4	8.3	19	8.2
Being aware of students' interests and talents	8	4.3	3	6.3	11	4.7
Being respectful, democratic, objective and thoughtful	8	4.3	3	6.3	11	4.7
Total	185	100.0	48	100.0	233	100.0

As seen in Table 6, participants' expectations from their teachers fall under seven categories. In the group of participants that have positive self-assessment of creativity, the greatest expectation is with regard to providing opportunity for free, flexible and original thinking, and not imposing rules (30.3%). The rate of this expectation is relatively high (22.9%) in the group of participants that have negative self-assessment of creativity, and the greatest expectation in this group is related to the promotion of research, analysis, synthesis, application and assessment, and the use of new materials. There are also teachers and instructors that expected teachers to be aware of their interests and talents, and to adopt respectful, democratic, objective and thoughtful attitudes towards students; however, the proportion of such participants is quite small in the groups that defined themselves as creative and uncreative. It was also found out that a participant that had a negative self-assessment of creativity expected teachers to orientate students to scientific, artistic, cultural and nature activities. Below are quotations from the teachers' and instructors' expectations from teachers, selected from each category:

Some examples from the statements of participants who expected their teachers "to provide the opportunity for free, flexible and original thinking, and not to impose rules":

> *"Producing individuals that think and perceive in the same way as their teachers do, and that are not able to go beyond the limits even in their mind… Is this what a good teacher does?"* (From a participant with positive self-assessment of creativity)

> *"There are teachers that try to stop their students. They do not intervene to provide guidance, but to impose restrictions. They do not want you to interpret, but to learn their interpretation. I would have been more creative if they had not expected me to harmonize my thoughts with existing thoughts, and take them closer to stereotypical ideas."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their teachers "to provide the opportunity for research, analysis, application, thinking, discussion, criticism and working with different materials":

> *"I would have been a different person today if they had given up presenting readily available information as pills or as a sort of imposition and asking us to recall such information, if they had wanted us to implement, analyze, synthesize and evaluate, and if they had been courageous enough to break strict rules of school and curriculum and adopted a more constructivist approach."* (From a participant with negative self-assessment of creativity)

> *"Someone must tell teachers that not every information represents absolute truth, a question may always have different answers, and class grades are not always equivalent to success in real life. Education programs are composed of a list of rules, but no one cares whether these rules have any practicality in real life."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their teachers "to offer education and instruction based on personal/affective development, exchange of interdisciplinary knowledge and improvement of life skills":

> *"Success in mathematics, physics or chemistry does not guarantee that you become a self-confident, objective,*

> *farseeing, compassionate and decent person! I do not believe that creativity is positively correlated with success in chemistry. Teachers who are expected to produce creative and thinking individuals should give importance to the improvement of affective skills. For, this is what lays the ground for creativity."* (From a participant with positive self-assessment of creativity)

> *"I grew up with a family and teachers, focusing on my academic success more than my personal characteristics. I was a successful student. Yet, today I can see that most of my learnings are unnecessary in real life. Success in life requires us to transform our learnings into something else that can be used in different settings and situations. Creativity is transforming. I sometimes feel that my mind is a trash bin that has not been emptied for a long time."* (From a participant with negative self-assessment of creativity)

An example from the statements of teachers and instructors who expected their teachers "to encourage students to get engaged in scientific, artistic, cultural and nature activities":

> *"It should have been one of the professional goals of our teachers – with whom we spent more time than with our family – to enhance our imagination and extend our horizons in childhood. However, they provided us with theoretical knowledge of science and mathematics that we would need in tests rather than make us meet nature, discovery and experiments, museums, exhibitions, painting and music. Thus, you might consider that our creativity enhanced on the basis of theoretical knowledge or at the theoretical level. But, in practice, my answer would be no! Don't you think that getting engaged in nature and arts is more appropriate for creative nature of human beings?"* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their teachers "to be creative":

> *"Creativity cannot be acquired, but it can be improved. Teachers, as individuals expected to improve our creativity, need to have a free and distinct way of thinking, get more engaged in nature and sports, read more and*

> *follow up-to-date knowledge, develop themselves, and in short, be more creative. They should first think creatively to be able to show us how to think."* (From a participant with positive self-assessment of creativity)

> *"In order to show me the signs of creativity, teachers first should be able to perceive and use these signs. You can have real knowledge of what you experience, not what you memorize or read in books. You need to know and have the skill to be able to teach or support the development of that skill."* (From a participant with negative self-assessment of creativity)

Some examples from the statements of teachers and instructors who expected their teachers "to be aware of students' interests and talents":

> *"One of the responsibilities of teachers is being farseeing; they should have become aware of my capacity earlier, and guided me. They could have at least helped me discover my fields of interest. We can enhance our limits in the area in which we are interested."* (From a participant with positive self-assessment of creativity)

> *"My teachers have laughed at or considered ridiculous the unusual answers I have given so far. They defined health care, teaching and engineering as good and important professions, but regarded our aims based on our fields of interest and skills as unrealistic dreams. If they had been able to observe and be aware of my interests and skills, I could have become an artist."* (From a participant with negative self-assessment of creativity)

An example from the statements of teachers and instructors who expected their teachers "to be respectful, democratic, objective and thoughtful":

> *"We are not just learning machines, but individuals with different thoughts, feelings and ideas. Teachers' negative, offensive and intolerant attitudes have always made me feel that they do not really love and respect us and their job, and that they had to perform this job only to earn their living. The basis on which creativity is built develops with teachers' attitudes and approaches toward us."* (From a participant with negative self-assessment of creativity)

Teachers' and Instructors' Self-Assessments within Their Specialties

The last inquiry in the study focused on a possible correlation between teachers' and instructors' self-assessments of creativity and their specialty. The related results indicate that 53.3% of the cells have expected count less than 5 in the total distribution of participants' specialties. Like the previous situation in which the self-assessments are examined through parents' education status, it was again determined that it would not be accurate to interpret the results of the χ^2 test which would be carried out to examine the significance of the correlation between the self-assessments of participants and their specialties. Therefore, a re-categorization was done within the revised categories of "fine arts and design", "music and performing arts", "educational sciences", "social sciences and linguistics" and "basic sciences" and the results of χ^2 test is presented in Table 7.

Table 7. *Chi-square test results for teachers' and instructors' self-assessments of creativity and specialty*

Specialty	Are you creative?				Total	
	Yes		No			
	N	%	N	%	N	%
Fine Arts & Design	106	85.5	18	14.5	124	100.0
Music & Performing Arts	45	72.6	17	27.4	62	100.0
Educational Sciences	28	71.8	11	28.2	39	100.0
Social Sciences & Linguistics	15	68.2	7	31.8	22	100.0
Basic Sciences	6	85.7	1	14.3	7	100.0
Total	200	78.7	54	21.3	254	100.0
χ^2=7.566	*sd=4*	*p=.109*				

As the descriptive statistics suggest, in the group of participants whose self-assessments of creativity are positive, the rates of teachers and instructors that have different fields of specialty are quite close to each other. The rates are close to each other in the group of participants that have negative self-assessments of creativity, as well. Table 7 supports that the observed differences do not represent significance. In other words, there is no significant correlation between participants' self-assessments of creativity and specialties ($\chi^2_{(4)}$ =7.566, p>.05).

DISCUSSION and CONCLUSIONS

Through the findings of the study, it is observed that approximately 4/5 of the teachers and instructors consider that they are creative while only 1/5 of the sample thinks that they do not have this skill. Those self-assessments of creativity are not found to be statistically significant in terms of teachers' and instructors' specialties and in terms of their gender, as well. In other words, specialty, gender and self-assessments related to creativity are uncorrelated variables in the sample. There has clearly been a greater tendency to investigate gender differences in recent years. Although so many studies have been done so far, gender difference in creativity has not become an important focus in the literature yet. This is probably because assessing gender differences related to creativity is a controversial line of research to explore, in other words, the findings on the existence and direction of gender differences shows that gender-specific work in the measurement of creativity-related domains has produced inconsistent findings (Baer & Kaufman, 2008). For instance, some researchers find no gender differences at all (e.g. Dudek & Verreault, 1989; Hargreaves, 1977; Paguio & Hollett, 1991) whereas others find male are more creative (e.g., OECD, 2014; Schmidt & Sinor, 1986) or female appeared to exhibit higher baseline levels of creativity (e.g. Amabile, 1983; Hardy & Gibson, 2015; Richardson, 1985). On the other hand, when it comes to gender differences based on subjective assessments of creativity (i.e. self-reports on creativity, self-perceptions of creative ability, and creative self-efficacy), Silvia, Wigert, Reiter-Palmon, and Kaufman (2012) argued that self-reported creativity is more reliable and valid than most researchers acknowledge. However, when the topic is subjective assessment on creativity, the main query focuses on the statement "Do our self-perceptions reflect our actual creative abilities?", which makes the findings more complicated. For instance, Goldsmith and Matherly (1988) found no gender differences in the study where they gave 118 college students three self-report measures of creativity, and Henderson (2003) found no gender differences in self-reported creative achievement of 247 inventors working in multinational firms who responded to a 90-question online survey, and Chan (2005) revealed no significant gender differences in all constructs after asking 212 gifted Chinese students to self-assess their creativity, family hardiness, and emotional intelligence. On the other hand, Kaufman (2006) found differences in women and men's self-assessments of creativity after asking 3553 individuals (mostly high school and college students) to rate themselves in 56 different domains of creativity. At the domain level, there were significant gender differences in 43 of 56

domains. Men tended to define themselves as creative more than women in 28 areas and overall whereas women reported higher creativity in 15 areas.

In the context of self-assessments related to being creative or not, a significant correlation was observed between teachers' and instructors' self-assessments and their fathers' educational level. It is observed that the fathers of the teachers and instructors who defined themselves as creative mostly graduated from a secondary or high school, whereas the fathers of participants who defined themselves as noncreative are mostly only literate or graduated from a primary school. It is observed that as the educational level of parents gets higher, the self-perceptions of creativity tend to be more positive in the sample.

With regard to the teachers' and instructors' expectations from their parents and teachers, it was found out that a great number of participants expected their parents to encourage them to get engaged in scientific, artistic, cultural and nature activities – and thus defined this as a major parental responsibility, while the number of participants that had such an expectation from their teachers was quite small. Other main expectations of participants from their parents were having freedom of the mind, not imposing restrictions such as rules and prohibitions, and being respectful and sensitive to children's interests, wishes, talents and differences. On the other hand, the attitudes expected from teachers for the enhancement of creativity were providing student with the opportunity to think freely, flexibly and originally, not imposing limitations and rules, and adopting an instructional approach that integrates into the learning environment a wide range of materials, including audiovisual media, which support high-level thinking skills.

When all the results obtained from the research are taken together, it is obvious that the views of teachers and instructors support the fact that development of creativity underlies in the basic education levels covering pre-school education, primary school, secondary school and high school years and the fact that parents and teachers play a critical role in setting a ground for creative generations, as emphasized by Bloom and Sosniak (1981).

The results of the research have shown that self-assessments of teachers and instructors about their creativity are appeared to be related to their parents' educational level and their parents' and past teachers' behaviors, which could foster or hinder their creative potential. Thus, almost every approach to creativity is directly related to and impacted by the culture in which people live, and observed self-assessments of teachers and instructors regarding creativity within the scope of this research are a natural reflection

of the culture they live in. Where individuals are members of a collectivist culture, they have grown up in line with the expectations of a group or society that has embraced traditional values, such as in Turkey. In the contrary, people are seen as independent and possessing a unique pattern of traits that distinguish them from other people in the individualistic cultures. Hence, exhibiting behaviors that are in harmony with the expectations of the community becomes a more primitive value than individuals' free choices, skills and creativity in collectivist cultures; besides, this conformity and promoted feeling associated with harmony may also extinguish the creative spark necessary for innovation (Aslan & Arslan Cansever, 2009; Goncalo & Staw, 2006; Kağıtçıbaşı, 1996; Kim & Markus, 1999). Because the preserving process of the premise/dominant-values in collectivist cultures is supported not only by the parent-child relationship but also by the student-teacher relationship, the behaviors of "having freedom of the mind, not imposing rules and prohibitions", "encouraging children to get engaged in scientific, artistic, cultural and nature activities", "being sensitive and respectful to interests, wishes, talents and differences" and "providing the opportunity for free, flexible and original thinking, not imposing rules" have come out as the common expectations of the teachers and instructors from their parents whereas the behaviors of "providing the opportunity for research, analysis, application, thinking, discussion, criticism and working with different materials" and "offering education and instruction based on personal/affective development, exchange of interdisciplinary knowledge and improvement of life skills" arise as the common expectations of the teachers and instructors from their teachers.

Based on this result, it can be concluded that the teachers and instructors who have the most important role and responsibility in educating creative individuals primarily have to be trained in educational environments where they can start their profession as individuals who are able to think free, flexibly, originally, analytically and critically; who are able to inquire, discuss, solve problems, respect others, and who have the desire to engage in scientific, artistic, cultural and nature activities. It is thought that this change will take place when new generations are trained in more universal education and training systems where cultural limitations affecting social, emotional and personal development areas are minimized.

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