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Investigation of the Relationships Between the Entrepreneurship Characteristics and Teacher Self-Efficiencies of Teacher Candidates: The Case of Gaziantep University[1]

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Abstract

This study was carried out to determine the relationships and differences between teacher self-efficacy and teacher entrepreneurship characteristics of teacher candidates who are studying at Education Faculties. For the purpose of the study, data were collected from the students of two different faculties of education affiliated with Gaziantep University. Correlation analysis performed on the data set showed that there was a positive and statistically significant relationship between teacher candidates' entrepreneurial tendencies and teacher self-efficacy. In addition, the t-test revealed that there were significant differences between the students of Gaziantep Faculty of Education and Nizip Faculty of Education with respect to both entrepreneurship and teacher self-efficacy levels. It was found that the t-test on the gender variable of the prospective teachers differed significantly in terms of entrepreneurial characteristics and teacher self-efficacy in terms of statistically significant difference between men and women. Psychological Counseling and Guidance, Classroom, Social Studies, Mathematics, Turkish and English Language Teaching Departments, which are part of the study, were statistically differentiated statistically in terms of entrepreneurship and teacher self-efficacy. It is possible to think that the motives that improve teacher trainees' entrepreneurship characteristics and the motives that elevate their teacher self-efficacy are the same or similar. This should be considered in the context of curriculum and syllabus design given in the faculties of education of teachers. Thus, it will be possible to educate individuals who are both better trained professionally and who can respond to the needs of the era at a higher level.

Keywords: *Entrepreneurship, Self-efficacy, Teacher, Education, Student*

[1] *This research was presented as abstract paper in the II. International Education Research and Teacher Education Congress held between 13-15 September 2018.*

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Öğretmen Adaylarının Girişimcilik Özellikleriyle Öğretmen Öz-yeterlikleri Arasındaki İlişkinin İncelenmesi: Gaziantep Üniversitesi Örneği

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Öz

Bu çalışma, Eğitim Fakültelerinde okuyan öğretmen adaylarının öğretmen öz-yeterlik ve öğretmen girişimcilik özellikleri arasındaki ilişki ve farklılıkları belirlemek amacıyla yapılmıştır. Araştırma kapsamında veriler, Gaziantep Üniversitesine bağlı iki farklı eğitim fakültesinde öğrenim gören öğretmen adaylarından toplanmıştır. Veri seti üzerinde yapılan korelasyon analizi, öğretmen adaylarının girişimcilik eğilimleri ile öğretmen öz-yeterliği arasında pozitif ve istatistiksel olarak anlamlı bir ilişki olduğunu göstermiştir. Buna ek olarak t-testi, Gaziantep Eğitim Fakültesi ve Nizip Eğitim Fakültesi öğrencileri arasında hem girişimcilik hem de öğretmen öz-yeterlik düzeyleri açısından anlamlı farklılıklar olduğunu ortaya koymuştur. Öğretmen adaylarının cinsiyet değişkeni bakımından girişimcilik özellikleri ve öğretmen öz-yeterlikleri arasında istatistiksel olarak anlamlı farklılık olduğu bulunmuştur. Araştırmanın örneklemini oluşturan Rehberlik ve Psikolojik Danışmanlık, Sınıf, Sosyal Bilgiler, Matematik, Türkçe ve İngilizce Öğretmenliği Bölümleri, girişimcilik ve öğretmen öz-yeterliği açısından istatistiksel olarak ayrıştırılmıştır. Araştırmadan elde edilen sonuçlardan hareketle öğretmen adaylarının girişimcilik özelliklerini ve motivasyonlarını arttıran güdülerinin aynı veya benzer olduğunu söylemek mümkündür. Bu durum, öğretmenlerin eğitim fakültelerinde verilen müfredat ve müfredat tasarımı bağlamında ele alınabilir. Böylelikle hem profesyonel olarak daha iyi eğitilmiş hem de çağın ihtiyaçlarına daha yüksek düzeyde cevap verebilen bireyler yetiştirmek mümkün olacaktır.

Anahtar Kelimeler: *Girişimcilik, Öz-yeterlik, Öğretmen, Eğitim, Öğrenci*

Introduction

Entrepreneurship is defined as the study of opportunity resources consisting of the process of discovering, evaluating and using opportunities (Shane and Venkataraman, 2000). In this context, entrepreneurship education is defined as the process in which students prepare for the world of work, which can be applied in every area of people's lives, and are given a number of skills to provide individual, social and economic returns (European Commission, 2011). In entrepreneurship education, which is expressed in the field of education, it is more important that students produce innovative ideas and gain features that will enable them to realize these ideas (Bellingham, L., Dhaliwal, H., Matlay and etc., 2012).

In recent years, the issue of entrepreneurship in teacher education has been one of the subjects mentioned in the European Commission's reports (European Commission, 2011; 2014; 2016). According to Schumpeter, the main process of entrepreneurship is innovation. The aim is to increase the productivity, to introduce new products, to try new methods to produce, to rearrange the resources (Schumpeter, 1934). In addition, entrepreneurship is a phenomenon that needs to be undertaken in the axis of innovation and creativity (Bozkurt, 2011). Therefore, the foundation of entrepreneurship is based on assuming some risks and introducing innovative products or services. In this sense, it may not be possible to expect each individual to engage in entrepreneurship. In this sense, it can be said that individuals who will engage in entrepreneurship should have some characteristics (Deveci and Aydın, 2017). As a result of literature review, the entrepreneur characteristics can be listed as; taking risks, being innovative, being creative, seeing opportunities, adapting to change, being self-confident, being tolerant of uncertainty, being determined, desire to succeed, acting independently, leadership, effective communication, focusing on internal control, decision making, responsibility receiving and so on (Deveci, 2016). It can be said that most of these features can be grouped under emotional intelligence. As a matter of fact, it is seen that the most important dimensions in researches related to entrepreneurship scale are taking risks, being innovative, seeing self-confidence, seeing opportunities and emotional intelligence (decision-making and self-control, desire

for success, being motivated, being able to control emotions) (Deveci and Çepni, 2015).

It is seen that entrepreneurship is associated with the education field in two ways (Çetin, et. al., 2017). These are entrepreneurship education and educational entrepreneurship. Entrepreneurship training focuses on entrepreneurial thinking and action. The importance of entrepreneurship education has been increasing in the last two decades. Entrepreneurship education is becoming a common phenomenon in global life. On the other hand, educational entrepreneurship is one of the sub-dimensions of entrepreneurship. The thinkers who advocate educational entrepreneurship argue that educational entrepreneurship issues should have genetic transmission, environmental factors, individual learning and life skills (Barr, 2000; Rushing, 1990; Snow, 2012). An entrepreneurial mindset is essential to a nation's socioeconomic growth as well as educational level, but it has not been established in the proper way among the people of both sectors. The industrial revolution forms the backbone of development of a nation. The innovation is the key for success to ascertain the global competitiveness (Li et al, 2019). The Entrepreneurs need to collaborate effectively with the industry people as leaders, in teams, and with their peer the need to identify a signature pedagogy for entrepreneurship that can be used in all teaching and learning contexts associated with all forms of Entrepreneuer education (Jones, 2019).

The concept of self-efficacy is defined as the individual's own judgment on the status of an individual to organize and carry out the necessary tasks to show a certain behavior (Bandura, 2001). Perceived self-efficacy affects the individual's motivation as it is related to the results of the performance (Bandura, 1999). Individuals perceptions of self-efficacy are formed from their own experiences directed towards the task, from indirect experiences, verbal persuasion by the environment, and their psychological conditions (Bandura, 1982; Schunk, 1987). The past achievements of the individual towards the task nourish the self-efficacy perception to achieve the task. In addition, the incentives that the environment can do this task and the individual's own psychological status (courage, self-confidence, etc.) strengthen their self-efficacy perception. Bandura (1982) emphasizes that self-efficacy perception affects the persistence of the individual towards the task.

Perceived self-efficacy plays a central role in the Social Cognitive Learning Theory. Because the perception of competence does not only affect the outcome of the behavior. The perception of competence affects the desire on other variables, analytical and strategic thinking, resistance to adversity and motivation (Bandura, 1999; Bandura, Barbaranelli, Caprara and Pastorelli, 2001). Therefore, self-efficacy perception of the individual not only directs his / her behaviors but also affects their decisions about different tasks (Bandura, 1999).

When it comes to teacher competencies, it is seen that the studies on this issue were made by RAND researchers who first took the work of Rotter (1966) as a theoretical basis in the 70s (Tschannen-Moran, Woolfolk Hoy and Hoy, 1998). In these studies; The beliefs or convictions developed by teachers about how they can influence the learning of non-motivated students are defined as teacher competence perception (Tschannen-Moran, Woolfolk Hoy and Hoy, 1998).

Teachers' self-efficacy is defined as the belief that the teacher can demonstrate the desired effect in student behavior, whether or not the students are motivated (Tschannen-Moran, Woolfolk Hoy and Hoy, 1998). More generally, the teacher's perception of himself / herself in dealing with the tasks in the teaching process is called the teacher self-efficacy. With Cognitive Theories developed after the Behavioral Learning Approach, it is seen that the students are more active in the learning process, they can learn more easily and how they can develop more positive attitudes in the learning process and how the competencies of teachers can be structured more effectively.

Studies conducted by different researchers have concluded that entrepreneurial behavior requires the ability to communicate effectively with others. The ability to interact with other people depends on a high level of emotional intelligence and is important for the ability to take advantage of opportunities and innovations (Chell& Baines, 2000; Duchseneau and Gartner, 1990; Rauch and Frese, 2007). Zampetakis et al. (2009) stated that emotional intelligence affects entrepreneurship behavior in two ways. First, individuals with a high level of emotional intelligence are more resistant to stress through self-efficacy. Second, those with a high level of emotional intelligence are proactive individuals, and this is possible

through more creative incentives that allow them to enter entrepreneurial behavior.

The characteristics of social entrepreneur teachers can be listed as; self-motivation, determination, ambition, charisma, leadership, risk taking, transferring and adopting their visions, inspiration, use of resources at high levels (Shaw & Carter, 2007), being open to extravagance and experience (Akar and Aydin, 2015). Empathy and high levels of motivation are necessary features for a social entrepreneur (Pearce, 2003). These characteristics are reminiscent of the perception of emotional intelligence and self-efficacy.

It is seen that determining the relationship between the entrepreneurial characteristics and self-efficacy levels of the teacher trainees in terms of strength and direction is of great importance in terms of increasing the success of teacher's education. This study was carried out to determine the relationships and differences between teacher self-efficacy and teacher entrepreneurship characteristics. Based on the results of the study, it will be possible to make suggestions for adding and organizing to the training formation of the teachers.

Methodology

In the research, cross-sectional screening method was used. Screening method is a scientific research method in order to understand the specific characteristics of a universe. It is essential to make generalization in screening researches. Since it is necessary to obtain a lot of information about him in order to describe any phenomenon; screening research is usually carried out on a large amount of data (Özdemir, 2015). In addition, the probable relational and differencial patterns between the fundamental variables (entrepreneuership and self-efficacy) of the research have been examined by using statistical parametric tests.

Data Collection Tools

Two different scales were used to collect data on teacher self-efficacy and entrepreneurship variables. Yılmaz and Sünbül's (2009) Entrepreneurship Scale for University Students were used for entrepreneuership variable as

data collection tools for teachers candidates. Teacher Self-Efficacy Scale which developed by Tschannen-Moran and Woolfolk Hoy in 2001; adapted to Turkish by Çapa, Çakıroğlu and Sarıkaya (2005) was used as a data collection tool for teacher self-efficacy variable. In addition, an information form was used to question the demographic characteristics, the faculties and departments of teacher candidates.

Sample of the Research

The data collected by the scales applied to 332 teacher candidates who were studying at the Gaziantep Faculty of Education and the Nizip Faculty of Education, two different faculties of education affiliated to the University of Gaziantep, were first checked for assumptions required by parametric statistical tests. As a result of the normality test performed, 3 questionnaires which constitute missing values were removed from the data set, and the data set from the remaining 329 samples were found to be in accordance with the parametric tests. 231 of the teacher candidates were females and the 98 are males. They are the students of six different departments such as Psychological Counseling, School, Social, Mathematics, Turkish and English teaching in their faculties.

Data Analysis Methods

Kolmogorov-Smirnov test was used to determine the distribution structure of data collected. For understanding the relationship patterns between variables of research; correlation analysis, t-test, one-way analysis of variance and Scheffe analysis methods were used.

Findings

As was mentioned previously, this study aims at exploring the relationships and differences among teacher candidates concerning Teacher Self Efficacy and Entrepreneurship. To this end, two different scales were used to gather data for each of the dependent variables. Before continuing with the analysis of the data, the data were first checked for the assumptions required by parametric statistical techniques.

As a rule of thumb, to perform parametrical tests, first and foremost, the data need to be normally distributed (Field, 2009). The data collected for this study were processed through tests of normality. At the first attempt, the calculations yielded 3 outliers and they were removed from the dataset. Thus, the sample size that was 332 at the beginning reduced to 329 after the outliers were removed from the sample.

After the removal of the outliers, the dataset was processed for normality. A Kolmogorov-Smirnov test was used to test for normality and related results are presented in Table 1.

Table 1. Kolmogorov-Smirnov test results for Teacher Self Efficacy and Entrepreneurship dataset

Scale	**Kolmogorov-Smirnov**		
	Statistic	df	p
Entrepreneurship	,053	329	,053
Teacher Self Efficacy	,044	329	,200

As can be observed from the above table, the results of the normality test indicate that the datasets for both scales are normally distributed for Entrepreneurship [D (329)= ,053, p >,05] and for Teacher Self Efficacy [D (329) = ,044, p > ,05].

In order to confirm the normality of the dataset, the following histograms can be checked. The first histogram represents the Entrepreneurship dataset and the second one represents the Teacher Self Efficacy dataset.

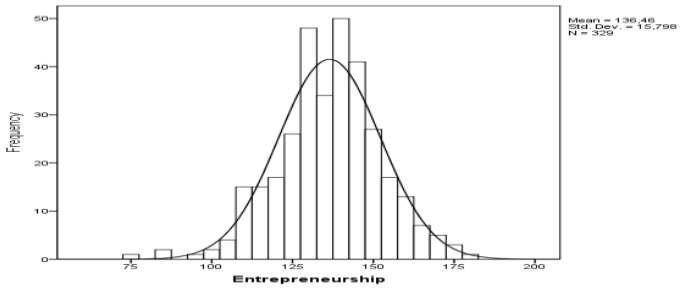

Figure 1. Histogram for the Entrepreneurship data

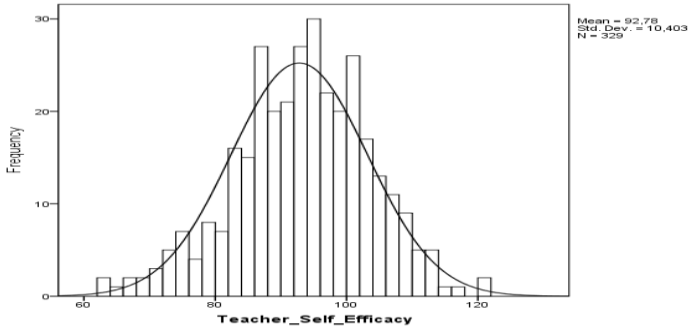

Figure 2. Histogram for the Teacher Self Efficacy data

In the figures above, the data distributions for both Entrepreneurship and Teacher Self Efficacy are displayed with a normal curve line. As can be observed from the two figures above, the data distributions for both sets are in line with the normal distribution curve, which means that the dataset can be used to carry out parametric tests.

The first research question that the current study is trying to deal with is whether there is a relationship between Entrepreneurship and Teacher Self Efficacy levels of teacher candidates? To answer this question, the correlation between the two scales were calculated and the results are presented in Table 2.

Table 2. Relationship between Entrepreneurship and Teacher Self Efficacy levels of teacher candidates

Scales	1	2
1) Entrepreneurship	-	
2) Teacher Self Efficacy	,629*	-

* p< ,01

In the table above, a correlational matrix that shows the relationship between the two dependent variables. It is clear from the table that there is a statistically significant relationship between Entrepreneurship and Teacher Self Efficacy levels (r=,629; N= 329; p= ,000). The correlation between the two dependent variables can be confirmed with a scatter plot below.

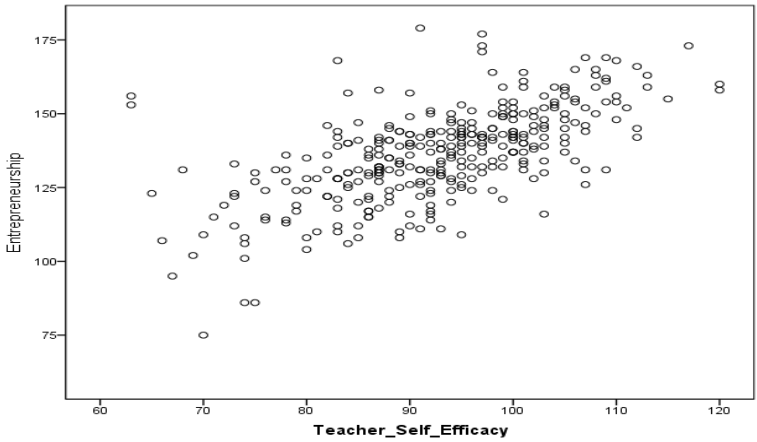

Figure 3. Scatter plot showing the positive relationship between Entrepreneurship and Teacher Self Efficacy scores of teacher candidates

For the second research question that tries to find out whether there is a statistically significant difference between teacher candidates at Nizip Faculty of Education and Gaziantep Faculty of Education in terms of Entrepreneurship levels, a t-test was performed, and the related results are given in the following table.

Table 3. T-test results showing whether Entrepreneurship scale scores show a statistically significant difference depending on the faculty

					t test		
Groups	*N*	$\overline{X}$	*sd*	*SEM*	*t*	*df*	*p*
NFE	69	140,84	14,206	1,710	2,615	327	,009
GFE	260	135,30	16,019	,993			

In Table 3, independent samples t-test results showing whether Entrepreneurship scale scores show statistically significant differences depending on the faculty that the teacher candidates attend to can be analyzed. It is clear from the table that there is a significant difference between the scores of teacher candidates at Nizip Faculty of Education (NFE) ($\overline{X}$ = 140,84, sd = 14,206) and the ones at Gaziantep Faculty of Education (GFE) ($\overline{X}$ = 135,30, sd = 16,019); t(327)= 2,615, p= ,009. The null hypothesis stating

that there is statistically no significant difference between the two groups' mean scores in terms of Entrepreneurship is rejected.

The third research question concerns the difference between teacher candidates at Nizip Faculty of education and Gaziantep Faculty of Education in terms of Teacher Self Efficacy levels. As in the first research question, as there are two independent groups, n independent t-test was performed and the results are provided in the following table.

Table 4. T-test results showing whether Teacher Self Efficacy scale scores show a statistically significant difference depending on the faculty

					t test		
Groups	*N*	$\overline{X}$	*sd*	*SEM*	*t*	*df*	*p*
NFE	69	94,99	10,554	1,271	1,986	327	,048
GFE	260	92,20	10,304	,639			

In the above table, t-test results along with the mean scores, standard deviation and standard error means are given. It can be understood from Table 4 that there is a significant difference between the scores of teacher candidates at Nizip Faculty of Education (NFE) ($\overline{X}$ = 94,99, sd = 10,554) and those at Gaziantep Faculty of Education (GFE) ($\overline{X}$ = 92,20, sd = 10,304); t (327) = 1,986, p= ,048. Therefore, the null hypothesis stating that there is statistically no significant difference between the two groups' mean scores in terms of Teacher Self Efficacy is rejected.

The next research question is related to the gender preferences concerning Entrepreneurship. The research question is: Is there a statistically significant difference between male and female teacher candidates in terms of Entrepreneurship levels? The Entrepreneurship scale scores of the two groups, female and male teacher candidates, were compared through a t-test and the related results are presented in the following table.

Table 5. T-test results showing whether Entrepreneurship scale scores show a statistically significant difference depending on the gender

					t test		
Groups	*N*	$\overline{X}$	*sd*	*SEM*	*t*	*df*	*p*
Female	231	135,13	16,221	1,067	-2,351	327	,019
Male	98	139,58	14,350	1,450			

In Table 5, the mean scores, standard deviation and standard error means and t-test results are given. It is clear from the table that there is a significant difference between the scores of female teacher candidates ($\overline{X}$ = 135,13, sd = 16,221) and male teacher candidates ($\overline{X}$ = 135,58, sd = 14,350); t (327) = -2,351, p= ,019. Thus, the null hypothesis stating that there is statistically no significant difference between female and male teacher candidates' mean scores concerning Entrepreneurship is rejected.

Within the scope of the current study, the fifth research question tries to determine if there is a statistically significant difference between male and female teacher candidates in terms of Teacher Self Efficacy levels. To this end, a t-test was conducted and the related results are displayed in the following table.

Table 6. T-test results showing whether Teacher Self Efficacy scale scores show a statistically significant difference depending on the gender

					t test		
Groups	*N*	$\overline{X}$	*sd*	*SEM*	*t*	*df*	*p*
Female	231	92,94	10,305	,678	,4	3	,68
Male	98	92,43	10,675	1,078	03	27	7

The mean scores, standard deviation and standard error means and t-test results can be analyzed in the table above. One can interpret from the table that there isn't a significant difference between the scores of female teacher candidates ($\overline{X}$ = 92,94, sd = 10,305) and male teacher candidates ($\overline{X}$ = 92,43, sd = 10,675); t (327) = ,327, p= ,687. Therefore, the null hypothesis stating that there is statistically no significant difference between female and male teacher candidates' mean scores concerning Teacher Self Efficacy is accepted.

The next research question tries to find out whether there is a statistically significant difference among teacher candidates at different departments in terms of Entrepreneurship levels. In the education faculties in which this study was carried out, there are basically six different departments as Psychological Counseling, School, Social Sciences, Mathematics Turkish Language and English Language. Therefore, in order to get an answer to this research question, since there are six different groups, a parametric test, one-way ANOVA was conducted and the related results

are presented below. The first results are related to group means and standard deviation.

Table 7. Group means and standard deviations concerning Entrepreneurship scale

Group	*N*	$\bar{x}$	sd
Psychological Counseling	39	130,36	20,079
School	117	139,61	15,217
Social	28	142,21	10,584
Mathematics	59	130,44	17,186
Turkish	67	136,81	12,540
English	19	138,58	13,692
Total	329	136,46	15,798

It is clear from Table 7 that the lowest mean score belongs to the Psychological Counseling group ($\bar{x}$ = 130,36) while the highest score belongs to the School teacher candidates ($\bar{x}$ = 139,61). In addition to this, the Psychological counseling group actually has the highest standard deviation (sd = 20,079). The one-way ANOVA results which are based on these means and standard deviations are presented in the following table.

Table 8. One-way ANOVA results comparing six groups in terms of the Entrepreneurship scale

	Sum of squares	df	Mean square	F	p
Between groups	5768,441	5	1153,688	4,897	,000
Within groups	76089,255	323	235,570		
Total	81857,696	328			

According to the data presented in Table 8, there is a statistically significant effect of the department on Entrepreneurship at the p<.01 level for the six departments [F(5, 323) = 4,897, p = ,000]. However, this table alone cannot help us to see which group means actually differ significantly. Therefore, a post-hoc Scheffe test was conducted to see the groups' means differences and the results are provided in the following table.

Table 9. Scheffe test results to determine which group means differ significantly in terms of the Entrepreneurship scale

Groups (i)	**Groups (j)**	$\bar{x}_i - \bar{x}_j$	*SEM*	*p*
Psy. Counseling	School	-9,248	2,838	,062
	Social	-11,855	3,802	,087
	Mathematics	-,082	3,167	1,000
	Turkish	-6,447	3,091	,502
	English	-8,220	4,294	,599
School	Psy. Counseling	9,248	2,838	,062
	Social	-2,607	3,229	,985
	Mathematics	9,166*	2,451	,017
	Turkish	2,801	2,351	,922
	English	1,028	3,796	1,000
Social	Psy. Counseling	11,855	3,802	,087
	School	2,607	3,229	,985
	Mathematics	11,774	3,522	,051
	Turkish	5,408	3,454	,783
	English	3,635	4,562	,986
Mathematics	Psy. Counseling	,082	3,167	1,000
	School	-9,166*	2,451	,017
	Social	-11,774	3,522	,051
	Turkish	-6,365	2,740	,372
	English	-8,138	4,049	,545
Turkish	Psy. Counseling	6,447	3,091	,502
	School	-2,801	2,351	,922
	Social	-5,408	3,454	,783
	Mathematics	6,365	2,740	,372
	English	-1,773	3,989	,999
English	Psy. Counseling	8,220	4,294	,599
	School	-1,028	3,796	1,000
	Social	-3,635	4,562	,986
	Mathematics	8,138	4,049	,545
	Turkish	1,773	3,989	,999

As is clear in Table 9, the source of the statistically significant difference actually stems from the means of School and Mathematics teaching departments. The mean difference between the two groups is 9,166 with a standard error mean of 2,451 and p= ,017.

The last research question of the current study tries to determine whether there is a statistically significant difference among teacher candidates at different departments in terms of Teacher Self Efficacy levels. To this end, a one-way ANOVA was conducted and the related results are presented in the following table.

Table 10. Group means and standard deviations concerning Teacher Self Efficacy scale

Group	*N*	$\bar{x}$	sd
Psychological Counseling	39	89,82	10,792
School	117	94,47	10,938
Social	28	97,04	9,123
Mathematics	59	91,10	10,659
Turkish	67	91,07	9,305
English	19	93,47	7,770
Total	329	92,78	10,403

In Table 10 above, group mean scores and standard deviations concerning Teacher Self Efficacy scale are presented. As can be understood from the figures, Social teacher candidates have the highest mean score ($\bar{x}$ = 97,04) with a standard deviation of 9,123 and Psychological Counseling group has the lowest mean score ($\bar{x}$ = 89,82) with a standard deviation of 10,792. One-way ANOVA test results based on these figures are presented in the next table.

Table 11. One-way ANOVA results comparing six groups in terms of the Teacher Efficacy scale

	Sum of squares	df	Mean square	F	p
Between groups	1553,071	5	310,614	2,956	,013
Within groups	33942,607	323	105,085		
Total	35495,678	328			

In Table 11, it can easily be seen that there is a statistically significant effect of the department on Teacher Self Efficacy scores at the p<.01 level for the six departments [F (5, 323) = 2,956, p = ,013]. However, as was mentioned previously, this table alone cannot help us to see which group

means actually differ significantly. For this reason, a Scheffe test was performed to see the group mean differences. The related results are presented in Table X.

Table 12. Scheffe test results to determine which group means differ significantly in terms of the Teacher Efficacy scale

Groups (i)	**Groups (j)**	$\bar{x}_i - \bar{x}_j$	*SEM*	*p*
Psy. Counseling	School	-4,650*	1,895	,015
	Social	-7,215*	2,539	,005
	Mathematics	-1,281	2,116	,545
	Turkish	-1,254	2,065	,544
	English	-3,653	2,868	,204
School	Psy. Counseling	4,650*	1,895	,015
	Social	-2,566	2,157	,235
	Mathematics	3,368*	1,637	,040
	Turkish	3,395*	1,571	,031
	English	,996	2,536	,695
Social	Psy. Counseling	7,215*	2,539	,005
	School	2,566	2,157	,235
	Mathematics	5,934*	2,352	,012
	Turkish	5,961*	2,307	,010
	English	3,562	3,047	,243
Mathematics	Psy. Counseling	1,281	2,116	,545
	School	-3,368*	1,637	,040
	Social	-5,934*	2,352	,012
	Turkish	,027	1,830	,988
	English	-2,372	2,704	,381
Turkish	Psy. Counseling	1,254	2,065	,544
	School	-3,395*	1,571	,031
	Social	-5,961*	2,307	,010
	Mathematics	-,027	1,830	,988
	English	-2,399	2,664	,369
English	Psy. Counseling	3,653	2,868	,204
	School	-,996	2,536	,695
	Social	-3,562	3,047	,243
	Mathematics	2,372	2,704	,381
	Turkish	2,399	2,664	,369

The results of the Scheffe post-hoc test reveals the sources of the mean differences among the groups. According to the results presented in Table 12, Psychological Counseling group differ significantly from the School and Social teacher candidates group (p = ,15 and p = ,05 respectively).

School teacher candidates' mean scores differ significantly from Psychological Counseling (p = ,015), Mathematics (p =,040), and Turkish teacher candidates' mean scores (p = ,031). Social teacher candidates' mean scores differ from Psychological Counseling (p = ,005), Mathematics (p= ,012) and Turkish teacher candidates (p = ,010). Mathematics teacher candidates' mean scores differ significantly from School (p = ,040), and Social teacher candidates (p = ,012). The last group, Turkish teacher candidates' mean scores differ significantly from School (p = ,031) and Social teacher candidates (p = ,010).

Discussion and Conclusion

In this study, which aims to determine the relationship between teacher candidates' self-efficacy and entrepreneurial characteristics, the scores of teacher candidates in Gaziantep Faculty of Education and Nizip Faculty of Education on self-efficacy scale and entrepreneurship scale were compared according to various variables. Based on the findings of this comparison, the following conclusions are reached:

- It has been determined that there is a positive correlation between teacher candidates' self-efficacy perceptions and entrepreneurship characteristics. This situation can be interpreted that the characteristics that shape the perception of self-efficacy and the factors determining the entrepreneurial characteristics support each other.
- Entrepreneurship scores of teacher candidates in NizipFaculty of Education are significantly higher than those of teacher candidates in Gaziantep Faculty of Education. As a district of Gaziantep, Nizip's social, artistic, scientific and cultural prospects are very limited compared to Gaziantep city center. This situation can be explained by the fact that the teacher candidates studying in Nizip are more in search of their personal development.
- The scores obtained from the self-efficacy scale indicate that the self-efficacy scores of the teacher candidates in Nizip are higher than the teacher candidates in Gaziantep Faculty of Education. This situation can be explained that the disadvantageous conditions mentioned above are directed to the Nizip teacher candidates to devote more time to their academic development.

- It is concluded that female teacher candidates' entrepreneurship scores are higher than male teacher candidates. This result is pleasing considering the disadvantaged position of women by social perception.
- It was concluded that there was no significant difference between the self-efficacy scores of male and female teacher candidates. In this context we can say that the gender is not a determinative variable on the perception of self-efficacy.
- In terms of entrepreneurship scores, Psychological Counseling and Guidance teacher candidates have the lowest points and primary school teacher candidates have the highest points. The fact that the teacher candidates in the field of Psychological Counseling and Guidance have the lowest points in terms of entrepreneurship characteristics can be explained by the fact that the teacher candidates in this field have more employment opportunities than other fields.
- In terms of self-efficacy scores, Psychological Counseling and Guidance teacher candidates have the lowest points, whereas teacher candidates in social studies have the highest score. The fact that teacher candidates of Psychological Counseling and Guidance department have the lowest score in terms of self-efficacy of teaching can be explained by the fact that teachers in this field do not teach any subject area in the classroom.

It is possible to say that the environmental conditions that support entrepreneurship and entrepreneurship activities are affected by a sociological context that includes the social structure, the conditions of this structure and the psychological characteristics of the individual. All these conditions constitute the context that leads to the emergence of the entrepreneurial culture or the inability to emerge from another perspective.

It is a known case that teacher self-efficacy is influenced by all these factors affecting entrepreneurship. As a matter of fact, the results presented above in this study confirm the overlap. In this context, the cooperation between both entrepreneurship and the teaching characteristics of the social structure is a very important finding for the institutions providing education for the entrepreneurship and educating professionals both.

In today's conditions, the economic and social aspects of entrepreneurship are a decisive factor in the welfare levels of societies. Considering the important role of teachers in the education of future generations, the effect of teaching on the level of welfare appears to be an undeniable issue. In this respect, the significant relationship between these two variables should be closely examined by the relevant researchers. The findings provide a basis for future studies on how to present the relationship between entrepreneurship and teacher self-efficacy to the use of relevant stakeholders.

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