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## University Students' Resilience Level: The Effect of Gender and Faculty

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### Abstract

This study aimed at revealing university students' psychological resilience level and its relation with some selected factors (gender and faculty). The participants consisted of 596 university students (216 males, 378 females and 2 no response) selected from various fields in the faculties of Education and Theology. Data was collected through using of "Resiliency Scale" (Gurgan, 2006) with eight sub-scales. Two factor ANOVA was run to examine the effects of gender and faculty on students' resilience level and also sub-scales of resilience. Students' resilience level was higher than average score (M=187, SD=30.57, Range=50-250) Male students showed significantly higher resilience level than did female students [F (1, 590) = 10.053, p<0.05]. Furthermore, the interaction effect of gender and faculty on resilience was also significant [F (1, 590) = 5.98, p<0.05]. Male-female difference was significant for the sub-scales of "Being Powerful" [F (1, 590) = 10.16, p<0.05], "Being Entrepreneur" [F (1, 590) = 16.25, p<0.05], "Foresight" [F (1, 590) = 7.32, p<0.05], "Achieving the goal" [F (1, 590) = 8.07, p<0.05], "Being a leader" [F (1, 590) = 4.71, p<0.05] and "Being a researcher" [F (1, 590) = 6.27, p<0.05] in favor of male students. Faculty differences was only observed to be significant for the sub-scale of "Being a leader" [F (1, 590) = 5.12, p<0.05] in favor of faculty of education. The implications of the study will be given during the presentation.

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### 1. Introduction

Losing any of relatives and loved ones, dismissal from the job, disasters such as earthquake, fire etc. along with terrorist attacks influence the people deeply. Despite to be exposed to such severe conditions, people recovery themselves even if they could not forget these risky situations totally. Psychological resilience is perceived as to

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adaptation process to normal life pace (Tusaie & Dyer, 2004). Masten (2001, as cited in Fine, 1991) defined resilience as the ability to return to the normal life activities successfully after experiencing negative and severe threats. Begun (1993, as cited in Fine, 1991) explain the resilience as the power to overcome hardness, stress and deprivation.

Resilience is perceived as personal characteristics in some studies, but in some others, it is considered as a quality to be learned afterwards and a process established with interaction of environmental factors. The more accepted view is that resilience is not a personal and innate characteristics, but it is a process revealed as a result of interaction of several factors in case of one's experiences in difficulty.

There are several factors that contribute to resilience. The factors are associated with family, school and the environment where the individual live (Garmezy,1983; Rodgers & Rose, 2002).

Resilience is one of the hot topics and is getting more and more attention in the field of psychological nowadays. In the literature, there are several studies that assess resilience level of various subjects in various contexts. Gürkan (2006) assessed the effect of psychological guidance (a program for group guidance resilience training) on resilience of university students. This study showed that resilience could be developed and this development could be sustained. Çakır (2009) worked on migrant Turkish women in England. Most of the studies on resilience were conducted with children confronted with unfavourable situations. Rutter (1987) found that when these children are successful in establishing new links, they start to overcome these unfavourable situations.

The effect of gender on resilience has been assessed in many of the studies, but no consensus was observed among the studies. While female students were observed to have higher resilience in the study of Önder and Gülay (2008), male students to have higher resilience in the studies of Bahadır (2006), Sürücü and Bacanlı (2010). On the other hand, in some others, the relationship between gender and resilience was not observed (Aktay, 2010; Özcan, 2005; Sezgin, 2005).

### *1.1. The purpose of the study*

The purpose of the study was to assess university students' resilience level and to reveal the association of this level with faculty type and gender. Following research questions guided and shaped overall study

RQ1. Is there any significant difference between male and female students with regard to resilience level and its sub-scales?

RQ2. Is there any significant difference between Faculty of Education and Faculty of Theology students with regard to resilience level and its sub-scales?

## **2. Method**

This study was designed using survey technique which is quantitative and descriptive in nature (Metin, 2014). This type of research design helps the researcher access several sample groups (Frankel & Wallen, 2006) and describe these groups of people's tendencies, attitudes, knowledge etc. on certain issues (Kıncal, 2010).

### *2.1. Sample*

Participants of the study consist of 596 (378 females, 216 males, 2 no respond) university students drawn from various field in four universities. Their ages ranged from 18 to 23, mostly between 19 and 22. Of the participants, 443 were from faculty of education, the remaining 153 participants were from faculty of theology. Students selected from each grade levels (preparatory class to senior level) studied the programs of Turkish Language Teaching (n=83), Social Studies Teaching (n=96), Science Education Teaching (n=247), Theology (n=153), and other (n=17).

### *2.2. Data collection instrument*

Developed by Gürkan (2006) for university students, Resiliency Scale with 50 items on a five point Likert type scale was used to collected data. The total score to be obtained from the instrument ranged from 50 to 250. An increase in the score reflects an increase in psychological resilience score.

The instrument consists of eight sub-scales; namely, (1) personal power, (2) initiative, (3) positive outlook, (4) relationships, (5) foresighted, (6) purpose in life, (7) leadership and (8) investigative. Cronbach's alpa reliability coefficient of the whole instrument was calculated with two samples which resulted in alpha scores of .78 and 87.

### 2.3. Data collection and analysis

Data was collected in the class hour based on the volunteer participation in fall semester of 2013-14 academic years. Collected data was entered into SPSS data set and subjected to both descriptive and inferential statistic procedures through using SPSS v. 22.0. In the first stage, data cleaning procedures were employed to clean the data and to make the date ready for inferential statistics. For this reason, missing case analysis and outlier analysis was run. Having cleaned the data, inferential statistics (two-way ANOVA) was undertaken over the data set.

### 3. Results

Descriptive statistic results (# of items, min-max scores, average mean score and standard deviation) are presented in Table 1.

Table 1. Descriptive scores for whole scale and sub-scales

Whole scale / sub-scales	# of item	Min – Max score	Average mean score	Standard Deviation (Ss)
Resilience	50	50 – 250	187.45	30.57
(1) personal power	18	18 – 90	63.29	11.43
(2) initiative	8	8 – 40	29.12	6.01
(3) positive outlook	6	6 – 30	19.28	4.19
(4) relationships	4	4 – 20	15.45	3.51
(5) foresighted	3	3 – 15	10.82	2.48
(6) purpose in life	4	4 – 20	15.68	3.36
(7) leadership	4	4 – 20	18.34	3.94
(8) investigative	2	2 – 10	8.24	1.64

As far as total mean score resilience level was concerned, it was observed that university students' resilience level was above average (M= 187.45, out of total score of 250). 2 (faculty type) X 2 (gender) ANOVA was run to investigate the single effect and interaction effect of faculty and gender.

Table 2. Two-way-ANOVA results for each sub-scale

Sub-scale	Single and interaction effect	Mean Square	F	Significance Level
Resilience (Whole scale)	Faculty	194.641	0.212	0.645
	Gender	9210.647	10.053	0.002
	Faculty X Gender	5478.37	5.98	0.015
Personal Power	Faculty	236.735	1.869	0.172
	Gender	2057.684	16.247	0.0001
	Faculty X Gender	673.58	5.318	0.021

Initiative	Faculty	1.434	0.040	0.841
	Gender	362.622	10.16	0.002
	Faculty X Gender	154.043	4.328	0.038
Positive Outlook	Faculty	61.627	3.513	0.061
	Gender	1.094	0.062	0.803
	Faculty X Gender	20.507	1.169	0.280
Relationships	Faculty	1.788	0.145	0.703
	Gender	2.145	0.174	0.677
	Faculty X Gender	9.29	0.754	0.386
Foresighted	Faculty	0.012	0.002	0.965
	Gender	44.628	7.323	0.007
	Faculty X Gender	40.679	6.675	0.010
Purpose In Life	Faculty	0.796	0.072	0.789
	Gender	89.235	8.074	0.005
	Faculty X Gender	156.625	14.172	0.0001
Leadership	Faculty	79.411	5.211	0.023
	Gender	71.731	4.707	0.030
	Faculty X Gender	13.289	0.872	0.351
Investigative	Faculty	5.019	1.896	0.169
	Gender	16.599	6.269	0.013
	Faculty X Gender	9.852	3.721	0.054

The single effect of faculty type (Education vs. Theology) on resilience level was found to be statistically insignificant [ $F(1, 590) = 0.212, p > 0.05$ ]. On the other hand, the single effect of gender [ $F(1, 590) = 10.053, p < 0.05$ ] and interaction effect of faculty and gender [ $F(1, 590) = 5.98, p < 0.05$ ] on resilience was statistically significant. Male students ( $M = 192.69 \pm 2.41$ ) reported higher resilience level than female ones ( $M = 183.22 \pm 1.76$ ). While male students in faculty of theology had highest resilience level ( $M = 195.65 \pm 4.19$ ), female in the same faculty type had lowest resilience level ( $M = 178.88 \pm 3.01$ ).

University students' score on personal power was observed to be higher than average which means that university students' personal power was higher than average score. The single effect of faculty type on the sub-scale of "Personal Power" was insignificant [ $F(1, 590) = 1.869, p > 0.05$ ]. Male students ( $M = 65.64 \pm 0.89$ ) had more personal power than did female students ( $M = 61.162 \pm 0.66$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 16.247, p < 0.05$ ]. The interaction effect was also significant [ $F(1, 590) = 5.318, p < 0.05$ ]. The male students in the faculty of theology had the highest personal power ( $M = 66.16 \pm 1.56$ ) whereas the female in the same faculty type had the lowest personal power ( $M = 59.12 \pm 1.12$ ).

University students' score on initiative was observed to be higher than average which means that university students showed initiative higher than average. The single effect of faculty type on the sub-scale of "Initiative" was insignificant [ $F(1, 590) = 0.040, p > 0.05$ ]. Male students ( $M = 30.26 \pm 0.47$ ) had more initiative than did female students ( $M = 28.38 \pm 0.35$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 10.16, p < 0.05$ ]. The interaction effect was also significant [ $F(1, 590) = 4.328, p < 0.05$ ]. The male students in the faculty of theology had the highest initiative ( $M = 30.93 \pm 0.83$ ) whereas the female in the same faculty type had the lowest personal power ( $M = 27.83 \pm 0.59$ ).

University students' score on positive outlook was a little bit higher than average score. Neither faculty effect nor gender effect on the sub-scale of "Positive Outlook" was statistically insignificant. Neither interaction effect was.

University students' score on relationships was higher than average which means that university students had relationships higher than average. Neither faculty effect nor gender effect on the sub-scale of "Relationships" was statistically insignificant. Neither interaction effect was.

University students' score on foresighted was a little bit higher than average score. The single effect of faculty type on the sub-scale of "Foresighted" was insignificant [ $F(1, 590) = 0.002, p > 0.05$ ]. Male students ( $M = 11.19 \pm 0.19$ ) had more foresighted than did female students ( $M = 10.54 \pm 0.14$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 7.323, p < 0.05$ ]. The interaction effect was also significant [ $F(1, 590) = 6.675, p < 0.05$ ]. The male students in the faculty of theology had the most foresighted ( $M = 11.51 \pm 0.24$ ) whereas the female in the same faculty type had the lowest foresighted ( $M = 10.22 \pm 0.25$ ).

University students' score on purpose in life was higher than average score. The single effect of faculty type on the sub-scale of "Purpose in Life" was insignificant [ $F(1, 590) = 0.072, p > 0.05$ ]. Male students ( $M = 16.22 \pm 0.26$ ) had more purpose in life than did female students ( $M = 15.29 \pm 0.19$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 9.079, p < 0.05$ ]. The interaction effect was also significant [ $F(1, 590) = 14.172, p < 0.05$ ]. The male students in the faculty of theology had the most purpose in life ( $M = 16.88 \pm 0.46$ ) whereas the female in the same faculty type had the lowest purpose in life ( $M = 14.72 \pm 0.33$ ).

University students' score on leadership was higher than average score and approaching to the max score. The students in faculty of education ( $M = 18.64 \pm 0.19$ ) had higher leadership score than those in faculty of theology ( $M = 17.77 \pm 0.33$ ). The single effect of faculty type on the sub-scale of "Leadership" was significant [ $F(1, 590) = 5.211, p < 0.05$ ]. Male students ( $M = 18.62 \pm 0.31$ ) had more leadership than did female students ( $M = 17.79 \pm 0.23$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 4.707, p < 0.05$ ]. The interaction effect was not significant [ $F(1, 590) = 0.872, p > 0.05$ ].

University students' score on investigative was higher than average score. The single effect of faculty type on the sub-scale of "Investigative" was insignificant [ $F(1, 590) = 0.1896, p > 0.05$ ]. The interaction effect of faculty type and gender was also insignificant [ $F(1, 590) = 3.721, p > 0.05$ ]. Male students ( $M = 8.42 \pm 0.13$ ) were more investigative than were female students ( $M = 8.015 \pm 0.09$ ), and the difference between male and female students was statistically significant [ $F(1, 590) = 6.269, p < 0.05$ ].

#### 4. Conclusion and Discussion

This study was undertaken with 596 university students studying in two different faculties (Education vs. Theology). Resiliency scale was administrated to the students to examine university students' resilience level and also to assess the effects of gender and faculty type on resilience level. In general, it was found that the effect of faculty type on resilience was not significant. But, faculty affect was only significant for the sub-scale of leadership in favour of the students in the faculty of education. On the other hand, the effect of gender on resilience was statistically significant in favour of male students. This finding is in line with the findings of Bahadır (2006), Sürücü and Bacanlı (2010). Gender difference was also significant for the sub-scales of personal power, initiative, foresighted, purpose in life, leadership and investigative. In all dimensions, the difference was in favour of male students. This refers that male students demonstrate higher resilience in case of difficulty and hardship when compared with female students. One of the reasons of these findings could be related to the effect of societal gender. Turkish society is man dominated society. When compared with men, women are supposed to be more responsible in several areas (e.g. duties at home, taking care of children, honor defence). The other reason could be that women are generally more emotional compared with the man so that they could be affected more deeply after experiencing traumatic events.

Especially for women and female students, training programs that contribute to the development of resilience level can be planned and implemented in universities. Psychological services can be disseminated at universities and made to be easily accessible for the students.

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