

## Loneliness, Hopelessness, Anxiety and Self Compassion of Medical Students: Gazi Example

Tıp Öğrencilerinin Yalnızlık, Umutsuzluk, Anksiyete ve Özanelayışları: Gazi Örneđi

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### ABSTRACT

**Objective:** Describing the preclinical medical students' loneliness, state and trait anxiety and hopelessness levels and comparing them with self-compassion levels were the aims of this study.

**Methods:** On voluntary basis an anonymous questionnaire consisting of UCLA Loneliness Scale, State-Trait Anxiety Inventory, Beck Hopelessness Scale and Self Compassion Scale, as well as socio demographic questions, was administered to every one out of five preclinical-year students (n=935) at Gazi University School of Medicine.

**Results:** Approximately half of (54.2%) the students were female and the mean age of the sample was

19.4±1.1 years (range: 17-25 years). The 34.7 % of the sampled students were living with their family. Loneliness, trait anxiety and the hopelessness levels of the students who were not satisfied with their career selection were significantly higher than chance (p<0.05). While loneliness, state and trait anxiety and hopelessness scores were in a positive correlation with each other, self compassion was in a negative correlation with state anxiety.

**Conclusion:** Self compassion can be described as coping with the stressors at various stages of life. Therefore, medical profession should begin with fostering self-compassion before the compassion toward others.

**Key Words:** Loneliness, hopelessness, anxiety, self-compassion, medical education

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### ÖZET

**Amaç:** Preklinik dönemdeki öğrencilerin yalnızlık, durumluluk ve süreklilik anksiyetesi ve ümitsizlik düzeylerini tanımlamak ve bunları özanelayış seviyeleri ile karşılaştırmak bu çalışmada amaçlanmıştır.

**Yöntemler:** Gönüllülüđe dayalı olarak sosyo demografik soruların yanı sıra UCLA Yalnızlık Ölçeđi, Durumluk-Süreklilik Kaygı Envanteri, Beck Umutsuzluk Ölçeđi ve Özanelayış Ölçeđinden oluşan bir anonim anket Gazi Üniversitesi Tıp Fakültesinin her beş preklinik öğrencisinden birine (n=935) uygulanmıştır.

**Bulgular:** Öğrencilerin yaklaşık yarısı (% 54.2) kadındır ve yaş ortalamaları 19.4 ± 1.1 yıldır (aralık: 17-25 yaş), öğrencilerin% 34.7 aileleriyle birlikte yaşamaktadır. Kariyer seçiminden memnun olmayan öğrencilerin yalnızlık, sürekli kaygı ve umutsuzluk düzeyleri anlamlı derecede yüksekti (p <0.05). Yalnızlık, durumsal ve sürekli kaygı ve umutsuzluk puanları birbirleri ile pozitif bir korelasyonda iken, özanelayış ile durumsal anksiyete arasında negatif korelasyon vardı.

**Sonuç:** Başkalarına anlayıştan önce özanelayış tıp mesleğinin çeşitli aşamalarında stresle başa çıkma gibi görünüyor.

**Anahtar Sözcükler:** Yalnızlık, umutsuzluk, anksiyete, özanelayış, tıp eğitimi

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**INTRODUCTION**

It is known that medical education attracts thoughtful and compassionate volunteers but in the process changes and shapes these students to become relatively less empathic and less sensitive due to various reasons (1-4). Because being a good doctor means being kind, considerate and an honorable professional practitioner, from time to time medical profession needs to go back to its roots and remind doctors of the profession's humanistic values (5,6). Starting from the first years of medical education, it becomes very stressful for medical students and physicians to deal with the death and the vulnerability of human beings, to take the responsibility of these vulnerable people while trying to protect their own psychological wellbeing (7-12). Loneliness, hopelessness, depression and anxiety are the known results of the internal conflicts that physicians experience. Feeling lonely is universal and leads to anxiety, anger, pessimism, health problems, alcohol or drug abuse, higher school dropout rates and poor academic performance in medical students and physicians (13-20).

Although hope is a positive emotional state, conversely, hopelessness means negative expectancies and beliefs inhibiting people's ability to generate adaptive expectations and solutions to problems (15, 21-23). Anxiety is a widely documented, studied and discussed state which is at the core of all personality theories. Anxiety has both positive and negative effects on human psychology, functioning to alarm people for danger, and sometimes, prevent them from thinking carefully and making right decisions (24).

Self-compassion is defined as being aware of one's own grief and having a nonjudgmental understanding of one's own mistakes (25). After experiencing negative emotions such as grief, sadness, burnout and failure one should find ways to cope with these negative emotions through processes like self-compassion which enhances positive thoughts and lessens negative ones, helping live life without any psychological damage (25, 26). From this point of view, self-compassion is a type of coping strategy used to deal with negative life events, which can protect people from the negative impacts of various situations, stressors, challenges, and fears of failure (25, 27).

In this study we aim to determine loneliness, hopelessness, anxiety and self-compassion scores and the correlations among them in preclinical medical students at Gazi Medical School.

**METHODS**

*Participants*

An anonymous, voluntary questionnaire consisting of socio demographic questions, UCLA Loneliness Scale (UCLA-LS), State-Trait Anxiety Inventory (STAI-I-II), Beck Hopelessness Scale (BHS) and Self Compassion Scale (SCS) was administered to every one out of five preclinical year students (n=935) of Gazi Medical School in 2011 with the permission of the faculty administration.

*Scales*

University of California Los Angeles Loneliness Scale (UCLA-LS) is a 20-item Likert scale to measure general loneliness levels of participants. Ten items of the scale are negative and the total score ranges from 20 to 80 points. The scale is translated and validated by Demir to Turkish (28, 29). The State-Trait Anxiety Inventory (STAI-I, STAI-II) is also a self-report, four-point Likert scale which consists of two subscales: state anxiety and trait anxiety. The scale's first 20 items measure state anxiety and 10 items of this part are reverse coded. The next 20 items measure trait anxiety and 7 of those items are reverse coded. On both subscales the total score ranges from 20 to 80 points. The validity and the reliability of the scale in Turkish was established by Öner et al. (30, 31).

Beck Hopelessness Scale (BHS) is a 20-item scale designed by Beck and was translated by Seber et al. to Turkish to measure the negative expectations of adults about themselves and their future life. The total score ranges from 0 to 20 with higher scores indicating increased levels of hopelessness(32, 33). Self Compassion Scale (SCS) is a 26-item scale developed by Neff. The Turkish translation of the scale contains 24 items, 11 of which are reverse coded (25, 34).

*Statistical Analyses*

In statistical analyses via SPSS 16.0, numbers and percentages for categorical variables and means and standard deviations for continuous variables were calculated. The association of the dependent variables (UCLA-LS, STAI-I, STAI-II, BHS and SCS) with the independent variables was also determined. If normality and homogeneity of variance assumptions were satisfied Student t-test, otherwise the Mann-Whitney U-test was applied to the data. Besides, One-way Anova, Kruskal-Wallis tests and correlation analyses were conducted. p values less than 0.05 was accepted as significance.

**RESULTS**

In this study, 225 filled questionnaires were analyzed. The mean age of the students were 19.4±1.1 years (range: 17-25 years). The 54.2% of them were female and the 34.7 % were living with their family. Forty percent of them were partly satisfied with the city life, and the 56.9% of them were satisfied with the career they chose. Table 1 shows the main characteristics of these students.

**Table 1.** Main characteristics of the students participated.

	n	%
<b>Academic year</b>		
Year I	77	34.2
Year II	70	31.1
Year III	78	34.7
<b>Gender</b>		
Female	122	54.2
Male	103	45.8
<b>Residence</b>		
With family	78	34.7
Dormitory	75	33.3
Home with friends	60	26.7
Other	12	5.3
<b>Economic status</b>		
Good	75	33.3
Middle	141	62.7
Bad	9	4.0
<b>Satisfaction with the city</b>		
Satisfied	128	56.9
Partly satisfied	89	39.6
Not satisfied	8	3.6
<b>Before career selection Information about medical education</b>		
Yes	168	74.7
No	57	25.3
<b>Before career selection Information about working conditions</b>		
Yes	157	69.8
No	68	30.2
<b>Satisfaction with the career selection</b>		
Satisfied	128	56.9
Partly satisfied	89	39.6
Not satisfied	8	3.6
<b>If you have a second chance</b>		
Again medical career	144	64.0
Never medical career	16	7.1
Not sure	65	28.9
<b>TOTAL</b>	<b>225</b>	<b>100.0</b>

The UCLA-LS, STAI-I, STAI-II , BHS, and SCS scores of the study group were: 32.8±9.3 (min:19- max:69), 38.1±10.2 (min:19- max:69), 43.5±8.7 (min:20- max:71), 4.9±4.3 (min:0- max:19) and 67.2±12.6 (min:10- max:110), respectively. Trait anxiety scores of the third year students were higher than those of the second year students (p<0.05). The self compassion levels of the students did not differ by academic year, gender, residence etc. (p>0.05). Table 2 presents the scale scores of the study group according to main participant characteristics.

**Table 2.** The scale scores of the students in respect to main characteristics.

	UCLA	STAI-I	STAI-II	HOPELESSNESS	SELF-COMPASSION
<b>Academic year</b>					
<i>Year I (I)</i>	33.4±8.8	36.9±9.2	43.9±8.2	5.3±4.3	69.1±10.6
<i>Year II (II)</i>	31.9±9.3	37.6±10.2	41.4±8.8	4.7±4.5	66.8±12.4
<i>Year III (III)</i>	33.2±9.9	39.6±11.2	45.0±8.7	4.7±4.0	65.6±14.4
<b>p</b>	0.571	0.242	0.039* (II-III)	0.638	0.219
<b>Gender</b>					
<i>Female</i>	31.7±8.5	38.0±11.0	44.1±8.9	4.4±4.1	67.1±12.5
<i>Male</i>	34.2±10.1	38.1±9.3	42.8±8.4	5.5±4.4	67.2±12.8
<b>p</b>	0.039	0.938	0.295	0.070	0.953
<b>Residence</b>					
<i>With family</i>	32.4±9.6	39.1±9.1	44.5±8.3	5.0±4.6	65.2±12.3
<i>Dormitory</i>	33.0±10.0	37.1±10.4	42.7±9.0	5.5±4.2	70.3±12.0
<i>Home with friends</i>	33.1±8.4	38.4±11.1	44.0±8.0	4.0±3.9	66.5±11.4
<i>Other</i>	34.1±8.3	35.5±11.6	39.6±10.8	3.8±3.8	63.7±20.5
<b>p</b>	0.928	0.219	0.502	0.200	0.058
<b>Economic status</b>					
<i>Good</i>	30.9±10.1	37.4±11.1	42.7±9.3	4.2±4.6	69.0±10.9
<i>Middle</i>	33.7±8.7	38.5±9.6	44.0±8.3	5.1±4.1	66.5±13.4
<i>Bad</i>	35.4±10.9	36.7±13.5	41.8±9.1	6.3±4.1	62.6±12.3
<b>P</b>	0.079	0.686	0.474	0.210	0.195

Students who were not satisfied with their city life were more lonely and hopeless and the students who were not satisfied with their career selection were significantly more lonely, anxious and hopeless than the others ( $p < 0.05$ ). In Table 3, the comparisons of the scale scores according to the satisfaction levels of the students regarding their city life and career

decisions as well as the amount of information received about the medical profession before they made their career decisions are presented.

While loneliness, state and trait anxiety and hopelessness had a positive correlation with each other, self compassion had a negative correlation with state anxiety. Table 4 presents correlations of the scales.

**Table 3.** The scale scores of the students in respect to satisfaction and information about city and medical career.

	UCLA	STAI-I	STAI-II	HOPELESSNESS	SELF-COMPASSION
<b>Satisfaction with the city</b>					
<i>Satisfied (I)</i>	30.9±8.5	36.1±10.2	42.7±8.5	4.3±4.3	68.1±12.3
<i>Partly satisfied (II)</i>	33.6±9.0	39.5±10.4	43.7±9.0	4.9±4.0	65.8±13.0
<i>Not satisfied (III)</i>	39.9±12.1	39.9±7.7	47.26.4	8.7±4.6	70.7±11.1
<b>p</b>	0.001* (I-III; II-III)	0.040* (I-II)	0.149	0.001* (I-III; II-III)	0.215
<b>Information about medical education</b>					
<i>Yes</i>	31.9±8.9	36.9±9.8	42.9±8.8	4.3±3.9	67.6±12.1
<i>No</i>	35.7±9.9	41.3±10.8	45.3±8.0	6.5±5.0	65.7±14.1
<b>p</b>	0.011	0.006	0.071	0.005	0.319
<b>Information about working conditions</b>					
<i>Yes</i>	32.1±8.7	37.7±10.0	43.3±8.7	4.6±4.1	67.3±12.9
<i>No</i>	34.4±10.5	38.6±10.6	43.6±8.5	5.1±4.2	67.6±11.7
<b>p</b>	0.110	0.558	0.820	0.360	0.851
<b>Satisfaction with the career selection</b>					
<i>Satisfied(I)</i>	30.9±8.5	36.8±10.3	41.9±8.7	3.8±3.4	67.6±13.6
<i>Partly satisfied (II)</i>	35.2±9.4	39.6±10.0	45.3±7.8	6.2±4.8	66.1±11.4
<i>Not satisfied (III)</i>	38.1±12.9	40.1±10.7	47.5±11.9	7.1±5.1	71.9±8.1
<b>p</b>	0.001* (I-III)	0.126	0.006* (I-III)	<0.001* (I-III)	0.388
<b>If you have a second chance</b>					
<i>Again medical career (I)</i>	31.6±9.0	36.9±10.0	42.3±8.4	4.1±3.7	67.4±12.8
<i>Never medical career (II)</i>	35.6±11.9	39.9±10.2	48.9±10.0	6.7±4.4	70.3±14.1
<i>Not sure (III)</i>	35.2±8.8	40.1±10.7	44.8±8.3	6.1±5.0	65.8±11.9
<b>P</b>	0.016* (I-III)	0.086	0.005* (I-II)	0.002* (I-III)	0.415

**Table 4.** Correlation between self-compassion and loneliness, hopelessness and state-trait anxiety.

		UCLA	STAI-I	STAI-II	HOPELESSNESS	SELF-COMPASSION
<b>UCLA</b>	r	1	0.46	0.51	0.40	0.03
	p	---	<0.001	<0.001	<0.001	0.65
<b>STAI-I</b>	r	0.46	1	0.67	0.43	-0.15
	p	<0.001	---	<0.001	<0.001	0.02
<b>STAI-II</b>	r	0.51	0.67	1	0.46	-0.01
	p	<0.001	<0.001	---	<0.001	0.93
<b>HOPELESSNESS</b>	r	0.40	0.43	0.46	1	-0.06
	p	<0.001	<0.001	<0.001	---	0.42
<b>SELF-COMPASSION</b>	r	0.03	-0.15	-0.01	-0.06	1
	p	0.646	0.02	0.93	0.42	---

r: correlation coefficient

## DISCUSSION

This study is aimed to determine the medical students' self compassion as a coping strategy in managing disturbing factors in their life such as loneliness, hopelessness and anxiety. It seems that self compassion levels of the students were not changing according to the number of academic years completed, gender or residence. However, their state anxiety was correlated negatively with their self compassion levels. Making informed decisions about career selection and being satisfied with these decisions and with the city environment in which they live also seem to be important factors in determining their loneliness, hopelessness and anxiety.

According to Coulehan "young physicians experience internal conflict between humanistic values and today's culture of medicine which is hostile to traditional qualities as altruism, compassion and integrity" (35). Another author Shapiro points to a need for "developing a tolerance for imperfection in self and others; and the acceptance of shared emotional vulnerability and suffering" (12). It is known that higher levels of self-compassion causes an increase in happiness and optimism and a decrease in anxiety, depression and the fear of failure which may be a good solution for the conflicts that physicians are experiencing regarding their relationships with their patients (4, 12, 26, 27, 34, 36-38). Self-compassion gives one a chance to accept responsibility for negative events and gives energy to find ways to cope with the situation, which are very important points to consider for a physician (27). Today it is obvious that not just academic grades but also the personality and the coping strategies of the physicians and medical students are important for their success, satisfaction with, and quality of, life (20,39,40).

This study also has limitations. It has a cross-sectional design and uses self-reported questionnaires and self-selected participants. We know that these results cannot be generalized to the medical students of all other faculties. However, we believe that new studies about loneliness, hopelessness, anxiety and self-compassion are needed and that this study of ours will pave the way for other related studies in the future.

## CONCLUSION

Psychological well-being of physicians needs a social and psychological support. We should teach them how to cope with the stressors at every stage of their career. Self compassion may be one of the ways of coping with difficult situations and living a happier, more satisfied and more hopeful life.

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## Conflict of Interest

No conflict of interest was declared by the authors.

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