# MERAM TIP FAKÜLTESİ ÖĞRENCİLERİNİN ÖZANLAYIŞLARINA KARŞIN YALNIZLIK, UMUTSUZLUK VE ANKSİYETE DÜZEYLERİ

# Medical Students' Loneliness, Hopelessness and Anxiety Against Their Self Compassion in Meram Faculty of Medicine

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#### Anahtar Sözcükler:

Yalnızlık, Umutsuzluk, Anksiyete, Özanlayış, Tıp eğitimi

#### Keywords:

Loneliness, Hopelessness, Anxiety, Self-compassion, Medical education

#### ÖZET:

Giriş, Amaç: "Anlama"nın anlamlarından biri, hata yapan insanları yargılamamak, insanların hatalar yapabileceklerini kabul etmektir. Özanlayış da benzer şekilde kişinin kendini hatalarıyla kabuludür. Anlayış ve Özanlayış yalnızlık, kaygı ve umutsuzluk durumlarından etkilenebilmektedir. Hekimlerin ironisi şifacı olmak iddiası ile ölümü durdurmanın mümkün olmadığını bilmenin arasındaki noktadır. Bu ana çatışma tıp eğitiminin başlangıcından itibaren hekimleri strese sokar ve özanlayış bu noktada hekimin duygusal bütünlüğünü koruyabilmesi için

çok önemlidir. Bu çalışmanın amacı, klinik öncesi tıp öğrencilerinin yalnızlık, durumluk ve sürekli kaygı ve umutsuzluk düzeylerini tanımlamak ve bunları özanlayış ile ilişkisini analiz etmektir.

**Yöntem:** Bu korelasyon araştırmasında, sosyo-demografik bilgi soruları, UCLA Yalnızlık Ölçeği, Durumluk-Sürekli Kaygı Envanteri, Beck Umutsuzluk Ölçeği ve Öz Anlayış Ölçeğini içeren anket preklinik dönemdeki toplam 582 öğrenciden en az üçte birine ulaşılması hedeflenerek tüm öğrencilere gönüllülüğe dayalı olarak uygulanmıştır.

Bulgular: Öğrencilerin yaş ortalaması (range: 17-25 yas)  $19.80 \pm 1.24 \text{ yıldı ve yaklaşık yarısı}$ yurtta (n = 94, %49,0) yaşıyordu. Çalışmadaki öğrencilerin sadece % 15,3'ü (n=29) şehirden ve %3,1'i (n=6) seçtikleri kariyerden memnun değildi. Çalışma grubunun UCLA, STAI - I, STAI - II, Beck Umutsuzluk ve Öz Anlayış puanları sırasıyla, 33,19±9,47, 38,77±9,31, 43,35±8,27, 4,32±3,94 ve 75,47±12,38 olarak belirlendi. Kariyer seçiminden memnun olmayan öğrencilerin yalnızlık, durumluk ve sürekli kaygı ile umutsuzluk ölçekleri puanları anlamlı olarak daha yüksek bulundu (p< 0.05). Yalnızlık, durumluk ve sürekli kaygı ile umutsuzluk pozitif korelasyon içinde iken, öz-anlayış ile diğer hepsi arasında negatif korelasyon vardı.

Sonuç: Öz anlayış tıp mesleğinin çeşitli aşamalarındaki stres faktörlerine karşı başa çıkma aracı olabilir ve başkalarına özellikle de hastalara anlayıştan önce gelir. Kendine yardım etmeden başkalarına yardım iddiası çok gerçekçi değildir.

#### ABSTRACT:

Background, Objective: One of the meanings of "compassion" is having nonjudgmental understanding for people making mistakes. Self compassion is similarly ones accepting of own self with mistakes. Compassion and self compassion can be affected by loneliness, anxiety and hopelessness. The irony of physicians' is at the point of the claim of being a healer and knowing that death can't be stopped. This main conflict puts a physician in stress from the beginning of medical education and self compassion helps them to protect their psychological unity. The aim of this study was to describe loneliness, state-trait anxiety and hopelessness levels of preclinical medical students and analyze the correlation of them with self-compassion.

Subjects, Methods: At least reaching to one

third of 582 medical students in preclinical years aimed. For this correlation study an anonymous questionnaire consisting of socio demographic questions, UCLA Loneliness Scale, State-Trait Anxiety Inventory, Beck Hopelessness Scale and Self Compassion Scale was applied, voluntarily to all students.

Results: The mean age of the students were 19.80±1.24 years (range: 17-25 years) and approximately half of them were living in a dormitory (n=94, 49.0%). Just 15.3% of them (n=29) were not satisfied with the city and just 3.1% of them (n=6) were not satisfied with the career they choose. The UCLA, STAI-I, STAI-II, BECK Hopelessness and Self Compassion Scale scores of the study group were 33.19±9.47, 38.77±9.31. 43.35±8.27. 4.32±3.94 75.47±12.38, respectively. Loneliness, statetrait anxiety and the hopelessness level of the students who weren't satisfied with the career selection were significantly higher (p<0.05). While loneliness, state and trait anxiety and hopelessness were in a positive correlation, selfcompassion was in a negative correlation with all of them.

Conclusion: Self-compassion may be a coping tool against the stressors at various stages of the medical profession and comes before compassion to others, especially patients. Claims about helping others cannot be so realistic without helping own self.

#### INTRODUCTION

"Why were you attracted to the profession of medicine? Have those original attractions and convictions changed?" (1). "Are the humanistic values like compassion-empathy-altruism and kindness make the moral calling of physicians before application to medical school?" (2). Professional values of medicine require that physicians should to put the patients' interests above their self-interest (3). The main question

of our profession to us is about being ready to dedicate ourselves to the others?" (1).

When first year students are asked why they have chosen to make a career in medicine they generally express a desire to help people (4-7). Medical students arrive at our doors as thoughtful, compassionate people (8). But medicine is a living professional tradition and physicians are normal human beings with diverse cultural backgrounds and value systems and unfortunately empathy declines throughout education (9-11). So, medical medical profession requires each generation to have the responsibility to reinvent itself according to the changing circumstances and individuals (12). One element of a good doctor is that of being a kind, considerate and honorable professional practitioner (13). The irony of being a healer and in some cases being not to be able to stop death is the main conflict putting a physician in stress. It is also known that stress, health concerns and emotional problems of a physician begin from the first years of medical education (14-18). One of the reasons of this distress is medicine's high demand of education and health care resulted in physicians who are always trying to be perfect every time, against every situation. But on the other hand physician is not a perfect one as a human. So we need to know what is going on our hearts and minds. Self-knowledge is the basis of personal moral development (4). By all account promoting empathy during medical education is not easy because of the medical students' complex and mostly unresolved emotional responses to the universal human vulnerability to illness, disability and ultimately death (19). Among this unresolved emotional responses there are loneliness, hopelessness depression and anxiety.

Loneliness is a universal experience, is an undesirable condition, and is at the core of emotional states as anxiety, anger, optimism, shyness besides physical health problems, alcohol or drug abuse, higher school dropout

rates and poor academic performance (20-27). Hope which lays at the bottom of the Pandora's Box in Greek mythology is the feeling that what is wanted can be had or what is desired may happen. Hope is the emotional state which promotes the belief in a positive outcome related to events and circumstances in one's life. Hopelessness is a central component of Beck's cognitive theory of depression and is the opposite of hope and means without hope; despairing, not able to learn or act, perform, or work as desired; inadequate for the purpose (22,28,29). Hopelessness has negative expectancies and beliefs about the future that was generated from interpretations of stressful life events (30,31). Hopelessness inhibits the person's ability to generate adaptive beliefs and solutions to problems (22-29).

Anxiety was noted to be at the core construct in all personality theories involving the self-concept which is defined as a trait, a state, a stimulus, a response, a drive, and as a motive (32). There are positive features of anxiety like acting as a warning signal for impending danger or harm or inducing motivation.

The term "self-compassion" is derived from the word compassion which is being aware of the others grief, having a desire to ease their suffering (33). Compassion means having nonjudgmental understanding for people making mistakes. As reported, individuals who experience negative emotions such as grief, sadness, burnout and failure during their life need to relieve calm down and most importantly get over these negative emotions without any damage in order to cope with such negative emotions (33-34). Selfcompassion is recognizing that one's experience is part of the common human experience (34-38). This understanding means transforming negative emotions into positive instead of avoiding them depending on cultural, universal values of justice, equality, independence and (34,35,39-41).Self-compassion tolerance enhances positive thoughts and lessens

negative thoughts (33). From this respect, self-compassion may be a valuable coping strategy for the ones experiencing negative life events (33,38). People who are self-compassionate are less likely to catastrophes negative situations, experience anxiety following a stressor, and avoid challenging tasks for fear of failure (38).

**Aim:** The aim of correlation study was to describe loneliness, state and trait anxiety and hopelessness levels of preclinical medical students and to analyze the correlation of them with their self compassion. In this respect, the following questions were to be answered in this study:

- 1. What are the average scores of loneliness, hopelessness, anxiety and self compassion of medical students in Meram Medical Faculty?
- 2. Are these scores of students different in respect to gender, academic years, residency, economic status, satisfaction with the city and the career and information about medical education and working conditions?
- 3. Do average loneliness, hopelessness and anxiety scores of students correlate in respect to their self compassion levels?

#### **MATERIAL-METHODS**

This is a correlation study. The authors of this manuscript made a similar study in another Medical School in a different city which was published (42). In 2011-2012 academic years with the permission of the faculty an anonymous 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 applied to all preclinical students of Meram Faculty of Medicine, voluntarily, after the approval of the Ethics Committee (28, 33, 35, 43-46). There were 582 students in total and reaching to one third of them was aimed depending on the prevalence's of loneliness, anxiety and depression. The questionnaire applied before the lectures by the first author after explaining the aim of the study and getting their permission orally. Questionnaires distributed after this short explanation and only voluntary ones filled the questionnaires themselves. While the questionnaires with missing answers about the first part were not eliminated, the unfilled Scales were all eliminated.

#### Scales

University of California Los Angeles Loneliness Scale (UCLA-LS): It is a 20-item Likert type scale to measure general loneliness levels of participants (43, 44). It is a self-report four-point Likert type scale developed by Russell et.al (43). The validity and reliability of the scale in Turkey was made by Demir (44). Participants rate each item as "I never feel this way=1", "I rarely feel this way=2"; "I sometimes feel this way=3" and "I often feel this way=4". Ten items are negative and the total score ranges from 20 to 80 points. The internal consistency of the scale was high (coefficient alpha of .94)(43).

The State-Trait Anxiety Inventory (STAI-I, STAI-II): It is a self-report four-point Likert type scale developed by Spielberger et.al (45). The validity and reliability of the scale in Turkey was made by Öner et al (46). The STAI consists of two subscales: state anxiety and trait anxiety. The scale's first 20 items measure state anxiety and 10 items are reverse. The next 20 items measure trait anxiety and 7 items are reverse. In both subscales the total score ranges from 20 to 80 points.

Beck Hopelessness Scale (BHS): It is a 20-item, self-administered rating scale designed by Beck and translated by Seber et. al to measure the negative expectancies of adults concerning themselves and their future life (28-47). The total score ranges from 0 to 20, and the level of hopelessness increases with increasing scores. Self-Compassion Scale (SCS): It is a 26-item scale developed by Neff but Turkish translation of the scale contains 24 items (33, 35). The 11 items of the scale are negative.

#### **Statistical Analyses**

All analyses were performed using SPSS 13.0. Categorical variables were expressed as numbers and percentages and the continuous variables expressed as means with standard deviations. The association of the dependent variables (UCLA-LS, STAI-I, STAI-II, BHS and SCS) with the independent variables was determined. Student t-test if normality and homogeneity of variance assumptions were satisfied, otherwise the Mann-Whitney U-test was applied. One-way Anova, Kruskal-Wallis tests and correlation analyses were made and Pearson correlation coefficient r was used. Statistical significance was set at p values less than 0.05

### RESULTS

There were 216, 194 and 172 students in first second and third years, respectively. According to analyzed 192 fulfilled questionnaires the mean age of the students were 19.80±1.24 years (range: 17-25 years). There were 48 (22.2%), 79 (40.7%) and 65 (37.7%) students representing preclinical years. One fourth of the study group was first year students (n=48, 25.0%). Above the half were male (n=100, 52.9%). The main socio demographic characteristics of students are shown in Table 1.

The Cronbach's alpha was founded as 0.89 for UCLA-LS, 0.87 for STAI-I, 0.83 for STAI-II, 0.83 for BHS, and 0.84 for SCS scales in this study.

The UCLA-LS, STAI-I, STAI-II, BHS, and SCS scores of the study group were: 33.19±9.47 (min:20- max:63), 38.77±9.31 (min:20-max:68), 43.35±8.27 (min:23- max:73), 4.32±3.94 (min:0- max:19; median:3.00) and 75.47±12.38 (min:32- max:106), respectively. State anxiety and hopelessness scores of the second year students, loneliness and the hopelessness scores of the men were higher (p<0.05). There were no significance in between self compassion levels of the students in

respect to academic year, gender, residency etc. (p>0.05). Table 2 presents the scale scores of the study group in respect to main characteristics.

Loneliness, state anxiety and the hopelessness level of the students who were not satisfied with the city, loneliness, state- trait anxiety and the hopelessness level of the students who were not satisfied with the career selection were significantly higher than the others (p<0.05). Table 3 shows the comparison of the scale scores according to satisfaction of the students from the city and the career besides being informed or not about medicine.

While loneliness, state and trait anxiety and hopelessness were in a positive correlation, self compassion was in a negative correlation with all of them. In table 4 correlations of the scales are shown

#### DISCUSSION

This study is among the very few studies about medical students self compassion comparing to loneliness, hopelessness and anxiety. It favors the previous studies showing the connection between well-being and well-seeming. Although there were no significance in between self compassion levels of the students in respect to academic year, gender, residency etc. there were an important negative correlation in between loneliness, hopelessness, anxiety and self-compassion. Satisfaction and informed decision making were also seems important in respect to loneliness, hopelessness and anxiety.

# What does it mean in terms of a doctor and patient perspective?

It was suggested that as a consequence of bioscientific based medical training, biomedical aspects of disease became more prominent than were the psychological aspects of patients (3). Newton et. al.(11) put an emphasis about the hardening of the heart during medical school. The main advices for establishing empathy and humanism are teaching a patient-centered interview and listening patient's concerns

(48). Young physicians claimed to experience internal conflict between humanistic values and dehumanizing features of the health care system because of the today's culture of medicine which is hostile to traditional qualities as altruism, compassion and integrity (3). Shapiro suggests the need for an epistemological paradigm that helps to develop a tolerance for imperfection in self and others; and acceptance of shared emotional vulnerability and suffering for the development of true empathy (19). Higher levels of self-compassion are linked to increased feelings of happiness and optimism, as well as decreased anxiety, depression and fear of failure (34-38). This perspective could open the door between students and their patients making the patient not only the object but the doctors own self (4,11,19,34,36,37). Life events, having interpersonal conflicts at work were identified as risk factors for becoming hopeless that can be seen as a result of one's inability to cope with the high levels of life stress as experiencing negative life events (49). Psychosocial stress may lead to more loneliness and poorer life satisfaction (21,22). Self-compassion may be the basic suggestion for coping with psychosocial stress and loneliness via giving more hope. It was said that people who are more self-compassionate are more willing to accept responsibility for negative events, and they are less likely to use avoidant coping strategies (38). It is an important aspect in a physician's life we should think about

It is known that success in a medical career depends on more personality than academic achievement (50). Besides external pressures like family wishes, desire for being a doctor and expectations from a medical education were founded to have significant effects on anxiety and depression levels of medical students (6,14,15,17,21). In spite of the fact that graduation scores shows medical competence, physicians' satisfaction in medicine, stress and burnout, and quality of life are related to

the psychological characteristics, depression, anxiety and coping styles at admission and during medical education (50,51). As an author noted the doctors dedication to the profession are chancing. Today's physicians noted to have a different view about what the medicine is and what it should be. Medicine seems to be "just a job" now (52). I may be a cultural shift or just a coping strategy. We should carefully analyze the today's professionalism and the results of it. We should note the limitations of this study. cross-sectional design. self-reported questionnaire and voluntary participation may call to bias. Besides, these results cannot be generalized to the medical students of other faculties

#### CONCLUSION

We should decide as a profession to make our profession as a job or an art. Psychological well-being needs social and psychological support. Coping with the stressors at various stages of the medical profession should begin with self compassion before compassion to others. Claims about helping others cannot be so realistic without helping own self. Reflection, structured discussions, case based discussions, films and role playing may be used to teach self compassion. Future research examining relationship among loneliness, hopelessness, anxiety and self-compassion can make our study more clear and comparable.

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## Tables

Table 1. Main socio-demographic characteristics of the students participated.

Socio demographic Characteristics	n	% (valid)
Academic year	48	25.0
Year I	79	41.1
Year II	65	33.0
Year III		
Gender*(missing3)	89	47.1
Female	100	52.9
Male		
Residency		
With family	26	13.5
Dormitory	94	49.0
Home with friends	66	34.4
Other	6	3.1
Economic status*(missing3)		
Good	58	30.7
Middle	118	62.4
Bad	13	6.9
Satisfaction with the city*(missing2)		
Satisfied	63	33.2
Partly satisfied	98	51.6
Not satisfied	29	15.3
Before career selection	133	70.0
Information about medical education *(missing 2)	57	30.0
Yes		
No		
Before career selection	131	70.1
Information about working conditions *(missing 5)	56	29.9
Yes		
No		
Satisfaction with the career selection	122	63.5
Satisfied	64	33.3
Partly satisfied	6	3.1
Not satisfied		
If you have a second chance*(missing 6)	118	63.4
Again medical career	16	8.6
Never medical career	52	28.0
Not sure		
TOTAL	192	100.0

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

Characteristics	UCLA-LS	STAI-I	STAI-II	BHS	SCS
Academic year					
Year I	33.25±8.83	36.06±7.92	42.81±8.56	4.12±3.65	74.43±12.79
Year II	34.53±10.65	41.49±10.1	44.98±8.80	5.12±4.06	73.74±12.72
Year III	32.75±8.46	37.46±8.40	41.76±7.07	3.50±3.86	77.61±11.49
p	0.88	0.00*	0.05	004*	0.17
192	1000000000	(I-II; II-III)	52332.7	(II-III)	
Gender		a postava sidare	1955		
Female	30.80±8.18	38.83±8.44	44.12±8.15	3.55±3.57	74.32±13.71
Male	35.06±10.11	38.53±10.10	42.54±8.37	5.00±4.18	76.79±11.08
p	0.00	0.82	0.19	0.01	0.18
Residency					
With family	31.00±8.29	39.76±8.54	42.80±8.84	3.88±3.85	78.57±15.89
Dormitory	32.81±9.34	38.31±9.23	42.69±7.95	4.34±4.08	75.05±11.73
Home with friends Other	33.96±9.85	39.59±9.58	44.37±8.49	4.16±3.63	74.83±11.94
Out	40.16±10.04	45.50±9.07	44.83±9.19	7.83±4.70	75.83±10.98
pes	0.15	0.16	0.59	0.15	0.59
Economic status			. Comment of the	Distriction of the second	In Section 1
Good	32.30±9.57	38.27±8.63	43.01±8.60	4.50±3.92	76.39±14.05
Middle	33.89±9.29	38.90±9.46	43.44±8.13	4.03±3.61	75.27±11.87
Bad	31.61±11.60	39.53±20.72	44.30±7.64	6.92±6.02	74.00±10.70
pss	0.44	0.87	0.86	0.04*	0.77
	December 1	555578		(middle-bad)	1000000
TOTAL	33.19±9.47	38.77+9.31	43.35+8.27	4.32+3.94	75.47±12.38

\*Shows the factor creating the difference P\*\* One-way Anova

- BHS: Beck Hopelessness Scale
- SCS: Self Compassion Scale:
- P: Statistical significance (0.05)

Home with friends: Student homes

p" Student t test

<sup>-</sup> UCLA-LS: University of California Los Angeles Loneliness Scale

STAI-I: STAI-II: The State-Trait Anxiety Inventory,

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

Satisfaction/ Information	UCLA-LS	STAI-I	STAI-II	BHS	SCS
Satisfaction with the city	900 1900 000 000	on beginning	.00V5K5,0981	(22.4 (23.4 (24.1 )	20,000,000
Satisfied	32.73±9.43	37.38±9.36	43.03±7.83	3.17±3.05	75.52±12.79
Partly satisfied	32.31±8.71	38.29±8.25	43.58±8.14	4.56±3.87	76.06±11.81
Not satisfied	37.79±10.98	43.17±11.66	43.44±10.03	6.20±5.12	73.31±13.17
p**	0.01* (I-III; II-III)	0.01* (I-III; II-III)	0.91	0.00* (I-III)	0.17
Information about medical education	1 52 (10 (10 )			a section of	
Yes	32.51±9.41	38.81±8.93	42.78±8.07	4.28±4.09	76.04±13.06
No	34.89±9.61	38.91±10.17	44.80±8.41	4.50±3.65	74.22±10.86
p***	0.11	0.94	0.12	0.71	0.32
Information about working conditions	-2004 N 700 P		pro described the Arms		171 W MODEL AND THE
Yes	32.33±9.41	37.71±8.86	42.75±8.30	4.14±3.97	76.17±12.80
No	35.58±9.24	40.73±9.64	44.82±7.94	4.64±3.75	73.83±11.14
p***	0.03	0.03	0.11	0.42	0.23
Satisfaction with the career selection			J. 10		
Satisfied	31.62+8.50	37.41±9.39	42.67±8.20	3.50±3.33	76.27±12.39
Partly satisfied	34.71±9.69	40.34±8.61	44.01±8.19	5.39±4.35	74.64±12.59
Not satisfied	49.00±10.03	49.50±5.54	50.83±7.52	9.83±4.26	68.16±7.46
p**	0.00*	0.02*	0.04*	0.00*	0.23
	(I-III; II-III)	(I-III; II-III)	(I-III)	(I-II; I-III; II-III)	
If you have a second					
chance	32.21±9.01	38.08±9.16	42.72±7.94	3.72±3.74	76.29±12.55
Again medical	36.56±12.80	37.87±9.99	44.37±8.80	4.68±4.62	76.56±7.42
career	34.69±9.25	40.76±9.28	44.78±8.89	5.34±4.11	73.88±12.81
Never medical					
career					
Not sure					
p**	0.10	0.20	0.29	0.04* (I-III)	0.47
TOTAL	33.19±9.47	38.77±9.31	43.35±8.27	4.32+3.94	75.47±12.38

Shows the factor creating the difference

- BHS: Beck Hopelessness Scale
- SCS: Self Compassion Scale:
- P: Statistical significance (0.05)

P" One-way Anova

p\*\*\* Student t test UCLA-LS: University of California Los Angeles Loneliness Scale

STAI-I: STAI-II: The State-Trait Anxiety Inventory

Table 4: The correlation between self-compassion and loneliness, hopelessness and state-trait anxiety scores.

SCALES		UCLA	STAI-I	STAI-II	BHS	SCS
UCLA	r		0.445*	0.452*	0.473*	-0.386*
	P		0.000	0.000	0.000	0.000
STAI-I	r	0.445*		0.589*	0.364*	-0.452*
	P	0.000		0.000	0.000	0.000
STAI-II	r	0.452*	0.589*		0.358*	-0.651*
	P	0.000	0.000		0.000	0.000
Hopelessness	r	0.473*	0.364*	0.358*		-0.337*
	p	0.000	0.000	0.000		0.000
Self-Compassion	г	-0.386*	-0.452*	-0.651*	-0.337*	
	P	0.000	0.000	0.000	0.000	

r-Pearson correlation coefficient

<sup>\*</sup>Correlation is significant at the 0.01 level
- UCLA-LS: University of California Los Angeles Loneliness Scale

<sup>-</sup> STAI-I: STAI-II: The State-Trait Anxiety Inventory,

<sup>-</sup> BHS: Beck Hopelessness Scale

SCS: Self Compassion Scale