# Paramedik Son Sınıf Öğrencilerinin Belirsizliğe Tahamülsüzlük ve Öz-Şefkat Düzeylerinin Belirlenmesi

# [Determining the Levels of Intolerance of Uncertainty and Self-Compassion of Paramedic Final Class Students]

<sup>ID</sup>Esra Bekircan<sup>1</sup>; <sup>ID</sup>Galip Usta<sup>1</sup>

<sup>1</sup> Department of Medical Services and Techniques, Tonya Vocational School of Higher Education, Trabzon University, Trabzon, Türkiye

Sorumlu Yazar / Correspondence Address:

Esra Bekircan

Department of Medical Services and Techniques, Tonya Vocational School of Higher Education, Trabzon University, 61500, Tonya, Trabzon, Türkiye

E-mail: esrasancar1991@hotmail.com

Geliş tarihi / Received: 24.07.2023

Revizyon tarihi / Revised: 22.08.2023

Kabul tarihi / Accepted: 13.09.2023

Elektronik yayın tarihi: 26.09.2023

**Online published** 

Anahtar Kelimeler / Keywords: First and Emergency Aid, Intolerance for Uncertainty, Uncertainty, Self-Compassion / First and Emergency Aid, Intolerance for Uncertainty, Uncertainty, Self-Compassion.

Kısaltmalar / Abbreviations: None.

**Künye** / **Cite this artcile as:** Bekircan E, Usta G. Determining the levels of intolerance of uncertainty and self-compassion of paramedic final class students. *Emerg Aid Disaster Science*. 2023;3(2):15-21.

Copyright holder Journal of Emergency Aid and Disaster Science

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. This is an open Access article which can be used if cited properly.

# Özet

**Giriş:** Hasta veya yaralıya akut dönemde ilk müdahaleyi yapan ilk ve acil yardım personelleri için olay örgüsünün her detayı belirsizlik ile ilişkilidir. İlk ve acil yardım (Paramedik) programında okuyan öğrencilerin belirsizliğe tahammülsüzlük ve öz-şefkat ilişkisinin incelenmesi hem kendi gençlik sorunlarıyla mücadele eden hem de olay yerinde ilk müdahalede bulunan adayların güçlü bir şekilde desteklenmesine yardımcı olabilir.

**Amaç:** Bu araştırma, ilk ve acil yardım programı son sınıf öğrencilerinin belirsizliğe tahammülsüzlük ve öz-şefkat düzeyleri arasındaki ilişkinin incelenmesi amacı ile yapılmıştır.

**Yöntem:** Tanımlayıcı nitelikte olan bu çalışmanın örneklemini Türkiye'de bulunan dört farklı üniversitenin ilk ve acil yardım programı son sınıfında okuyan 187 öğrenci oluşturmuştur. Veriler, Sosyo-Demografik Veri Formu, Belirsizliğe Tahammülsüzlük Ölçeği ve Öz-Şefkat Ölçeği Kısa formu kullanılarak toplanmıştır.

**Bulgular:** Bu araştırmada yer alan bireylerin belirsizliğe tahammülsüzlük düzeylerinin 26-122 değerleri arasında  $80,58\pm18,94$  ortalama ile dağıldığı, öz-şefkat ölçek düzeylerinin 19-54 değerleri arasında  $33,93\pm6,83$  ortalama ile dağılım gösterdiği görülmektedir. Öz-şefkat düzeyi ile belirsizliğe tahammülsüzlük ölçek düzeyleri arasında istatistiksel olarak anlamlı bir ilişki bulunmaktadır (r=-0,504; p<0,05).

**Sonuç:** Elde edilen bulgular sonucunda ilk ve acil yardım son sınıf öğrencilerinin öz-şefkat düzeyleri arttıkça belirsizliğe tahammülsüzlük düzeylerinin azaldığı sonucuna ulaşılmıştır.

# Abstract

**Introduction:** It can be said that the uncertainty can be very high for the students of the first and emergency aid programs (paramedic), who are the focus of the work with the first responders in extraordinary situations. Examining the relationship between intolerance of uncertainty and self-compassion can help strongly support candidates struggling with their own youth issues and first responders on the scene.

**Purpose:** This research was conducted to examine the relationship between intolerance of uncertainty and self-compassion levels of senior and first-aid program students.

**Method:** The sample of this descriptive study consisted of 187 students studying in the last year of the first and emergency aid programs of four different universities in Turkey. Data were collected using the Socio-Demographic Data Form, the Intolerance of Uncertainty Scale, and the Self-Compassion

**Findings:** It was observed that the levels of intolerance to the uncertainty of the individuals included in this study ranged between 26-122 values with an average of  $80.58\pm18.94$ , and self-compassion scale levels ranged between 19-54 values with an average of  $33.93\pm6.83$ . There is a statistically significant relationship between self-compassion level and intolerance of the uncertainty scale levels (r=-0.504; p<0.05).

**Conclusions:** As a result of the findings, it was concluded that as the self-compassion levels of the first and emergency final year students increased, the level of intolerance to uncertainty decreased.

#### **Intolerance of Uncertainty and Self-Compassion**

eing a student at university is one of the most turbulent periods of development for students, as it is a transitional stage both socially and biologically. Especially for the young people studying in the last year, the university has an important and critical quality as the beginning of business life or unemployment life <sup>1</sup>. For university students, not only in the field of employment but also other uncertainties they may encounter after graduation can create anxiety. Uncertainties about finding a job or finding a job can cause anxiety in many issues in life <sup>2,3</sup>. It can be said that the youth period is problematic because individuals experience problems such as being alone, leaving the family, and finding a job during the youth period <sup>4</sup>. The concept that emerges at this point is intolerance to uncertainty. This concept associates the psychological state of individuals with uncertainty <sup>5,6</sup>. People therefore do not want uncertainty and want to avoid it <sup>6,7</sup>. In a study, it was found that there is a relationship between people's self-compassion and intolerance to uncertainty<sup>8</sup>. Uncertainty can be a major source of stress, especially for healthcare professionals. Self-compassion, a strategy for coping with stress and burnout, is a skill that can help students better prepare for the uncertainty inherent in clinical practice 9. Self-compassion is necessary for individuals to accept themselves without judgment when faced with negative life events and to cope with their painful feelings and thoughts. This concept advocates accepting negative experiences as a natural part of human life <sup>10,11</sup>.

According to the findings of a bibliometric research on self-compassion, the notion of self-compassion is commonly utilized with students and instructors, while it is seldom used with police recruits and judiciary employees. Self-compassion has been linked to characteristics such as resilience, forgiveness, anxiety, sadness, psychological well-being, and perfectionism, according to research<sup>12</sup>. Self-compassion has been shown in studies of nurses to promote emotional intelligence, work satisfaction, and prevent professional burnout. Furthermore, in order to provide compassionate care to patients in healthcare professional groups that interact directly with people, healthcare professionals must first be compassionate to themselves <sup>13</sup>. Individuals with a high level of sensitivity to uncertainty are more worried when they anticipate a threat, see uncertain circumstances as disasters, and employ immature coping techniques more frequently, according to research <sup>14</sup>. In this context, when the concepts of intolerance of uncertainty and self-compassion are considered together, it can be stated that these two concepts can have positive or negative effects on the mental states of individuals.

It can be said that the uncertainty can be very high for the students of the first and emergency aid programs, who are the focus of the work with the first responders in extraordinary situations. Examining the relationship between intolerance of uncertainty and self-compassion can help strongly support candidates struggling with their own youth issues and first responders on the scene. For this reason, this study, it was aimed to examine the relationship between intolerance of uncertainty and self-compassion levels of first and emergency program students in a period when living conditions are difficult and uncertainties are high. The results of this study can guide first and emergency program students to take measures to help them cope with uncertainty and develop self-compassion. In this way, students can work more effectively in their future healthcare delivery processes. For this purpose, answers to the following questions were sought:

- What is the level of intolerance of uncertainty and self-compassion among first and emergency aid, students?
- What is the relationship between intolerance of uncertainty and self-compassion levels of first and emergency aid students?

#### **MATERIAL AND METHODS**

#### Model of the Research

This study was conducted using the descriptive research method.

#### **Research Question**

What is the link between senior first and emergency program students' intolerance of ambiguity and self-compassion levels?

#### **Place and Time of The Research**

The data of the study were collected between March, and April 2023. The data were obtained from the last year students studying in the first and emergency aid programs of four different state universities, which were accessed and institutional permissions were obtained.

#### **Population and Sample of The Research**

The population of the research consisted of senior students studying in the first and emergency aid programs at four state universities in Turkey. The sample size of this study was determined by a statistician in G\*Power 3.1.2. Power analysis was performed using the software. According to the results of the sample and power calculation; The minimum number of samples to be taken was determined as 125 people at the 95% confidence interval, 80% power, and 0.5 effect level. The convenience sampling method was used in the research, and 187 students who voluntarily accepted to participate in the research formed the sample of the study.

# Inclusion and Exclusion Criteria for The Study

The convenience sampling method was used in the study. It is planned to include first and emergency program students studying at four different universities that can be accessed by researchers in this study. All students who were senior students in the first and emergency aid program and voluntarily agreed to participate in the study were included in the study. Individuals who did not want to participate in the study or left the survey questions blank were excluded from the study.

#### Variables of the Study

In descriptive studies, the relationship and degree of relationship between independent variables and dependent variables are generally investigated. In this study, the dependent variables are intolerance to uncertainty and self-compassion levels. Independent variables are sociodemographic data such as age, gender, marital status, and educational status.

# Measurement Tools Used in The Study

In the study, the Socio-Demographic Data Form and the Intolerance of Uncertainty and Self-Compassion Scale Short

16

Form were used, which were prepared by the researchers in line with the literature.

# **Intolerance of Uncertainty Scale**

The original form of the Intolerance of Uncertainty Scale was developed by Freeston et al.(1994) to assess cognitive, emotional, and behavioral responses to uncertain situations<sup>15</sup>. The scale was adapted into English by Buhr & Dugas (2002). The internal consistency of the English version of the scale was .94, and the test-retest reliability was .74<sup>7</sup>. The Turkish adaptation of the scale was made by Sarı & Dağ (2009).<sup>16</sup> "Uncertainty is stressful and distressing," "negative self-evaluations of uncertainty," "not knowing the future is disturbing," and "uncertainty hinders action" reflect four of the factors obtained. The new version of the scale consists of 26 items and includes 4-factor structures. The internal consistency of the scale was .93, and the test-retest reliability was .66<sup>16</sup>.

# Short Form of Self-Compassion Scale

Self-compassion scale measures self-compassion. The scale, which had 26 items<sup>11</sup> in its original form, was translated into Turkish as a short 11-item form. The validity and reliability study of the scale in Turkey was conducted by Yıldırım & Sarı (2018)<sup>17</sup>. The scale is a Likert-type scale rated from 1 (never) to 5 (always). The Cronbach Alpha coefficient for the entire scale was calculated as 0.75. Items 1, 4, 8, 9, 10, and 11 of the scale are reverse-coded. The highest score obtained from the scale is 55. High scores on the scale indicate a high level of self-compassion <sup>17</sup>.

# **Application of Data Collection Tools**

The period of the research is stated as March, and April 2023. During this period, students continue their education through distance education (online). The data collection form was prepared using the Google questionnaire and was sent to the students via WhatsApp. This data collection method allowed researchers to collect data from students' locations and enabled the research process to be carried out quickly and effectively. During the survey answering process, the identity information of the participants was not included in the data collection form in order to enable the participants to express their opinions impartially without any pressure. In this way, the confidentiality of the participants was protected and their answers were kept completely anonymous.

# Analysis of Data

The data obtained in this study were analyzed using the licensed SPSS 25.0 package program. The skewness and kurtosis coefficients were used when examining the normal distribution of the variables. According to Tabachnik & Fidell (2013)<sup>18</sup>, when the skewness and kurtosis values are between -1.50 and +1.50, the variables are considered to come from a normal distribution.<sup>18</sup> Cronbach's Alpha test statistic was used as the internal consistency coefficient for reliability. When evaluating the reliability coefficient,  $0.00 \le \alpha < 0.40$  (not reliable);  $0.40 \le \alpha < 0.60$  (with low confidence);  $0.60 \le \alpha < 0.80$  (highly reliable), and  $0.80 \le \alpha < 1.00$  (highly reliable) <sup>19</sup>. While examining the differences between the groups, independent samples t-test and one-way ANOVA tests were used because the variables came from the normal distribution. In case of a difference in the ANOVA test, the differences were calcula-

# **RESULTS**

In this section, primarily socio-demographic data of the participants are presented. 70.05% of the individuals participating in the study were female, 29.95% were male, 18.18% of their mothers never went to school, 50.80% of them had a primary school education level, and 4.81% of the individuals participated in the study. Fathers never went to school,

F F	in the study. Fathers		
Table 1.	Frequency distribut	ion table	of socio-
demograph	ic characteristics		
		n	%
Gender	Female	131	70.05
	Male	56	29.95
	Did not study at any school	34	18.18
Education	Primary School	95	50.80
Level of the Mother	Middle School	38	20.32
litter	High School	18	9.63
	University	2	1.07
	Did not study at any school	9	4.81
Education	Primary School	73	39.04
Level of the Father	Middle School	46	24.60
rather	High School	48	25.67
	University	11	5.88
Monthly	1000 TL-	9	4.81
	1001-2000 TL	34	18.18
Salary	2001-3000 TL	41	21.93
	3001 TL+	103	55.08
	Low	45	24.06
Income Rate	Medium	130	69.52
	High	12	6,42
Status of working	Yes	18	9,63
	No	169	90,37
Smoling	Yes	50	26,74
Smoking	No	137	73,26
		Mean± sd	MinMax.
Age		21±1.42	18-27
Number of Siblings 3±1.92 1-9			

25.67% of them had a high school education, 69.52% had a medium income level, 24.06% had a low income, 9.63% were working, 26.74% were smokes cigarettes, and when the age values are examined, it is seen that he is  $21\pm1.42$  years old (Table 1).

According to Table 2, when the frequency distribution of the scales is examined, the levels of intolerance to uncertainty are distributed with an average of 80.58±18.94 between the values of 26-122, and the levels of self-compassion scales are distributed with an average of 33.93±6.83 between the values

### **Intolerance of Uncertainty and Self-Compassion**

of 19-54 is seen.

According to Table 3, there is a statistically significant difference between the genders in terms of the level of uncertainty that is stressful and distressing (p<0.05). Women have high

intolarence levels of uncertaintly. There was no statistically significant difference between genders in terms of self-compassion scale levels (p>0.05).

According to Table 4, there is no statistically significant dif-

Table 2. Frequency table of scale levels						
	Mean	Min.	Max.	SD		
Uncertainty is stressful and distressing	27.65	9	40	6.48		
Negative self-evaluations of uncertainty	25,42	8	40	6,37		
Not knowing the future is disturbing	12,45	4	20	3,68		
Uncertainty hinders action	15,07	5	25	4,12		
Intolerance of Uncertainty Scale	80.58	26	122	18.94		
Self-compassion Scale	33.93	19	54	6.83		

#### Table 3. Comparison of scale levels and gender

-	_	Gender		t-test	
Mean		sd	t	р	
Uncertainty is stressful and distressing	Female	28.44	6.36	0.261	0.010*
Uncertainty is stressful and distressing	Male	25.79	6.42	0.261	
No zotino colfornalizationa of un containte	Female	25.61	6.31	0 (25	0.526
Negative self-evaluations of uncertainty	Male	24.96	6.55	0.635	
	Female	12.56	3.57		
Not knowing the future is disturbing	Male	12.20	3.94	0.614	0.54
	Female	15.02	4.10	0.22(	0.814
Uncertainty hinders action	Male	15.18	4.19	-0.236	
Intelevence of Uncenteinty Scole	Female	81.63	18.72	1 1 ( 1	0.247
Intolerance of Uncertainty Scale	Male	78.13	19.41	1.161	0.247
Calf companying Scale	Female	34.31	7.01	1 1 ( 5	0.245
Self-compassion Scale	Male	33.04	6.37	1.165	0.245

# Table 4. Comparison of scale levels and income levels

	_	Income I	Rate		ANOVA		
Mean		sd	F	Р	Difference**		
	Bad	28.84	6.77				
Uncertainty is stressful and distressing	Medium	27.30	6.39	1.033	0.358		
uistiessing	Good	26.92	6.24				
	Bad	25.58	7.04				
Negative self-evaluations of uncertainty	Medium	25.17	6.15	0.752	0.473		
uncertainty	Good	27.50	6.19				
	Bad	12.64	3.91				
Not knowing the future is disturbing	Medium	12.41	3.65	0.106	0.899		
uistui biilg	Good	12.17	3.35				
	Bad	15.29	4.76				
Uncertainty hinders action	Medium	15.01	3.95	0.086	0.918		
	Good	14.92	3.60				
	Bad	82.36	20.77				
Intolerance of Uncertainty Scale	Medium	79.88	18.51	0.297	0.743		
State	Good	81.50	17.35				
	Bad (1)	31.73	6.12				
Self-compassion Scale	Medium (2)	34.50	6.85	3.371	0.036*	1<	
	Good (3)	35.92	7.82				

September 2023

18

ference between income levels in terms of intolerance to uncertainty scale and sub-dimension (p>0.05). There is a statistically significant difference between income levels in terms of self-compassion scale levels (p<0.05). The self-compassion levels of those with a low-income level are significantly lower than the self-compassion levels of those with a medium-income level.

According to Table 5, there is a statistically significant relationship between the levels of self-compassion and the levels of uncertainty, which is stressful and distressing, with moderate strength in the opposite direction (r=-0.404; p<0.05). As the levels of self-compassion increase, the level of uncertainty that is stressful and distressing decreases. There is a statistically significant correlation between self-compassion levels and negative self-evaluation levels related to uncertainty with moderate strength (r=-0.482; p<0.05). As self-compassion levels increase, negative self-evaluation levels related to uncertainty decrease. There was a statistically significant correlation between the levels of self-compassion and the levels of not knowing the future are disturbing (r=-0.517; p<0.05). As the level of self-compassion increases, uncertainty decreases. There is a statistically significant correlation between the levels of self-compassion and the levels of uncertainty that prevent taking action with moderate strength (r=-0.475; p<0.05). As self-compassion levels increase, not knowing the future is disturbing and their levels decrease. There was a statistically significant correlation between self-compassion levels and intolerance to uncertainty scale levels with moderate strength in the opposite direction (r=-0.504; p<0.05). As self-compassion levels increase, intolerance of uncertainty scale levels decrease.

Table 5. Relationship between scale levels					
	Self-compassion Scale				
	R	р			
Uncertainty is stressful and distressing	404**	0.000*			
Negative self-evaluations of uncertainty	482**	0.000*			
Not knowing the future is disturbing	517**	0.000*			
Uncertainty hinders action	475**	0.000*			
Intolerance of Uncertainty Scale	504**	0.000*			
*p<0.05; **Correlation Coefficient					

# **DISCUSSION**

The overall average score of intolerance to uncertainty of the participants in this study was 80.58±18.94, and their level of intolerance to uncertainty was higher than the average score. When the literature is examined, it was concluded that uncertainty and worries about their future may lead to low quality of life in university students studying in the field of health <sup>20,21</sup>, and intolerance to uncertainty and mindfulness significantly affect anxiety and depression levels <sup>22</sup>, and there is a negative relationship between intolerance of uncertainty and resilience <sup>23</sup>. In a study conducted by it was observed that as nursing students' intolerance to uncertainty levels increased, their depression, anxiety, and stress levels increased <sup>24</sup>. It can be stated that it is appropriate to carry out self-compassion

development studies for young people receiving education. Therefore, it can be thought that these studies can help reduce the levels of intolerance to uncertainty. For university students, changing cities, waiting for an exam result, determining future goals, making career choices, starting a romantic relationship, unemployment, and economic fluctuations can create uncertainty. In addition, the recent interruption of education due to the COVID-19 pandemic, social isolation, economic problems, and natural disasters such as earthquakes may have adversely affected young people psychosocially. The increase in uncertainty today can be a source of anxiety, negative mood, and stress, especially for individuals who are intolerant of uncertainty <sup>25</sup>.

In this study, it is seen that the total score of the participants' self-compassion scale levels is above the average with an average of  $33.93\pm6.83$ . In the study conducted by Bulduk & Ardıç (2015), they were found to be at a moderate level <sup>26</sup>. Self-compassion can assist those who work or study in the health industry be more compassionate to themselves <sup>11</sup>. The data of our study and the literature data show similarities.

It was concluded that as the self-compassion levels of the participants included in the study increased, their level of intolerance to uncertainty decreased. In a study conducted on undergraduate students, a negative relationship was shown between intolerance to uncertainty and self-compassion<sup>8</sup>. No other research has been found in the literature that directly examines self-compassion and intolerance of uncertainty. People with low tolerance show persistently intense attention to uncertain situations, which can lead to emotional arousal and intolerance, and cognitive avoidance when faced with uncertainty. Individuals who cannot tolerate uncertainty may increase their feelings of negativity by having anxious thoughts. This may result in behavioral avoidance strategies (for example, use alcohol) aimed at avoiding anxiety-related experiences and reducing bodily sensations created by uncertainty <sup>27,28</sup>. People may use negstive defense mechanisms, such as substance use to cope with uncertainty <sup>29</sup>. Awareness of individuals protects them from uncertainty and enables the development of new coping methods <sup>29</sup>. Being more compassionate can cause people to love themselves and eliminate their uncertainty <sup>10</sup>. Self-compassion can make people more adaptable <sup>10</sup>. The level of self-compassion in people's troubled times can contribute to coping with this situation <sup>30</sup>. Therefore, when the findings on the relationship between self-compassion and uncertainty are examined, it can be said that the data of the literature and our study are similar.

In our study, a relationship was found between the income levels of individuals and their self-compassion levels. Low income level may cause low self-compassion level. Burnout and social status affect self-compassion level <sup>31</sup>. Therefore, it can be said that income level has an effect on psychological health, self-compassion, and well-being. Therefore, it can be assumed that reducing social and economic inequalities and making income distribution more equitable may have positive effects on the psychological health of individuals.

In this study, there is a statistically significant difference between the genders in terms of the level of uncertainty

#### **Intolerance of Uncertainty and Self-Compassion**

that is stressful and distressing. Women's levels of uncertainty are distressing and distressing are significantly higher. Individuals can use self-compassion or tolerance towards themselves to cope with the anxieties created by uncertainty. Especially when students score below expectations in exam results, individuals with self-compassion can cope with negative emotions more easily and they can better cope with the consequences of failure by forgiving themselves <sup>32</sup>. In a study conducted with senior students, it was concluded that women have a higher intolerance to uncertainty rate than men<sup>33</sup>. Uncertainty can be a stressful and upsetting situation for female students. This may affect situations such as making a marriage decision, completing a university education, having a job, saving money, and making a career <sup>2</sup>. Many people today have difficulty coping with stress. For this reason, it is very important for people to be self-compassionate, learn from their mistakes, try exercise methods to cope with stress, and set goals for themselves. In addition, acting by taking risks into account can have positive results in people's lives. In this context, studies show that women have a higher level of stress about uncertainty than men. Similarly, our study points to this result in line with the literature data.

# Limitations

Since the students received education through distance education at the time of the research, the questionnaire forms could not be filled by face-to-face interview method, it was accepted that this situation constituted the limitation of the study. The fact that the sample is at a certain age and education level reduces the generalizability of the results. However, the inclusion of senior students in the study constitutes the strengths of the study. In new studies, it is thought that the sample should also include people from other age groups and education levels. It is recommended to conduct mixed-patterned studies to determine in which area the uncertainties of individuals affect them more.

#### **CONCLUSION AND RECOMMENDATIONS**

According to the results of this research, paramedic senior students are generally intolerant of uncertainty and their self-compassion levels are moderate. As self-compassion levels increase, the level of intolerance to uncertainty decreases. The stress and distress level of female students towards uncertainty may be significantly higher than male students. In addition, the self-compassion levels of the students with a low-income level are significantly lower than the students with a middle-income level. According to the study's findings, paramedic students should practice self-compassion and acceptance in order to manage with uncertainty.

#### Ethics

**Ethics Committee Approval:** Approval was obtained from Trabzon University Social and Human Sciences Ethics Committee (Approval No: E-81614018-000-2300024185)

**Informed Consent:** Informed consent was obtained from the participants.

### Peer-review

Enternally and internally peer-reviewed.

# **Authorship Contributions**

The authors contributed equally at all stages of the study.

### **Conflict of Interest**

No conflict of interest.

# Funding

None.

# REFERENCES

- Üstün G, Dedekoç Ş, Kavalalı T, Öztürk F, Sapcı Y, Can S. Üniversite Son Sınıf Öğrencilerinin İş Bulmaya İlişkin Umutsuzluk Düzeylerinin İncelenmesi. *Amasya Educ J*. 2014;3(2):200-221. doi:10.17539/AEJ.33402
- Baş E, Cengiz E. Üniversite Öğrencilerinin Evlilik ve Aileyi Anlamlandırma Biçimleri: Karadeniz Teknik Üniversitesi Örneği. İmgelem. 2018;2(2):5-27.
- Gizir CA. Orta Doğu Teknik Üniversitesi Son Sınıf Öğrencilerinin Problemleri Üzerine Bir Çalışma. Mersin Üniversitesi Eğitim Fakültesi Derg. 2005;1(2):196-213.
- 4. Arnett JJ. Emerging Adulthood: A theory of Development from the Late Teens Through the twenties. *Am Psychol*. 2000;55(5):469-480.
- Carleton RN, Norton MAPJ, Asmundson GJG. Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. *J Anxiety Disord*. 2007;21(1):105-117. doi:10.1016/J.JANXDIS.2006.03.014
- Dugas MJ, Gosselin P, Ladouceur R. Intolerance of Uncertainty and Worry: Investigating Specificity in a Nonclinical Sample. *Cognit Ther Res.* 2001;25(5):551-558. doi:10.1023/A:1005553414688/METRICS
- Buhr K, Dugas MJ. The Intolerance of Uncertainty Scale: Psychometric Properties of the English Version. *Behav Res Ther.* 2002;40(8):931-945. doi:10.1016/S0005-7967(01)00092-4
- Babenko O, Guo Q. Measuring Self-Compassion in Medical Students: Factorial Validation of the Self-Compassion Scale-Short Form (SCS-SF). *Acad Psychiatry*. 2019;43(6):590-594. doi:10.1007/S40596-019-01095-X
- Poluch M, Feingold-Link J, Papanagnou D, Kilpatrick J, Ziring D, Ankam N. Intolerance of Uncertainty and Self-Compassion in Medical Students: Is There a Relationship and Why Should We Care? J Med Educ Curric Dev. 2022;9:238212052210770. doi:10.1177/23821205221077063
- Neff K. Self-Compassion: An Alternative Conceptualization of a Healthy Attitude Toward Oneself. *Self Identity*. 2003;2(2):85-101. doi:10.1080/15298860309032
- Neff KD. The Development and Validation of a Scale to Measure Self-Compassion. *Self Identity*. 2003;2(3):223-250. doi:10.1080/15298860309027
- 12. Karagöz Ş, Uzunbacak HH. Öz-Şefkat Konusunda Yayınlanan Makalelerin Bibliyometrik Analizi. *Int J Manag Acad*. 2023;6(2):410-420. doi:10.33712/MANA.1276099
- 13. Şahin Altun Ö, Kabakçı K, Olçun Z. Hemşirelikte Öz -

Şefkat. Arşiv Kaynak Tarama Derg. 2020;29(3):218-225.

- Yığman F, Fidan S. Transdiagnostik Faktör Olarak Belirsizliğe Tahammülsüzlük. *Curr Approaches Psychiatry*. 2021;13(3):573-587. doi:10.18863/PGY.827416
- Freeston MH, Rhéaume J, Letarte H, Dugas MJ, Ladouceur R. Why do people worry? *Pers Individ Dif.* 1994;17(6):791-802. doi:10.1016/0191-8869(94)90048-5
- Sarı S, Dağ İ. Belirsizliğe Tahammülsüzlük Ölçeği, Endişe ile İlgili Olumlu İnançlar Ölçeği ve Endişenin Sonuçları Ölçeği'nin Türkçeye Uyarlanması, Geçerliliği ve Güvenilirliği. Anadolu Psikiyatr Derg. 2009;10:261-270.
- Yıldırım M, Sarı T. Öz-Şefkat Ölçeği Kısa Formu'nun Türkçe uyarlaması: Geçerlik ve Güvenirlik Çalışması. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Derg. 2018;18(4):2502-2517. doi:10.17240/AIBU-EFD.2018.18.41844-452171
- Tabachnik BG, Fidell SL. Multicollinearity and Singularity. Using Multivariate Statistics. Boston, MA: Pearson.; 2013.
- 19. Kalaycı Ş. SPSS Uygulamalı Çok Değişkenli Istatistik Teknikler. Asil Yayın Dağıtım Ltd. Şti. ; 2010.
- 20. Jang JY. The effects of Intolerance of Uncertainty, Experiential Avoidance and Difficulties in Emotional Regulation on Career Indecision Among Undergraduate Students. *Korean J Couns*. 2016;17(2):121-138.
- Lee MK, Sung H, Kim E, Ji S, Ahn S. The Effect of Intolerance to Uncertainty on Life Satisfaction in University Students-Focusing on the Mediating Effects of Work Volition and Work Hope. J Career Educ Res. 2016;29(3):141-159.
- 22. Nekić M, Mamić S. Intolerance of Uncertainty and Mindfulness as Determinants of Anxiety and Depression in Female Students. *Behav Sci.* 2019;9(12). doi:10.3390/ BS9120135
- 23. Lee JS. Effect of Resilience on Intolerance of Uncertainty in Nursing University Students. *Nurs Forum*. 2019;54(1):53-59. doi:10.1111/NUF.12297
- 24. Şentürk S, Bakır N. The Relationship between Intolerance of Uncertainty and the Depression, Anxiety and Stress Levels of Nursing Students during the Covid-19 Outbre-

ak. *Kıbrıs Türk Psikiyatr ve Psikol Derg*. 2021;3(2):97-105. doi:10.35365/CTJPP.21.2.12

- 25. Liao KYH, Wei M. Intolerance of Uncertainty, Depression, and Anxiety: The Moderating and Mediating Roles of Rumination. *J Clin Psychol*. 2011;67(12):1220-1239. doi:10.1002/JCLP.20846
- 26. Bulduk S, Ardıç E. Hemşirelik Öğrencilerinde Öz-Duyarlığın İncelenmesi. *JAREN/Hemşirelik Akad Araştırma Derg*. 2015;1(2):60-65.
- 27. Kraemer KM, McLeish AC, O'Bryan EM. The Role of Intolerance of Uncertainty in Terms of Alcohol Use Motives Among College Students. *Addict Behav*. 2015;42:162-166. doi:10.1016/J.ADDBEH.2014.11.033
- 28. Newman MG, Llera SJ. A Novel Theory of Experiential Avoidance in Generalized Anxiety Disorder: A Review and Synthesis of Research Supporting a Contrast Avoidance Model of Worry. *Clin Psychol Rev*. 2011;31(3):371-382. doi:10.1016/J.CPR.2011.01.008
- 29. Mantzios M, Wilson JC, Linnell M, Morris P. The Role of Negative Cognition, Intolerance of Uncertainty, Mindfulness, and Self-Compassion in Weight Regulation Among Male Army Recruits. *Mindfulness (N Y)*. 2015;6(3):545-552. doi:10.1007/S12671-014-0286-2
- Allen AB, Leary MR. Self-Compassion, Stress, and Coping. Soc Personal Psychol Compass. 2010;4(2):107-118. doi:10.1111/J.1751-9004.2009.00246.X
- Kroshus E, Hawrilenko M, Tandon PS, Browning A, Steiner MK, Christakis DA. Structural Inequities in Self-compassion and Parental Burnout. *Mindfulness (N Y)*. Published online 2023:1. doi:10.1007/S12671-023-02104-9
- 32. Tang WK. Resilience and Self-Compassion Related with Achievement Emotions, Test Anxiety, Intolerance of Uncertainty, and Academic Achievement. *Psychol Stud* (*Mysore*). 2019;64(1):92-102. doi:10.1007/S12646-019-00482-6
- Bıkmaz Z, Akça Yağan N. Üniversite Son Sınıf Öğrencilerinin İş Bulma Kaygısı ve Belirsizliğe Tahammülsüzlük Düzeylerinin İncelenmesi. *Pearson Journal*. 2020;5(8):169-181.