

## Death Distress and Mental Well-being: Serial Mediating Roles of Meaning-Based Coping and Hope

Hasan Kütük<sup>1</sup> Fatma Betül Yılmaz<sup>2</sup> Zahide Gül Aktepe<sup>3</sup>

Sinan Okur<sup>4</sup> Seydi Ahmet Satıcı<sup>5</sup>

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### Abstract


While having an awareness of death may make life more meaningful for some individuals, it might also cause death distress for others. This study aims to understand the effects of death distress as an existential problem on mental health. A novel aspect of this study is the examination of the mediating roles of meaning-based coping and hope in this relationship. In the study, data were collected from 397 adults residing in 51 different Turkish provinces. The age range of the participants was 18 to 57 years old, and the average age was 24.39 years. ( $SD = 5.42$ ). The participants participated in the study voluntarily through a web-based form. Using structural equation modeling (SEM) and the bootstrapping method, the relationships between variables were determined. All variables in the study were found to be related to each other. Additionally, as a result of the serial multiple mediation analysis, it was determined that meaning-based coping and hope played a full mediating role serially in the relationship between death distress and mental well-being. This finding indicates that death distress predicts mental well-being through meaning-based coping and hope. In conclusion, the findings indicate that meaning-based coping and hope have a beneficial and positive effect on reducing the negative impact of death distress on mental well-being.


**Keywords:** Mental well-being, death distress, meaning-based coping, hope, serial mediation analysis.

<sup>1</sup>  [hasan.kutuk@yildiz.edu.tr](mailto:hasan.kutuk@yildiz.edu.tr), Department of Psychological Counseling, Yıldız Technical University, Istanbul, Türkiye

<sup>2</sup>  [betul.yilmaz@istinye.edu.tr](mailto:betul.yilmaz@istinye.edu.tr), Faculty of Humanities and Social Sciences, Psychology, İstinye University, Istanbul, Türkiye

<sup>3</sup>  [zgul@yildiz.edu.tr](mailto:zgul@yildiz.edu.tr), Department of Psychological Counseling, Yıldız Technical University, Istanbul, Türkiye

<sup>4</sup>  Corresponding Author, [sinan.okur@msu.edu.tr](mailto:sinan.okur@msu.edu.tr), Department of Educational Sciences, National Defense University, Turkish Air Force Academy, Istanbul, Türkiye

<sup>5</sup>  [ahmet.satici@yildiz.edu.tr](mailto:ahmet.satici@yildiz.edu.tr), Department of Psychological Counseling, Yıldız Technical University, Istanbul, Türkiye

## Introduction

There is no doubt that no living being can escape death. The difference between man and other living things is that man is conscious of death and continues his or her life with this consciousness. Death distress is a kind of anxiety about the existence of an individual and might be experienced continuously in daily life. The death expectation contains different negative emotions and cognitions due to the existence of the person (Abdel-Khalek, 2004). Death distress can be defined as a concept that expresses a person's negative emotional reactions to death, attitudes towards death, fear, anxiety, restlessness, and awareness of death (Yıldırım & Güler, 2021). Al-Sabwah and Abdel-Khalek (2006) define death distress as a common human experience that consists of different negative concepts such as death anxiety, death depression, and death obsession. Dadfar et al. (2016), who developed the measurement tool for death distress, also emphasize that death distress consists of a combination of the mentioned factors. The difference between death distress, death anxiety, death depression, and death obsession is that death distress is based on experience. Individuals with a high level of death distress are likely to experience various mental health problems, such as feelings of inadequacy, anxiety, chronic stress, and depression (Menzies et al., 2019). In addition, studies in the literature reveal that death distress is associated with concepts such as resilience (Wen, 2010), well-being (Nagaraj & Nithyanandan, 2019), obsession (Abdel-Khalek, 2004), and suicidality (Lee et al., 2020). It is thought that death distress might cause negative mental health problems such as stress, dissatisfaction with life, impaired ego integrity, low resilience, and low well-being (Semenova & Stadlander, 2016). People who are in poor physical and mental health fear death more. This might play a role in increasing their death distress (Geurtsen, 2010). Various studies in the literature support that individuals with health problems experience more death distress (e.g., Depaola et al., 2003; Moreno et al., 2008). People who want to improve their well-being typically desire positive feelings. However, it cannot be said that they always succeed. Death distress is one of the negative emotions that individuals can experience throughout their lives. Almost every individual might be disturbed by the distressing situations that death can create. This negative situation created by the death distress on individuals can adversely influence their well-being. Menzies et al. (2019) emphasize that anxiety and depression might increase in individuals with death distress. On the other hand, Wen (2010) states that death distress negatively influences resilience. Various studies in the literature reveal the negative relationship of death distress with concepts such as life satisfaction, happiness, and well-being (Moreno et al., 2008; Nagaraj & Nithyanandan, 2019). From this point of view, it is thought that the fear of death has a negative effect on well-being.

While death distress is one of the important determinants of well-being, it is possible to talk about other determinants. Since well-being is a broad concept, various concepts that can influence the well-being of individuals can be mentioned. It is thought that one of them might be meaning-based coping.

Death and meaning are two concepts that are often studied together, especially through existential approaches. People might choose a goal for themselves to make life meaningful at some point in their lives. Meaning in life might be characterized as a person's recognition of consistency and order in his or her life, pursuit of the objectives that are significant to them, achievement of a goal, and the satisfaction felt as a consequence (Reker & Wong, 1988). This definition is based on Frankl's (1969) World War II traumas. In the afore-mentioned research emphasized the importance of creating meaning in life in order to cope with devastating traumatic situations. Based on Frankl's theories, Updegraff et al. (2008) emphasized that finding meaning in life plays an important role in post-traumatic recovery. It might be claimed that meaning-based coping mechanisms are based on this theory. Wenzel et al. (2002) defined meaning-based coping as “a positive re-evaluation and interpretation of a stressor”. Hope (Feldman & Snyder, 2005), existential coping (Maddi, 2013), creative/proactive coping (Klein, 2017), meaningful activities (Schueller & Seligman, 2010), existential gratitude (Kleiman et al., 2013), and reframing (Park, 2010) are examples of meaning-based coping methods that have been based on research in the literature. Eisenbeck et al. (2022) state that the most effective of the meaning-based coping strategies are existential and creative/proactive coping strategies. Existential coping strategies are based on accepting the brutality of real life and building personal assumptions about the meaning of life. In this coping strategy, individuals try to cope with

challenging experiences with the help of the meaning they have built. In creative/proactive coping strategies, individuals aim to turn difficult experiences into a psychologically developmental advantage. They focus on how their experience will improve themselves by approaching the difficult events they have experienced from different perspectives (Wong et al., 2006). All these strategies mentioned are used as behavioral practices for meaning-based coping. This reveals that meaning-based coping is a behavioral strategy. In summary, it can be said that creating meaning in life is an effective coping strategy.

### **Meaning-Based Coping and Hope as Serial Mediators**

Meaning-based coping is thought to have a significant role in increasing psychological resilience to traumatic experiences, protecting psychological health, and increasing immunity to chronic stress (McEwen, 1998). It might be claimed that meaning contributes an important function in overcoming stress and traumatic experiences. This significant function contributes to improved well-being and lower distress (Halama, 2014). Arslan and Yıldırım (2021b) state that meaning is associated with better coping and lower stress. Ellis et al. (2017) concluded in their research that meaning-based coping has a mediating and regulating effect on the relationship between mental health problems and well-being. When the literature is examined, it is possible to come across many studies on the positive effect of meaning-based coping on well-being (e.g., Arslan & Yıldırım, 2021a; Milman et al., 2020). All these findings reveal that meaning-based coping might be an important factor in reducing stress and increasing well-being.

While trying to understand the well-being of individuals in terms of death, another concept that is thought to have a role other than meaning-based coping is hope. When the factors that reduce the death distress of individuals are examined, it is seen that concepts such as hope, optimism, or self-esteem come to the fore (Soleimani et al., 2020). Hope can be defined as people's beliefs about reaching their goals and their tendency to exhibit various behaviors within the framework of these beliefs (Satici, 2016). There are various studies on hope, which is thought to be an important concept for the well-being of the individual (Gallagher & Lopez, 2009). Nadi and Sajjadian (2012) emphasized in their research that there is an important relationship among concepts such as well-being, life satisfaction, and hope. In another study examining the relationship among the concepts of resilience, well-being, and hope, the importance of hope in predicting well-being was mentioned (Munoz et al., 2020). Counted et al. (2022) also emphasized that individuals with high hope levels have higher well-being levels. It is possible to come across many studies that reveal this strong relationship between hope and well-being (Satici & Okur, 2022; Satici et al., 2023). Based on the relevant research, it might be concluded that hope is an important concept that contributes to well-being.

### **Models and Hypotheses**

This research aims to reveal the serial mediator role of meaning-based coping and hope in the relationship between death distress and well-being. The concept of "death distress" is typically assumed to be connected to negative emotions. Death distress naturally causes various emotions and cognitions, which are mostly negative in individuals (Abdel-Khalek, 2011). The literature suggests that death distress, as an affective and cognitive response to mortality, has been consistently associated with adverse psychological outcomes, including impaired well-being (Abdel-Khalek, 2005; Feifel & Branscomb, 1973). These negative responses can create a barrier for individuals to engage in adaptive coping strategies, specifically meaning-based coping (Park & Folkman, 1997). Meaning-based coping, which involves positive reappraisal and finding significance in stressful experiences, has been linked to decrease psychological distress and enhanced hope (Folkman & Moskowitz, 2000). Emotions, thoughts, and behaviors related to death can prevent individuals from discovering the meaning of life and using coping strategies. In other words, individuals with high levels of death distress might have difficulty applying meaning-based coping strategies. As a result of this difficulty, individuals are likely to experience hopelessness. To conclude, since an individual experiencing death distress cannot use meaning-based coping, their level of hope might decrease, which negatively influences their well-being.

Hope itself functions as a crucial psychological resource that fosters goal-directed thinking, thereby contributing to better mental well-being (Snyder, 2002). In this sense, heightened levels of

death distress might undermine a person's capacity to utilize meaning-based coping, subsequently weakening hope, and ultimately reducing overall well-being (Folkman, 1997). By examining these constructs together, the present study extends the existing literature and provides a more holistic understanding of how death distress, meaning-based coping, and hope collectively influence well-being. All of this indicates that this research will offer important implications. When the literature is examined, although there are studies in which these concepts are examined separately, there is no study in which all the concepts are considered together. Therefore, it might be said that this research is important. In addition, the research is important in terms of revealing the serial mediator effect between the variables. All findings will further help explain the relationship between death distress and well-being. In this context, the hypotheses of the proposed research model for death distress, meaning-based coping, hope, and mental well-being are presented below:

H<sub>1</sub>. Meaning-based coping will play a mediating role in the relationship between death distress and mental well-being.

H<sub>2</sub>. Hope will play a mediating role in the relationship between death distress and mental well-being.

H<sub>3</sub>. Meaning-based coping and hope will play a serial mediating role in the relationship between death distress and mental well-being.

## Method

### Participants and Procedure

The convenience sampling method was adopted in creating the sample for the study. The study group consists of 397 (303 [76.3%] female and 94 [23.7%] male) adults aged ranged 18-57 ( $M=24.39$ ,  $SD=5.42$ ) living in 51 different cities in Türkiye. The participants voluntarily participated in the study through a web-based questionnaire. The participants were asked to provide basic information (gender, age, and city of residence) as well as measures related to meaning-based coping, death distress, hope, and well-being. The sample's characteristics are shown in Table 1.

Table 1  
Participants' Characteristics

Variable	Frequency	%
<i>Gender</i>		
Female	303	76.3
Male	94	23.7
<i>Educational status</i>		
High School or below	26	6.5
University	283	71.3
Master / Ph.D.	88	22.2
<i>Perceived Socio-Economic Status</i>		
Poor	98	24.7
Moderate	256	64.5
Good	43	10.8
<i>Employee Status</i>		
Student	199	50.1
Public Employee	71	17.9
Private sector employee	75	18.9
Unemployed	52	13.1

### Measures

*Meaning-Based Coping Scale.* Eisenbeck et al. (2022) developed the Meaning-Based Coping Scale to assess people's meaning-based coping mechanisms. It is a seven-point Likert-type scale scored between 1 (strongly disagree) and 7 (strongly agree). The nine-item scale is a self-report scale (e.g., "I

believe this will yield a positive result"). The psychometric properties of the scale show that it is suitable for use in many cultures, including Türkiye. In this context, Cronbach's alpha value was reported as 0.86 in the reliability analysis (Eisenbeck et al., 2022).

*Death Distress Scale.* The Death Distress Scale was developed by Dadfar and Lester (2020) to measure the death distress of people. It is a five-point Likert scale scored between 1 (never) and 5 (always). The scale, which consists of three sub-dimensions, is a nine-item self-report scale (e.g., "I can't get the concept of death out of my mind"). The sub-dimensions of the scale are explained as death anxiety, death obsession, and death depression, respectively. Death anxiety is defined as individuals' intense and constant worry about death. Death obsession is when people constantly feel disturbed by death and have obsessive thoughts about it. Lastly, death depression is a serious mood problem that causes people's quality of life to decrease due to death and death-related thoughts. The adaptation of the scale to the Turkish sample was carried out by Yıldırım and Güler (2021). Internal consistency and reliability of the scale were calculated as 0.77 for the death anxiety sub-dimension, 0.88 for the death depression sub-dimension, and 0.91 for the death obsession sub-dimension.

*Dispositional Hope Scale.* Snyder et al. (1991) developed the Dispositional Hope Scale to measure people's level of hope. It is an eight-point Likert scale, scored between 1 (definitely false) and 8 (definitely true). The scale, which consists of two sub-dimensions, consists of four fillers and a total of 12 items (e.g., "My past experiences prepared me well for my future"). The adaptation of the scale to the Turkish sample was carried out by Tarhan and Bacanlı (2015). The Cronbach's alpha value, which was determined by the reliability analysis of the scale, was calculated as 0.84.

*Warwick-Edinburgh Mental Health Scale.* Tennant et al. (2007) developed the Warwick-Edinburgh Mental Health Scale to assess people's levels of well-being. It is a five-point Likert scale, scored between 1 (never) and 5 (always). The 14-item scale, which was at first translated into Turkish by Keldal (2015), was condensed into a seven-item form by Demirtaş and Baytemir (2019). This short form, which was also developed in this study, was used. The Cronbach's alpha value, which was determined by the reliability analysis of the scale, was calculated as 0.86.

## **Data Analysis**

Data was collected in 2023 through an online form shared on various social media platforms. The form was designed so that participants who were at least 18 years old and agreed to participate voluntarily in the study could view the questions. Informed consent was obtained from each participant prior to data collection. No financial payments or rewards were given to participants during the study.

The initial evaluation of the data's suitability for parametric tests involved a normality test. After confirming that the data followed a normal distribution, descriptive statistics, correlation coefficients, convergent and discriminant validity, and reliability coefficients including McDonald's Omega, Guttman lambda, and Cronbach Alpha were calculated. IBM SPSS Statistics 26.0 and JASP 0.16.4 were utilized to perform descriptive statistics. The research questions were investigated using Structural Equation Modeling (SEM) in AMOS Graphics and a two-step approach, as suggested by Anderson and Gerbing (1988). First, the measurement model was evaluated, then the hypothetical model. Model fit indices included the standardized root mean square residual (SRMR), the root mean square error approximation (RMSEA), the comparative fit index (CFI), the normed fit index (NFI), the goodness of fit index (GFI), and the incremental fit index (IFI). Previous research suggests that the SRMR and RMSEA values should be less than 0.08, whereas the CFI, TLI, NFI, GFI, and IFI values should exceed 0.90 (Hoyle & Panter, 1995). For unidimensional scales, the parceling technique was used to reduce measurement errors due to a single factor (Little et al., 2002). Thus, WEMWBS and MCS were divided into two separate parcels. In addition, gender and age were accounted for as covariates in the study.

## **Ethics Statement**

Before the research began, the Yıldız Technical University Social and Human Sciences Research Ethics Committee issued a certificate of ethical compliance (Report No: 20230402008, Verification Code: 7297f). At all stages of the study, the researchers adhered to the updated ethical

principles outlined in the Helsinki Declaration of 1975. Informed consent was obtained from all of the participants at the beginning of the study, and they were informed that the research results would be published. All participants in the research were volunteers, and no payment was made to the participants within the scope of the research. Volunteers who agreed to participate in the research filled out the research scales individually. Lastly, all participants were informed that they could withdraw from the study at any time.

## Results

### Preliminary Analyses

The descriptive statistics and correlations for the study variables are presented in Table 2. Positive associations were found between mental well-being and hope ( $r=0.59, p<.001$ ), meaning-based coping ( $r=0.58, p<.001$ ), and death distress ( $r=-0.28, p<.001$ ). While hope correlated negatively with death distress ( $r=-0.23, p<.001$ ), it correlated positively with meaning-based coping ( $r=0.61, p<.001$ ). Also, there was a negative correlation ( $r=-0.20, p<.001$ ) between meaning-based coping and death distress.

### Statistical Assumption Tests

According to the study's findings, skewness values ranged from -0.444 to 0.286, and kurtosis values ranged from -0.195 to 0.124, satisfying the normality criteria. In addition, all coefficients of reliability were greater than 0.83, which is an acceptable level of internal consistency. They are presented in Table 2. There were no issues with multicollinearity and residuals, as the variance inflation factor values ranged from 1.06 to 1.68 and the tolerance values ranged from 0.60 to 0.94, with a Durbin Watson value of 1.88. As a result, Field's (2016) proposed hypotheses were all confirmed.

### Serial Multiple Mediation Analyses

Initially, the measurement model was evaluated with four latent and nine observed variables. Indicators of model fit were favorable:  $\chi^2(df=21, N=397)=55.76, \chi^2/df=2.65$ ; RMSEA=0.065, SRMR=0.044, GFI=0.970, TLI=0.964, CFI=0.979, NFI=0.967, IFI=0.979, AIC=103.768, and ECVI=0.262. All indicator factor loadings were significant, ranging from 0.68 to 0.98, indicating that each indicator adequately represented its corresponding variable. The factor loadings, mean, standard deviation, and reliability coefficients are presented in Table 2. According to the results, all factor loadings ranged between 0.46 and 0.97 and were statistically significant. The model had sufficient convergent and discriminant validity according to the standards proposed by Bagozzi and Yi (1988) and Fornell and Laecker (1981). All of the coefficients of reliability were excellent ( $\alpha>0.83, \omega>0.83$ , and  $\lambda_6>0.84$ ). In light of these findings, it was determined that the observed variables were reliable indicators of the latent constructs.

After determining that the measurement model was adequate, structural equation modeling was conducted. The partial model was evaluated with respect to the relationship between death distress and psychological well-being through the serial mediation roles of meaning-based coping and hope. Each fit index was acceptable [ $\chi^2(df=37, N=397)=93.027, \chi^2/df=2.51$ ; RMSEA=0.062, SRMR=0.067, GFI=0.960, TLI=0.951, CFI=0.967, NFI=0.946, IFI=0.967] with the significant pathways. The pathway from death distress to mental well-being was found to be insignificant ( $B=0.079, p>.05$ ). As a result, this pathway was eliminated, and a comprehensive mediation model was implemented. We observed acceptable fit indices for the full mediation model ( $\chi^2(df=38, N=397)=95.812, \chi^2/df=2.52$ ; RMSEA=0.062, SRMR=0.070, GFI=0.959, TLI=0.950, CFI=0.966, NFI=0.945, IFI=0.966). It was also determined that each path was significant. Comparing partial and full models, the full model was selected due to the lack of significance of the direct path and quadrature in the partial model ( $\Delta\chi^2=2.78, df=1, p>.05$ ). In the comprehensive mediation model, gender and age effects were accounted for. The results of the serial mediation analyses are depicted in Figure 1.

Table 2  
Descriptive Statistics, Correlations and Reliability Values of Research Variables

Latent variables	Indicator	Loadings	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	$\alpha$	$\omega$	$\lambda^6$	1	2	3
Death distress	DA	.46	10.71	2.98	.286	-.195	.86	.83	.90	–		
	DD	.83	9.26	3.60								
	DO	.62	6.24	3.53								
Meaning based coping	MBCP1	.97	25,50	5.37	-.444	-.043	.86	.86	.86	-.20*	–	
	MBCP2	.85	20,99	4.19								
Hope	AW	.71	25,06	3.91	-.365	.124	.83	.83	.84	-.23*	.61*	–
	AT	.84	22,68	4.22								
Mental well-being	MWP1	.88	14,35	3.08	-.377	-.025	.85	.85	.84	-.28*	.57*	.59*
	MWP2	.90	10,75	2.42								

*DA* death anxiety, *DD* death depression, *DO* death obsession, *MBCP* parcels of meaning-based coping, *AW* alternative ways, *AT* actuating thinking, *MWP* parcels of mental well-being. \* $p < .001$

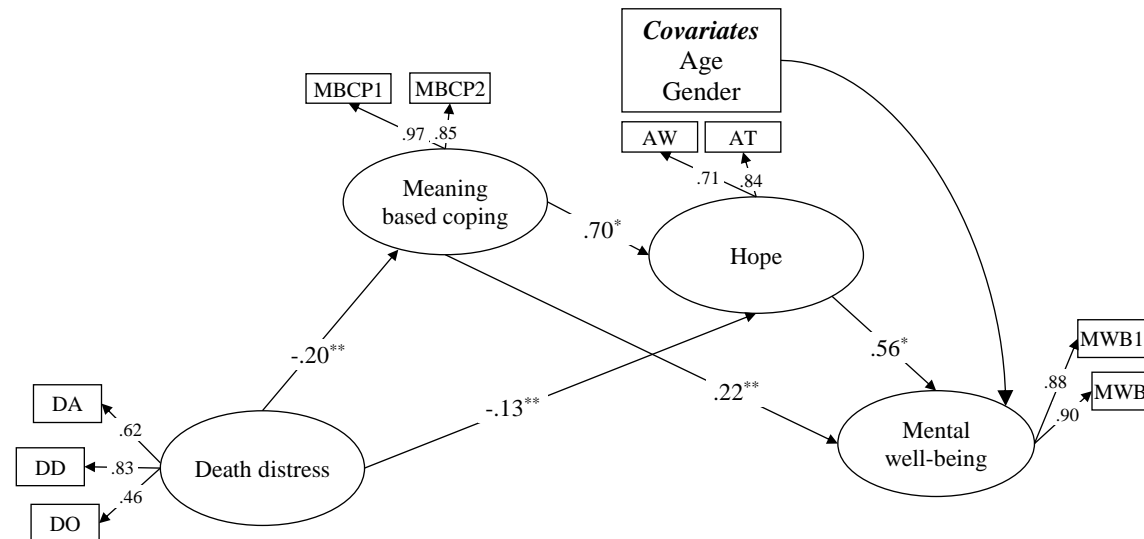


Figure 1. Structural Equation Modeling for the Serial Mediation Model.

Note. \*  $p < .05$ , \*\*  $p < .01$ , *DA*: death anxiety, *DD*: death depression, *DO*: death obsession *MBCP1*: parcel of meaning based coping, *MBCP2*: parcel of meaning based coping, *AW*: alternative ways, *AT*: agency thinking, *MWB1*: parcel of mental well-being, *MWB2*: parcel of mental well-being.

### Bootstrapping Analysis

We examined the statistical significance of the mediating variable utilizing 5000 bootstrap samples. This method generated confidence intervals (CI) for the indirect effects with a 95% level of assurance. Bootstrap 95 percent of non-zero confidence intervals were deemed statistically significant (Hayes, 2018). Meaning-based coping partially mediated the relationship between death distress and mental well-being (-0.085,  $p < .05$ ; BCa95% lower limit=-0.227 to upper limit=-0.010). Hope partially mediated the association between death distress and mental health (-0.143,  $p < .05$ ; BCa95% lower limit=-0.328 to upper limit=-0.021). The relationship between death distress and psychological health was fully mediated by meaning-based coping and hope (-0.151,  $p < .05$ ; BCa95% lower limit=-0.349 to upper limit=-0.042). The indirect relationships between variables are represented in Table 3.

Table 3  
Indirect Effect of Serial Mediation Model

Path	Coefficient	95%CI	
		LL	UL
Death distress → Meaning based coping → Mental well-being	-.085	-.227	-.010
Death distress → Hope → Mental well-being	-.143	-.328	-.021
Death distress → Meaning based coping → Hope → Mental well-being	-.151	-.349	-.042

Note. CI confidence interval; LL lower limit; UL upper limit

### Discussion and Suggestions

In this study, the role of meaning-based coping and hope as serial mediators in the relationship between death distress and well-being was investigated. Obtained findings are discussed and interpreted in detail below.

The first finding of this study shows that meaning-based coping has a full mediator role in the relationship between death distress and well-being. This means that meaning-based coping affects well-being positively by reducing the negative relationship between death distress and well-being. When the literature was examined, no study was found that examined the relationship among these three variables. The findings obtained from the studies examining the bilateral relations between the concepts support this finding of the research. It is possible to come across studies in the literature that reveal the negative relationship between death distress and well-being. Nagaraj and Nithyanandan (2019) revealed the negative relationship between death distress and well-being in their study.

Likewise, Semenova and Stadlander (2016) reached similar results. Various studies also reveal the positive effect of meaning-based coping on well-being. For instance, Arslan and Yıldırım (2021a) reported that meaning-based mechanisms increase optimism and reduce stress. From this point of view, it is thought that individuals who have a sense of meaning in life might have high levels of well-being. Based on various studies, it might be claimed that meaning-centered skills help manage stress in an individual's life, increase positive emotions, and strengthen resilience (Batthyany & Russo-Netzer, 2014; Hicks & Routledge, 2013). It is emphasized that meaning-based coping helps to increase psychological functionality and reduce distress (Halama, 2014). Another study focused on the effects of meaning-based coping on individuals with traumatic experiences (McEwen, 1998). According to this research, the effect of meaning-based coping on protecting mental health and reducing chronic stress has been revealed. Arslan and Yıldırım (2021b) also state that the stress level of individuals who apply meaning-based coping strategies decreases. These data show us that meaning-centered coping protects mental health by affecting various variables in an individual's life. In summary, the concept of meaning has an important influence on an individual's mental well-being. Based on all of the studies, it can be posited that the use of meaning-based coping strategies is associated with a reduction in death distress and a consequential enhancement of well-being.

According to the second finding of the study, hope plays a full mediator role in the relationship between death distress and well-being. In this finding, increasing the level of hope in the individual eliminates the negative effect of death distress on well-being. This finding is consistent with



the research in the literature. Although there are no studies in the related literature that deal with these three variables together, it is possible to come across studies examining bilateral relations. When the studies are examined, results supporting the second finding of the study are found. Previous studies have shown that higher hope levels play an important role in reducing negative emotions. For example, Arnau et al. (2007) emphasize that hope reduces negative emotions. In a similar finding, Wu et al. (2021) also state that as the hope level of individuals' increases, negative emotions such as death distress will decrease. The findings of Cheng et al. (2021) also support this. From this point of view, it might be interpreted that hope is a variable that reduces the distress of death. Numerous studies in the literature (Counted et al., 2022; Gallagher & Lopez, 2009; Satıcı et al., 2023) have also revealed the connection between hope and well-being. Wong et al. (2006) also stated that meaning-based coping has a positive role in increasing well-being. Based on these studies in the literature, it can be interpreted that hope reduces death distress and strengthens well-being.

In the third and main finding of this study, it was revealed that meaning-based coping and hope play a full mediator role in the relationship between death distress and well-being. In other words, the effect of death distress on well-being decreases when meaning-based coping and hope variables come into play. When the relevant literature was examined, no study was found in which these concepts were discussed together. For this reason, it is expected that this finding will make a unique contribution to the literature. Death distress is one of the important stressors that an individual may encounter during her/his daily life. When an individual encounters a stressor that they cannot cope with, meaningful coping strategies might be weakened. This can cause the person to lose their sense of meaning and experience hopelessness. In addition, it is possible for the individual to develop negative feelings about the future due to death anxiety. Developing negative emotions might lower the hope level of the individual. It is inevitable that the level of well-being of the individual whose meaning-based coping level and hope level decrease also decreases. Meaning-based coping is one of the most effective methods of coping with stress. It might be claimed that individuals with a high degree of meaning-based coping will not have difficulty managing the stressors they will encounter in their lives. From this point of view, individuals' participation in activities that will increase their meaning-based coping skills and hope levels might play an important role in increasing well-being by reducing death distress. Based on the findings of the research, it might be claimed that it will be effective to include activities that will improve meaning-based coping and hope in studies aiming to reduce death distress.

In addition to all these discussions, another important point to note in this study is that the participants are predominantly female adults. Therefore, the research findings should also be interpreted in terms of gender. Considering Turkish cultural characteristics, men and women have different emotional reactions to difficult life events. In Turkish society and similar cultures, women are likely to react more emotionally to positive and negative experiences (Güder & Kaya, 2023; Kandemir, 2020). For instance, women from Turkish culture tend to be more upset and react emotionally to death, while men prefer to remain silent and keep the pain inside. Thus, the findings of this study can be considered to reflect women's reactions in a cultural context. In other words, the results of this research enable us to better understand the emotional reactions of Turkish women within the cultural context and to realize through what factors mental well-being might be strengthened when experiencing death distress. Strengthening the meaning-based coping strategies of women facing the distress of death and enabling them to look at the future more positively will further protect their mental health.

To ensure the universal applicability of these findings, educational programs should be adapted to different cultural and social contexts. Programs designed to address death distress can incorporate culturally sensitive approaches that consider varying emotional expressions and coping styles across societies. For instance, in collectivist cultures, group-based interventions and community support systems might be more effective, while in individualist cultures, personal reflection and self-guided coping strategies could be emphasized. Developing flexible, culturally tailored psychoeducational programs will enhance their relevance and accessibility across diverse populations.

## Limitations and Future Research

The present study has some limitations. The first limitation is that the study represents the Turkish sample. In future studies, conducting an intercultural study with data obtained from different cultures will ensure that the results are more comprehensive. The second limitation is that the sample group consists of adults. Obtaining the data used in the study from a specific group might reduce generalizability. Therefore, it should not be ignored that this study does not include adults. In future studies, using data obtained from individuals in different life periods will increase generalizability. The third limitation of the study is that it is a cross-sectional study. Cross-sectional studies are not as successful as longitudinal studies in clearly demonstrating the cause-effect relationship. Therefore, using the longitudinal methodology in future studies might be important in terms of revealing the long-term effects of the variables. The fourth limitation of the study is that the number of female participants in the study is higher than that of males. This might limit the generalizability of the findings across genders. In future studies, it is recommended that the gender distribution be more balanced and the effects of gender on the variables be examined in more detail.

The findings from the study suggest that meaning-based coping strategies and the enhancement of hope might be useful when working with individuals experiencing death anxiety by psychologists and counselors. In particular, meaningful-based coping and practices that increase hope can be used in interventions aimed at reducing death-related stress and increasing mental well-being. It can guide the development of policies to reduce the psychological effects of death. Future research can explore how these policies can be effectively implemented in educational settings, particularly through structured programs that promote resilience and coping skills. Additionally, studies can assess the long-term impact of meaning-based interventions on students' mental well-being, informing the development of evidence-based educational practices. Hope and meaning-based coping strategies can be used to relieve the emotional burden of individuals experiencing death distress. In this context, training programs for teachers and educators can be developed to equip them with the necessary skills to address death distress and teach coping strategies to students. These training sessions can include workshops on fostering resilience, emotional expression, and meaning-based discussions about loss and grief. Additionally, integrating modules on death awareness and coping strategies into teacher education curricula can help educators become more confident in addressing these topics in the classroom. Schools can also establish support systems, such as peer mentoring or counselor-led group discussions, to provide a safe space for students to process their emotions. Additionally, schools can integrate structured counseling services and dedicated support groups to help students navigate death distress. These services can include regular sessions with trained counselors, grief workshops, and peer support networks, ensuring that students have access to professional guidance and emotional support when needed. By incorporating these practices into educational settings, teachers and educators can play a crucial role in helping young individuals build emotional resilience and adopt positive coping mechanisms.

## Conclusion

As a result, in this study, meaning-based coping and hope have a full mediating role in the relationship between death distress and mental well-being. In other words, death distress experienced by individuals predicts mental well-being through the mediating role of meaning-based coping and hope. This finding reveals that meaning-based coping and hope are effective in reducing the negative influence of death distress on mental well-being. Therefore, encouraging the search for meaning and the level of hope of individuals experiencing death distress might be an important factor in supporting and protecting mental health.

Some implications may be made based on these results obtained within the scope of the research. For instance, these results have important application potential for mental health professionals. When we consider the distress of death as a natural part of life, developing individuals' meaning-based coping skills and increasing their positive expectations for the future during the psychological counseling process can strengthen mental health. Mental health professionals can also guide people on developing hope and meaning-based coping mechanisms at the same time. In addition, integrating death distress and coping strategies into educational curricula through structured workshops or dedicated courses can provide individuals with the necessary tools to manage such

distress effectively. These educational initiatives can be incorporated into university counseling programs, mental health training, or even broader school curricula to promote emotional resilience from an early age. For all these, psychoeducational programs that might be developed and implemented by researchers are needed. Particularly for adolescents and young adults, these programs can be designed with age-appropriate content that incorporates interactive activities, group discussions, and real-life scenarios to help them develop meaning-based coping and hope. Schools, universities, and community organizations can collaborate with mental health professionals to integrate these programs into their curricula, ensuring accessibility and effectiveness. Additionally, digital platforms and mobile applications can be utilized to provide continuous support and resources for young individuals, enabling them to engage with coping strategies in a way that resonates with their daily experiences. These programs should ensure that individuals gain awareness of issues related to death distress and indirectly strengthen their mental well-being. Additionally, these programs might raise social awareness about death distress and mental health. Furthermore, educational institutions can collaborate with mental health professionals to design interdisciplinary courses that integrate psychological resilience, existential concerns, and meaning-based coping strategies, ensuring a holistic approach to mental well-being. Lastly, psychoeducational programs can provide training on meaning-based coping strategies and improve the level of hope. All of these might lead to a better understanding of the connection between death distress and mental well-being and increase individuals' meaning-based coping skills and level of hope in situations of death distress. It is believed that such activities will benefit people's mental health.

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**Ethics statement:** In this study, we declare that the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" are complied with and that we do not take any of the actions based on "Actions against Scientific Research and Publication Ethics". At the same time, we declare that there is no conflict of interest between the authors, which all authors contribute to the study, and that all the responsibility belongs to the article authors in case of all ethical violations.

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## References

- Abdel-Khalek, A. M. (2004). A general factor of death distress in seven clinical and non-clinical groups. *Death Studies*, 28(9), 889-898. doi: 10.1080/07481180490491040
- Abdel-Khalek A. M. (2005). Death anxiety in clinical and non-clinical groups. *Death Studies*, 29(3), 251-259. doi: 10.1080/07481180590916371
- Abdel-Khalek, A. M. (2011). The death distress construct and scale. *Omega*, 64(2), 171-184. doi: 10.2190/om.64.2.e
- Al-Sabwah, M. N., & Abdel-Khalek, A. M. (2006). Religiosity and death distress in Arabic college students. *Death Studies*, 30(4), 365-375. doi: 10.1080/07481180600553435
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. doi: 10.1037/0033-2909.103.3.411
- Arnau, R. C., Rosen, D. H., Finch, J. F., Rhudy, J. L., & Fortunato, V. J. (2007). Longitudinal effects of hope on depression and anxiety: a latent variable analysis. *Journal of Personality*, 75(1), 43-64. doi: 10.1111/j.1467-6494.2006.00432.x
- Arslan, G., & Yıldırım, M. (2021a). Coronavirus stress, meaningful living, optimism, and depressive symptoms: a study of moderated mediation model. *Australian Journal of Psychology*, 73(2), 113-124. doi: 10.1080/00049530.2021.1882273
- Arslan, G., & Yıldırım, M. (2021b). Meaning-based coping and spirituality during the COVID-19 pandemic: mediating effects on subjective wellbeing. *Frontiers in Psychology*, 12, 646572. doi: 10.3389/fpsyg.2021.646572
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Sciences*, 16, 74-94. doi: 10.1007/BF02723327
- Batthyany, A., & Russo-Netzer, P. (Eds.). (2014). *Meaning in positive and existential psychology*. New York: Springer. doi: 10.1007/978-1-4939-0308-5
- Cheng, L., Guo, X., Liu, H., Chen, Q., & Cui, R. (2021). Hope, death anxiety and simplified coping style scores of nursing students during the outbreak of COVID-19: a cross-sectional study. *Medicine*, 100(34), e27016. doi: 10.1097/MD.00000000000027016
- Counted, V., Pargament, K. I., Bechara, A. O., Joynt, S., & Cowden, R. G. (2022). Hope and wellbeing in vulnerable contexts during the COVID-19 pandemic: does religious coping matter? *The Journal of Positive Psychology*, 17(1), 70-81. doi: 10.1080/17439760.2020.1832247
- Dadfar, M., & Lester, D. (2020). Death distress constructs: a preliminary empirical examination of the Farsi form in nurses: A brief note. *Nursing Open*, 1-6. doi: 10.1002/nop2.484
- Dadfar, M., Lester, D., & Bahrami, F. (2016). Death anxiety, reliability, validity, and factorial structure of the Farsi form of the Arabic Scale of Death Anxiety in Iranian old-aged persons. *Journal of Aging Research*, 2906857. doi: 10.1155/2016/2906857
- Demirtaş, A., & Baytemir, K. (2019). Adaptation of Warwick-Edinburgh Mental Well-Being Scale short form into Turkish: validity and reliability study. *Electronic Journal of Social Sciences*, 18(70), 654-666. doi: 10.17755/esosder.432708
- Depaola, S. J., Griffin, M., Young, J. R., & Neimeyer, R. A. (2003). Death anxiety and attitudes toward the elderly among older adults: the role of gender and ethnicity. *Death Studies*, 27(4), 335-354. doi: 10.1080/07481180302904
- Eisenbeck, N., Carreno, D. F., Wong, P. T. P., Hicks, J. A., María, R. G., Puga, J. L., Greville, J., Testoni, I., Biancalani, G., López, A. C. C., Villareal, S., Enea, V., Schulz-Quach, C., Jansen, J., Sanchez-Ruiz, M. J., Yıldırım, M., Arslan, G., Cruz, J. F. A., Sofia, R. M., Ferreira, M. J., ... García-Montes, J. M. (2022). An international study on psychological coping during COVID-19: towards a meaning-centered coping style. *International Journal of Clinical and Health Psychology*, 22(1), 100256. doi: 10.1016/j.ijchp.2021.100256
- Ellis, K. R., Janevic, M. R., Kershaw, T., Caldwell, C. H., Janz, N. K., & Northouse, L. (2017). Meaning-based coping, chronic conditions and quality of life in advanced cancer & caregiving. *Psycho-oncology*, 26(9), 1316-1323. doi: 10.1002/pon.4146
- Feifel, H., & Branscomb, A. B. (1973). Who's afraid of death? *Journal of Abnormal Psychology*, 81(3), 282-288. doi: 10.1037/h0034519

- Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology, 24*, 401-421. doi: 10.1521/jscp.24.3.401.65616
- Field, A. (2016). *Discovering statistics using IBM SPSS Statistics*. New York: Sage Publications.
- Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science & Medicine, 45*(8), 1207-1221. doi: 10.1016/S0277-9536(97)00040-3
- Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist, 55*(6), 647-654. doi: 10.1037/0003-066X.55.6.647
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. doi: 10.2307/3151312
- Frankl, V. E. (1969). *The will to meaning: foundations and applications of logotherapy*. Bromborough: Meridian.
- Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health: identifying the unique contributions of hope and optimism. *The Journal of Positive Psychology, 4*(6), 548-556. doi: 10.1080/17439760903157166
- Geurtsen, L. A. (2010). *A multidimensional approach of death anxiety: physical health, gender and psychosocial correlates in a community sample and a clinical sample of Dutch elderly people* [Unpublished master's thesis]. Universiteit Utrecht.
- Güder, M., & Kaya, E. (2023). The attitude of generations X, Y and Z to death and the reaction to mourning. *Turkish Studies-Social Sciences, 18*(1), 161-186. doi: 10.7827/TurkishStudies.64563.
- Halama, P. (2014). Meaning in life and coping: sense of meaning as a buffer against stress. In Batthyany A., Russo-Netzer P. (Eds.), *Meaning in positive and existential psychology* (pp. 239-250). New York: Springer.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach (2nd Ed.)*. New York: The Guilford Press.
- Hicks, J. A., & Routledge, C. (2013). *The experience of meaning in life: classical perspectives, emerging themes, and controversies*. New York: Springer. doi: 10.1007/978-94-007-6527-6
- Hoyle, R. H., & Panter, A. T. (1995). Writing about structural equation models. In R. H. Hoyle (Ed.), *Structural equation modeling: concepts, issues, and applications* (pp. 158-176). New York: Sage Publications.
- Kandemir, F. (2020). An empirical research on the relationship of Covid-19 pandemic generation's religiosity and death anxiety in the context of some demographic variables. *Tokat Journal of Ilmiyat, 8*(1), 99-129. doi: 10.5281/zenodo.3876200
- Keldal, G. (2015). Turkish version of the Warwick-Edinburgh Mental Well-Being Scale: a validity and reliability study. *The Journal of Happiness & Well-Being, 3*, 103-115.
- Kleiman, E. M., Adams, L. M., Kashdan, T. B., & Riskind, J. H. (2013). Gratitude and grit indirectly reduce risk of suicidal ideations by enhancing meaning in life: evidence for a mediated moderation model. *Journal of Research in Personality, 47*, 539-546. doi: 10.1016/j.jrp.2013.04.007
- Klein, N. (2017). Prosocial behavior increases perceptions of meaning in life. *The Journal of Positive Psychology, 12*, 354-361. doi: 10.1080/17439760.2016.1209541
- Lee, S. A., Jobe, M. C., Mathis, A. A., & Gibbons, J. A. (2020). Incremental validity of coronaphobia: coronavirus anxiety explains depression, generalized anxiety, and death anxiety. *Journal of Anxiety Disorders, 74*, 102268. doi: 10.1016/j.janxdis.2020.102268
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: exploring the question, weighing the merits. *Structural Equation Modeling, 9*(2), 151-173. doi: 10.1207/S15328007SEM0902\_1
- Maddi, S. R. (2013). Hardiness as the existential courage to grow through searching for meaning. In J. A. Hicks, & C. Routledge (Eds.), *The experience of meaning in life: classical perspectives, emerging themes, and controversies* (pp. 227-239). New York: Springer.
- McEwen B. S. (1998). Protective and damaging effects of stress mediators. *The New England Journal of Medicine, 338*(3), 171-179. doi: 10.1056/NEJM199801153380307

- Menzies, R. E., Sharpe, L., & Dar-Nimrod, I. (2019). The relationship between death anxiety and severity of mental illnesses. *The British Journal of Clinical Psychology, 58*(4), 452-467. doi: 10.1111/bjc.12229
- Milman, E., Lee, S. A., & Neimeyer, R. A. (2020). Social isolation and the mitigation of coronavirus anxiety: the mediating role of meaning. *Death Studies, 46*(1), 1-13. doi: 10.1080/07481187.2020.1775362
- Moreno, R., Solana, E. I., Rico, M., & Fernández, L. M. (2008). Death anxiety in institutionalized and non-institutionalized elderly people in Spain. *Omega, 58*(1), 61-76. doi: 10.2190/om.58.1.d
- Munoz, R. T., Hanks, H., & Hellman, C. M. (2020). Hope and resilience as distinct contributors to psychological flourishing among childhood trauma survivors. *Traumatology, 26*(2), 177-184. doi: 10.1037/trm0000224
- Nadi, M. A., & Sajjadian, I. (2012). The analytical relations between spiritual concept with spiritual wellbeing, mental happiness, satisfaction with life, psychological flourishing, hope for future and purposefulness in the university students. *Toloobehtdasht, 10*(3), 54-68.
- Nagaraj, M., & Nithyanandan, D. V. (2019). Death anxiety and psychological wellbeing of institutionalized elderly: relationship, association, and influences of demography. *Indian Journal of Gerontology, 33*(3), 255-267.
- Park, C. L. (2010). Making sense of the meaning literature: an integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin, 136*(2), 257-301. doi: 10.1037/a0018301
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology, 1*(2), 115-144. doi: 10.1037/1089-2680.1.2.115
- Reker, G. T., & Wong, P. T. P. (1988). Aging as an individual process: toward a theory of personal meaning. In J. E. Birren, & V. L. Bengtson (Eds.), *Emergent theories of aging* (pp. 214-246). New York: Springer.
- Satıcı, S. A. (2016). Psychological vulnerability, resilience, and subjective wellbeing: the mediating role of hope. *Personality and Individual Differences, 102*, 68-73. doi: 10.1016/j.paid.2016.06.057
- Satıcı, S. A., Kayış, A. R., Satıcı, B., Griffiths, M. D., & Can, G. (2023). Resilience, hope, and subjective happiness among the Turkish population: fear of COVID-19 as a mediator. *International Journal of Mental Health and Addiction, 21*(2), 803-818. doi: 10.1007/s11469-020-00443-5
- Satıcı, S. A., & Okur, S. (2022). Investigating the link between psychological maltreatment, shyness, hope, and wellbeing. *Personality and Individual Differences, 196*, 111764. doi: 10.1016/j.paid.2022.111764
- Schueller, S. M., & Seligman, M. E. (2010). Pursuit of pleasure, engagement, and meaning: relationships to subjective and objective measures of wellbeing. *The Journal of Positive Psychology, 5*, 253-263. doi: 10.1080/17439761003794130
- Semenova, V., & Stadlander, L. (2016). Death anxiety, depression, and coping in family caregivers. *Journal of Social, Behavioral, and Health Sciences, 10*(1), 5. doi: 10.5590/JSBHS.2016.10.1.05
- Snyder, C. R. (2002). Hope theory: rainbows in the mind. *Psychological Inquiry, 13*(4), 249-275. doi: 10.1207/S15327965PLI1304\_01
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*(4), 570-585. doi: 10.1037/0022-3514.60.4.570
- Soleimani, M. A., Bahrami, N., Zarabadi-Pour, S., Motalebi, S. A., Parker, A., & Chan, Y. H. (2020). Predictors of death anxiety among patients with heart disease. *Death Studies, 44*(3), 160-167. doi: 10.1080/07481187.2018.1527416
- Tarhan, S., & Bacanlı, H. (2015). Adaptation of Dispositional Hope Scale into Turkish: validity and reliability study. *The Journal of Happiness & Well-Being, 3*(1), 1-14.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS):

- development and UK validation. *Health and Quality of Life Outcomes*, 5, 63. doi: 10.1186/1477-7525-5-63
- Updegraff, J. A., Silver, R. C., & Holman, E. A. (2008). Searching for and finding meaning in collective trauma: results from a national longitudinal study of the 9/11 terrorist attacks. *Journal of Personality and Social Psychology*, 95(3), 709-722. doi: 10.1037/0022-3514.95.3.709
- Wen, Y. H. (2010). Religiosity and death anxiety. *The Journal of Human Resource and Adult Learning*, 6, 31-37.
- Wenzel, L., Glanz, K., & Lerman, C. (2002). Stress, coping, and health behavior. In K. Glanz, B. Rimer and F. M. Lewis (Eds.), *Health behavior and health education: theory, research and practice*. New Jersey: Jossey-Bass.
- Wong, P. T. P., Reker, G. T., & Peacock, E. J. (2006). A resource-congruence model of coping and the development of the coping schema inventory. In P. T. P. Wong, & L. C. J. Wong (Eds.), *International and cultural psychology series: handbook of multicultural perspectives on stress and coping* (pp. 223-283). New York: Springer.
- Wu, X., Xu, H., Zhang, X., Han, S., Ge, L., Li, X., & Zhang, X. (2021). Self-efficacy, hope as mediators between positive coping and resilience among patients with gastric cancer before the first chemotherapy. *Cancer Nursing*, 44(1), 79-85. doi: 10.1097/NCC.0000000000000753
- Yıldırım, M., & Güler, A. (2021). Positivity explains how COVID-19 perceived risk increases death distress and reduces happiness. *Personality and Individual Differences*, 168, 110347. doi: 10.1016/j.paid.2020.110347