



# Determining the Relationship between Spiritual Well-Being and Organ Donation Attitude

## Spiritüel İyi Oluşluk ile Organ Bağışı Tutumu Arasındaki İlişkinin Belirlenmesi

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### Abstract

**Aim:** The aim of this descriptive study is to determine the relationship between the spiritual well-being and organ donation attitude among Turkish society.

**Material and Method:** The study sample is consisted of 569 adults who were above 18 years of age, actively use the internet and voluntarily accepted to participate in the study. The data were collected via internet using Three-Factor Spiritual Well-Being Scale and Organ Donation Attitude Scale between October 2020 and January 2021.

**Results:** In this study, 66.3% of the participants were female. The median age of the participants was 21 years. It was found that 92.4% of the participants had not signed an organ donor card. The mean score of the Spiritual Well-Being Scale and the sub-dimensions of the scale, transcendence, harmony with nature and anomie were determined as  $112.9 \pm 18.6$  -  $61.1 \pm 13.6$  -  $29.3 \pm 6.0$  and  $22.4 \pm 7.0$ , respectively. The mean positive attitude towards organ donation score of participants is  $46.0 \pm 23.7$  and the mean negative attitude score is  $73.6 \pm 26.3$ . Participants' total Three-Factor Spiritual Well-Being Scale scores showed significant positive correlations with negative attitudes towards organ donation ( $r:0.298$   $p:0.0001$ ) and negative correlations with positive attitudes towards organ donation ( $r:-0.177$   $p:0.0001$ ).

**Conclusion:** As the spiritual well-being levels of the participants increase, their voluntary attitude towards organ donation decreases. It is recommended to plan campaigns and training programs for different spiritual beliefs to encourage individuals to donate organs.

**Keywords:** Spiritual well-being, organ donation, attitude

### Öz

**Amaç:** Bu tanımlayıcı çalışmanın amacı, Türk toplumunda spiritüel iyi oluşluk ve organ bağışı tutumu arasındaki ilişkiyi belirlemektir.

**Gereç ve Yöntem:** Araştırmanın örneklemini 18 yaşın üzerinde olan, aktif olarak internet kullanan ve çalışmaya katılmayı gönüllü olarak kabul eden 569 yetişkinden oluşturmaktadır. Veriler, Ekim 2020 - Ocak 2021 tarihleri arasında internet üzerinden Üç Faktörlü Spiritüel İyi Oluş Ölçeği ve Organ Bağışı Tutum Ölçeği kullanılarak toplandı.

**Bulgular:** Bu çalışmada, katılımcıların %66,3'ü kadındı. Katılımcıların ortalama yaşı 21 yıldır. Katılımcıların %92,4'ünün organ bağış kartı imzalamadığı tespit edildi. Spiritüel İyi Oluş Ölçeği ortalama puanı ve ölçeğin alt boyutları olan aşkınlık, doğa ile uyum ve anomi alt boyut puanları sırasıyla  $112,9 \pm 18,6$  -  $61,1 \pm 13,6$  -  $29,3 \pm 6,0$  ve  $22,4 \pm 7,0$  olarak belirlendi. Katılımcıların organ bağışına yönelik ortalama olumlu tutum puanları  $46,0 \pm 23,7$  ve ortalama negatif tutum puanı  $73,6 \pm 26,3$ 'tür. Katılımcıların toplam Üç Faktörlü Spiritüel İyi Oluş Ölçeği puanları, organ bağışına yönelik olumsuz tutumlarla anlamlı pozitif korelasyon ( $r:0,298$   $p:0,0001$ ) ve organ bağışına yönelik pozitif tutumla negatif korelasyon göstermiştir ( $r:-0,177$   $p:0,0001$ ).

**Sonuç:** Katılımcıların spiritüel iyilik düzeyleri arttıkça organ bağışına yönelik gönüllü tutumları azalmaktadır. Bireyleri organ bağışına teşvik etmek için farklı manevi inançlar için kampanya ve eğitim programlarının planlanması önerilmektedir.

**Anahtar Kelimeler:** Spiritüel iyi oluş, organ bağışı, tutum



## INTRODUCTION

In parallel with the developments in technology and surgical techniques, developments in organ transplantation are progressing rapidly. However, the limited number of organ donations worldwide cause the number of patients on the waiting list to increase rapidly. Therefore, the gap between the number of patients awaiting organ transplantation and organ donation proceed to increase.<sup>[1,2]</sup> According to the Ministry of Health, 75.448 organ transplants (except bone marrow) have been carried out in Turkey since 2008. However, it is known that the number of patients awaiting transplantation is 292.031 in Turkey. In line with these data, it can be said that organ donation is limited and does not meet the demand.<sup>[3]</sup>

It is known that people's attitudes towards organ donation depend on many factors such as education, socioeconomic level, culture, and religious belief. One of the factors affecting the attitude towards organ donation is spirituality.<sup>[2]</sup> Spirituality is defined as a broad personal search for and acceptance for meaning, purpose, and value in life.<sup>[2,4]</sup> Spiritual well-being is the search for the meaning and purpose on which life is based, and the realization of a power greater than yourself. An individual who achieves spiritual well-being is a person with high life satisfaction and self-fulfillment.<sup>[5]</sup> The spiritual dimension comes to the prominence especially in crisis situations where the individual experiences life-threatening illness, stress, fear of death, question the meaning of life and lose hope.<sup>[6]</sup>

It is stated that the sense of purpose in life is a key mechanism that enables the importance of voluntary activities to be associated with the well-being of the person.<sup>[2]</sup> Accordingly, it is expected that the spiritual well-being of individuals will affect their attitudes towards organ donation. For this reason, determining the relationship between individuals' spiritual well-being and their attitudes towards organ donation is very important in terms of guiding studies to increase organ donation. However, the effect of spiritual well-being on attitudes towards organ donation is lacking. For this reason, this study was conducted to determine the relationship between the spiritual well-being and organ donation attitude among Turkish society.

## MATERIAL AND METHOD

**Study design and aim:** This study is a descriptive study conducted to determine the relationship between the spiritual well-being and organ donation attitude among Turkish society.

**Study sample:** The sample of the study consisted of 569 adults who voluntarily accepted to participate in the study and actively used the internet. In the study, priori power analysis was performed with the G-Power 3.1 statistical program based on the data in a similar study by Arisal and Atalar (2020).<sup>[7]</sup> While the power of the test was 0.95 and the type I error was 0.05, the minimum sample required in the study was determined

as 510. After data collection, posthoc power analysis was also performed. Accordingly, the correlation coefficient is 0.177; the alpha value was 0.05 and the strength of the study was found to be at least 0.92.

**Data collection:** The data of the research were collected between October 2020 and January 2021. Data were collected over the internet due to the pandemic process. Accordingly, the researchers published an invitation letter on social networking sites. The aim and link of the study is included in the invitation letter. IP verifying is provided to ensure that each participant can fill out a single questionnaire. Data collection forms filled online were backed up daily by the researchers. It took approximately 8-10 minutes for the participants to fill in the form.

**Data collection instruments:** The data of the study were collected using the Data Collection Form. This form consists of 3 parts. In the first part of the form, there are questions aiming to determine the socio-demographic characteristics of the participants included in the study.

In the second part of the form, there is Three-Factor Spiritual Well-Being Scale (TFSWBS) which was developed by Ekşi and Kargaş (2017). The scale consists of 29 items and is a five-point Likert type. Seven questions in the scale are reverse coded. The score range to be obtained from the scale ranges from 29-145. As the score obtained from the scale increases, the level of spiritual well-being increases. The Cronbach alpha coefficient of the scale is 0.886.<sup>[5]</sup>

In the third part of the form, there is Organ Donation Attitude Scale. The scale was used to determine the participants' attitudes towards organ donation. The Turkish validity and reliability study of the Organ Donation Attitude Scale was conducted by Yazıcı Sayın (2015). The Turkish form of the scale consists of 40 items related to organ donation attitude. These items consist of 20 positive and 20 negative attitudes towards organ donation. The scores that can be obtained from positive attitudes are between 20 and 120, likewise, the total negative attitude score is between 20-120. High positive and low negative scores indicate strong voluntary attitudes towards organ donation. The scale is in a Likert format with six options for each item.<sup>[8]</sup>

**Ethical considerations:** This study was approved by the non-interventional clinical research ethics committee of a university (Approval number: 2020/09-63). Necessary information about the purpose and application of the research was given to the participants included in the study in the introduction part of the data collection form. In line with this information, "I agree to participate in the study" and "I do not agree to participate in the study" options were included in the introduction part of the data collection form. Accordingly, the participants who accepted to participate in the study were able to complete the data collection form. In order to apply the "Three-Factor Spiritual Well-being Scale" and "Organ Donation Attitude Scale" used in the study, written permission was obtained from the authors who made the Turkish validity and reliability of the scale via e-mail.

**Data analysis:** The data obtained from the study were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows version 20.0. Descriptive statistics (number, percentage, mean, standard deviation) were used to evaluate the data. Kolmogorov Smirnov test was used to determine whether the data showed normal distribution. The relationship between spiritual well-being and organ donation attitude was evaluated using Spearman Correlation Analysis. In all results, p value less than 0.05 was considered statistically significant ( $p < 0.05$ ).

## RESULTS

The median age of the participants included in the study was determined as 21 (min: 18, max: 102) years. The socio-demographic characteristics of the participants are shown in **Table 1**.

In this study, it was determined that 92.4% (n:526) of the participants had not signed an organ donor card. In addition, it was determined that 46.0% (n: 262) of the participants would consider donating the organs of any relative (mother, father, sibling, child, spouse, etc.) who had brain death in the future.

In this study, the mean score of the Spiritual Well-Being Scale of the participants was determined as  $112.9 \pm 18.6$  (min:57 max:144). The mean scores of the sub-dimensions of the scale, transcendence, harmony with nature and anomie, were found to be  $61.1 \pm 13.6$  (min:15 max:75),  $29.3 \pm 6.0$  (min:7 max:35) and  $22.4 \pm 7.0$  (min:7 max:35), respectively.

The mean positive attitude towards organ donation score of participants is  $46.0 \pm 23.7$  (min:20 max:120), the mean negative attitude score is  $73.6 \pm 26.3$  (min:20 max:120). It was determined that the mean scores of "fear of medical neglect" and "fear of physical injury" which are indicators of negative attitude were  $37.3 \pm 13.8$  (min:10 max:60) and  $36.3 \pm 13.5$  (min:10 max:60), respectively.

The correlation between participants' spiritual well-being and organ donation attitude scores are shown in **Table 2**. Participants' transcendence, harmony with nature, anomie and total TFSWBS scores showed significant positive correlations with negative attitudes towards organ donation and subscales of fear of medical neglect and fear of physical injury. Participants' harmony with nature, anomie and total TFSWBS scores showed significant negative correlations with positive attitudes towards organ donation (**Table 2**).

## DISCUSSION

As it is known, the insufficient number of organ donations and transplants around the world causes many patients who have been receiving treatment for organ failure recently to die while waiting for an organ. In this study, it was found that participants have low positive and high fear of medical neglect and fear of physical injury scores which means participants showed negative attitudes towards organ donation. In studies conducted in Turkey the mean positive attitude scores vary between 90 and 95; fear of medical neglect scores vary between 25 and 27; and fear of physical injury vary between 25 and 32.<sup>[9-11]</sup>

Our positive attitude scores were lower and negative scores were higher than similar studies. This difference is thought to be due to the sociocultural characteristics (such as younger age, tradition, civique, etc.) of the participants in the sample group.

It is known that there are many factors affecting organ donation attitudes. It is known that one of the most important factors affecting organ donation negatively is religious conceptualizations and beliefs. It is stated that this situation arises from the religious misconception of the individuals.<sup>[7,12,13]</sup> Spirituality can be considered as a component of religion, it is a concept which includes religious practices but it is comprehensive to be limited to religious beliefs and practices.<sup>[2,6]</sup> It is known that spiritual issues such as spiritual bond with the recipient, a spiritual concern about organ loss, subjective norms, bodily integrity, and traditional beliefs about death are significant factors affecting individuals' willingness to

Table 1. Distribution of the participants according to their socio-demographic characteristics

Socio-demographic Characteristics	Number	Percentage
<b>Gender</b>		
Male	192	33.7
Female	377	66.3
<b>Marital status</b>		
Married	142	25.0
Single	427	75.0
<b>Education status</b>		
Literate	8	1.4
Primary education	19	3.3
Secondary education	29	5.1
High school	199	35.0
Undergraduate	285	50.1
Graduate	29	5.1
<b>Chronic disease</b>		
Yes	90	15.8
No	479	84.2
<b>Total</b>	<b>569</b>	<b>100</b>

Table 2. Correlation between spiritual well-being and organ donation attitude scores

Spiritual Well-Being Scale Scores	Organ Donation Attitude Scale Scores			
	positive attitude towards organ donation	negative attitude towards organ donation	Fear of medical neglect	Fear of physical injury
Transcendence	r:-0.081 p:0.054	r:0.145 p:0.001	r:0.164 p:0.0001	r:0.115 p:0.006
Harmony with nature	r:-0.228 p:0.0001	r:0.313 p:0.0001	r:0.315 p:0.0001	r:0.285 p:0.0001
Anomie	r:-0.248 p:0.0001	r:0.158 p:0.0001	r:0.183 p:0.0001	r:0.111 p:0.008
Total SWBS	r:-0.177 p:0.0001	r:0.298 p:0.0001	r:0.323 p:0.0001	r:0.248 p:0.0001

become organ donors.<sup>[2,7,12,14]</sup> Bresnahan et al. (2007) stated that increased spiritual concerns are causing fears about organ donation which restrains participants willingness to donate organs.<sup>[14]</sup> In this study, a weak negative correlation was found between spiritual well-being and positive organ donation attitude. In other words, as the spiritual well-being levels of the participants increase, their voluntary attitude towards organ donation decreases. Nevertheless, there was a positive correlation between spiritual well-being and negative organ donation attitude. It can be said that individuals who are spiritually strong have a negative attitude towards organ donation. It is thought that the negative attitude of people who are spiritually strong to organ donation may be due to misconceptual religious and spiritual beliefs. At the same time, this result is thought to be due to the fact that people with high spiritual concerns are less willing to donate organs. Therefore, it can be said that studies examining the relationship between spiritual concerns and attitude to organ donation are needed. Bortz et al. (2015) stated that willingness to donate organs correlated with low level of transcendental spirituality.<sup>[2]</sup> Similarly, in this study it was found that participants with high transcendental spirituality tend to have negative attitudes towards organ donation. It thought that transplantation nurses, who have an important place in the campaigns on organ donation, have responsibilities to determine the spiritual values of the society and to encourage the society to donate organs.

## CONCLUSIONS

There was a negative correlation between spiritual well-being and positive organ donation attitudes. It is recommended that transplantation nurses, who provide a holistic care service, plan campaigns for different spiritual beliefs to encourage individuals to donate organs. In addition, it is recommended that training programs for individuals with varying levels of spiritual well-being should be conducted with multidisciplinary teams.

## ETHICAL DECLARATIONS

**Ethics Committee Approval:** Ethical Issue: This study was approved by the non-interventional clinical research ethics committee of Izmir Bakircay University (Approval number: 2020/09-63).

**Informed Consent:** Written consent was obtained from all patients who participated in the study and their relatives.

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