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Research Article

A Closer Look into the Correlates of Spiritual Well-Being in Women with Breast Cancer: The Mediating Role of Social Support

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Abstract
The aim of this study was to obtain insight into the relationships between spiritual well-being, social support, psychological flexibility, and personality traits in women with breast cancer. The study was conducted on 64 women from Serbia (Mage = 58.36, SD = 11.30) who were undergoing radiation therapy. The Quality of Life Instrument – Breast Cancer Patient Version (QOL-BC) was used to assess spiritual well-being (religious and spiritual activities, changes in spiritual life after the cancer diagnosis, uncertainty about the future, positive changes in life following the illness, a sense of purpose/reason for being alive, and hope). Perceived social support was measured with the Medical Outcomes Study Social Support Survey (MOS-SSS), psychological inflexibility was evaluated with the Acceptance and Action Questionnaire (AAQ II), and personality traits were assessed with the Big Five Inventory (BFI). Demographic and clinical data were also collected. Multiple regression analysis showed that younger, less agreeable, and more conscientious patients were more likely to experience positive changes in life after the illness; greater perceived social support positively predicted a sense of purpose/reason for being alive, and younger, more open to experience patients tended to be more hopeful. Full mediation effect of perceived social support was revealed – participants who were more agreeable and open to experience, through greater perceived support, achieved a higher sense of purpose/reason for being alive. In contrast, conscientious and psychologically inflexible individuals perceived less support, which resulted in a reduced sense of purpose. Our results highlight the pivotal role of perceived social support, which could modulate and diminish negative psychological, spiritual, and existential consequences of breast cancer.

Keywords:
Spiritual well-being • Social support • Breast cancer • Psychological inflexibility • Personality traits

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Introduction

There are indices that spirituality and religiosity might be positively related to various indicators of mental health, and play a significant role in recovering from life crises, such as serious illness (Garssen et al., 2021; Marks, 2005; Palmer Kelly et al., 2022; Tanhan & Young, 2022; Unterrainer et al., 2014). Thus, it has been shown that spiritual well-being is positively associated with quality of life in cancer patients (Kamijo & Miyamura, 2020; Yilmaz & Cengiz, 2020). Breast cancer, as the most prevalent malignant disease in women (McGuire, 2016; WHO, 2023), brings with it a psychological and emotional burden such as distress, anxiety, depression, fatigue, decreased social interactions, and vulnerability to emotional disorders (Guarino et al., 2020). Diagnosis and demanding treatment of breast cancer challenge both the physical and mental health of an individual. When confronted with such a crisis, a person often experiences a wide range of intense and unpleasant emotional reactions, concerns, and fears. Among many psychological challenges, patients usually experience survival concerns, existential suffering, impaired body-image, diminished self-esteem, decreased faith (Mohebbifar et al., 2015), symptoms of depression and anxiety (Tsaras et al., 2018), and overall worsened quality of life (Tsaras et al., 2018; Yilmaz & Cengiz, 2020). Many patients facing the experience of cancer feel the need to address spiritual issues with their healthcare providers (Pearce et al., 2012). However, in the context of clinical oncology, the spiritual needs of the patients are frequently underestimated (Peteet & Amonoo, 2023), and patients often receive far less spiritual care than they desire (Pearce et al., 2012). According to recent guidelines from the National Comprehensive Cancer Network, addressing the spiritual needs of patients in oncology is recognized as one of the highest priorities in providing them with full psychosocial support (Riba et al., 2019).

Spirituality may be described as a complex construct, referring to the purpose and meaning in life, seen through the perspective of interaction with self, others, and the world (Timmins & Caldeira, 2017). This construct specifically gains importance in life-threatening situations or serious life challenges, such are health issues (Timmins & Caldeira, 2017). Religiosity has commonly been defined as a concept more directed toward institutions and traditions, while spirituality is often described as a broader construct that is not necessarily tied to confessional bonds (Sulmasy, 2002). Therefore, both religiosity and spirituality can be considered an important aspect of human existence, creating the context for purpose and meaning in life (Unterrainer et al., 2014).

Spiritual well-being and personality traits

It is known that notable individual differences exist in how spirituality and religion are central to people, and how they experience them. Previous studies examining the relationship between spirituality and personality from the Big Five perspective in

nonclinical population have yielded intriguing findings. Some authors have observed significant correlations between spiritual/religious well-being and all five personality dimensions (Unterrainer et al., 2010). However, those personality dimensions that are more temperamental in their nature, such as Extraversion and Neuroticism, seem to be less relevant for understanding individual differences in religion and spirituality (Saroglou & Muñoz-García, 2008). At the same time, traits that seem to be more character and virtue-related, such as Agreeableness and Conscientiousness, have a much clearer and more consistent relationship with religiosity, while Openness to experience seems to distinguish between a tendency toward traditional religiosity and modern spirituality (Lace et al., 2020; Saroglou, 2002; Saroglou & Muñoz-García, 2008). Löckenhoff and colleagues (2009) obtained results somewhat consistent with these insights, finding that among people living with HIV spirituality/religiousness was more strongly associated with Conscientiousness, Agreeableness, and Openness, rather than Extraversion and Neuroticism. Nevertheless, little is known about the relationship between personality and spiritual well-being when it comes to patients treated for breast cancer. Exploring this question was one of the aims of the current study.

Spiritual well-being and psychological flexibility

One of the constructs that is often associated with mental health and well-being is psychological flexibility. This concept originates from Acceptance and commitment therapy (ACT) and reflects the ability of an individual to be fully in contact with the present moment, including unpleasant private events, such as thoughts, feelings, and bodily sensations, while at the same time engaging in behaviors which are consistent to one's personal goals and values (Bond et al., 2011). On the other hand, psychological inflexibility occurs when individual attempts to avoid these unwanted personal experiences, which leads to a paradoxical effect, increasing psychological and emotional distress in return (Hayes et al., 2004). It has already been shown that psychological flexibility is a relevant resource for adaptive coping with adverse experiences (Polizzi et al., 2020), as well as being a protective factor regarding anxiety, depression, and negative affect in breast cancer patients (Berrocal Montiel et al., 2016). Some authors have even addressed the possibilities of the potential relationship between ACT and spirituality (Kaplaner, 2019). However, there is still a significant lack of empirical research on the relationship between psychological flexibility as a core ACT concept, and spiritual well-being, especially in the population of breast cancer patients.

Spiritual well-being and social support

Although the link between spiritual well-being, personality traits, and psychological flexibility in breast cancer lacks sufficient research, it has been well established that

social support is a crucial coping resource for breast cancer patients, being positively associated with quality of life, emotional well-being, and survival (Fong et al., 2017; Kroenke et al., 2006; Wang et al., 2023). Furthermore, previous studies have demonstrated a positive relationship between social support and meaning in life (Jadidi & Ameri, 2022) and post-traumatic growth in breast cancer patients (Fekih-Romdhane et al., 2022; Yeung & Lu, 2018). It has also been found that social support is negatively related to symptoms of depression and anxiety in women with breast cancer (Du et al., 2022; Hajian-Tilaki et al., 2022). Still, the role of social support in the spiritual well-being of breast cancer patients is yet to be fully understood. Therefore, one of the goals of this study was to shed more light on this question.

Aims of the study

The body of previous literature leaves an impression of scarce insight into the association between personality traits related to spirituality/religiosity, psychological flexibility, social support, and spiritual well-being of breast cancer patients. The problem of the current study revolved around the intention to address this perceived gap in the existing literature. Consequently, the aims of this research were multiple: 1) to examine which aspects of spiritual well-being measured in our study were the most/the least prominent among breast cancer patients, 2) to explore predictors (with emphasis on personality traits, psychological inflexibility, and perceived social support) of various aspects of spiritual well-being in breast cancer patients, and 3) to examine if there was a mediating role of perceived social support between personal characteristics of patients, and their spiritual well-being.

Method

Sample and procedure

The research was conducted on 64 women, aged from 33 to 79 years (M_{age} = 58.36, *SD* = 11.30) while undergoing radiation therapy at the Oncology Institute of Vojvodina, Serbia. Inclusion criteria for the study were that this was the first breast cancer onset, that participants were not previously diagnosed with any other malignant disease, and that at the time of the study, the presence of metastasis was not detected. Regarding education, 26.6% of participants completed elementary school, 54.7% secondary school, 7.8% a college, while 11% had a university degree. Women mainly reported that they were retired (48.4%), after which the most represented were employed participants (26.6%), and finally, those unemployed (25%). In terms of marital status, 71.9% of participants had a partner, while 28.1% were single, divorced or widowed. Before radiation treatment, 18.8% of women received neoadjuvant chemotherapy and 50% of them received adjuvant chemotherapy. All participants had undergone breast cancer surgery. As for comorbidities,

62.5% of participants reported that they had nonmalignant comorbid conditions, such as hypertension, diabetes, cardiovascular disease, etc.

This cross-sectional research was conducted with the approval of the ethical committee of the Oncology Institute of Vojvodina, under ethical clearance number 4/17-789/2-8. The data were collected from patients at the beginning of their entry at the Clinic for Radiotherapy within the Oncology Institute of Vojvodina. Participants were recruited through a combination of convenient and purposeful sampling, respecting the principles of voluntary participation. Before filling in the questionnaires, all participants were informed about the main goals of the study, and they signed an informed consent.

Instruments

Spiritual well-being was measured with the subscale from the **Quality of Life Instrument – Breast Cancer Patient Version** (QOL-BC; Ferrell et al., 2012), based on a previous version of the QOL instrument developed by researchers at the City of Hope National Medical Center (Ferrell et al., 1995). The QOL-BC is a 46-item instrument, covering physical, psychological, social, and spiritual well-being. The subscale which measures spiritual well-being consists of 7 items, presented on a 10-point scale. Participants are asked to report the following: how important for them are religious activities such as praying or going to church/temple, how important for them are other spiritual activities such as meditation/praying, how much their spiritual life changed after the cancer diagnosis, how much uncertainty do they feel about the future, to what extent have they made positive changes in life due to the illness, do they have a sense of purpose/mission for life or a reason for being alive, and finally, how hopeful do they feel. Cronbach's alpha for the subscale on the sample in our study is .642. As internal consistency is acceptable, but clearly points out that this subscale contains some highly heterogeneous concepts, we rather used item scores as separate variables, instead of a total score. Additionally, we hoped that this approach would enable a more detailed and useful insight into determinants of various aspects of spiritual well-being in breast cancer patients.

Agreeableness, Conscientiousness, and Openness to experience were assessed with **The Big Five Inventory** (BFI; John et al., 1991). The BFI consists of 44 five-point Likert scale items that measure the Big Five dimensions of personality. The Agreeableness subscale includes 9 items, measuring characteristics such as compliance, tender-mindedness, forgiveness, altruism, modesty, etc. The Conscientiousness subscale contains 9 items covering tendency toward order, self-discipline, being efficient, etc. The Openness to experience subscale has 10 items and refers to the facets such as ideas/curiosity, fantasy, aesthetics, a wide range of interests, excitability, and unconventional values, among others (John & Srivastava,

1999). Cronbach's alpha for these subscales on the sample in our study was .816, .747, and .840 respectively. We focused on those personality traits that previous literature suggests are more relevant for understanding individual differences concerning religion and spirituality.

Psychological inflexibility was evaluated with the **Acceptance and Action Questionnaire** (AAQ II; Bond et al., 2011; Serbian adaptation Lazić et al., 2013). The AAQ II is a measure of psychological inflexibility, which reflects a tendency toward experiential avoidance of unpleasant private events such as unwanted thoughts, emotions, or bodily sensations. Serbian adaptation of the AAQ II consists of 8 items on a seven-point scale. A higher score indicates a greater level of psychological inflexibility. Cronbach's alpha for this instrument on the sample in the current research was .917.

Social support was measured with **The Medical Outcomes Study Social Support Survey** (MOS-SSS; Sherbourne & Stewart, 1991; Serbian adaptation Jovanović & Gavrilov-Jerković, 2015). The scale consists of 19 Likert-type items, measuring perceived, rather than received social support (Sherbourne & Stewart, 1991). The MOS-SSS covers four dimensions of functional social support: emotional/ informational support, instrumental support, positive social interaction, and affective support, while the total score, which was used for the purpose of this research, can also be calculated. Cronbach's alpha on the sample in our study is .969.

Data analysis

First, the descriptive statistics indicators and Pearson's correlation coefficients were calculated, to obtain basic information about the characteristics and relationships between the variables. One-way MANOVA was used to investigate potential differences in spiritual well-being domains with respect to demographic and clinical variables. Afterward, the repeated measures ANOVA with Greenhouse-Geisser correction was conducted, followed by the post hoc analysis with Bonferroni adjustment, in order to explore if there were statistically significant differences in the manifestations of various facets of spiritual well-being among breast cancer patients. Furthermore, we were interested in investigating predictors of diverse spiritual well-being domains, therefore 7 multiple regression analyses were conducted, with each aspect of spiritual well-being set as a criterion variable, while predictors in all models were age, Agreeableness, Conscientiousness, Openness to experiences, psychological inflexibility, and social support. Data were previously checked for multicollinearity. VIF values ranged from 1.063 to 3.114, which indicates an acceptable result according to a more conservative threshold of VIF > 5 being considered problematic for smaller samples (James et al., 2017). Finally, based on the results obtained through regression analysis, relying on the approach postulated

by Baron and Kenny (1986), we hypothesized a mediation model in order to explore whether there was a mediating role of perceived social support between personal characteristics of patients and sense of meaning and purpose in life as an indicator of spiritual well-being. A mediation model (4 predictors x 1 mediator x 1 outcome) was tested, with Agreeableness, Conscientiousness, Openness to experiences, and psychological inflexibility as predictor variables, perceived social support as a mediator, and sense of purpose or reason for being alive as an outcome variable. According to Cohen (1992) minimum sample size required to detect an R^2 value of 0.25 in any endogenous variable for a significance level of 5%, with statistical power of 80% and a number of independent variables in the model being 5 is 45 (sample in our research was $N = 64$). Data were analyzed using jamovi version 2.3.28 (The jamovi project, 2023).

Results

Descriptive measures for all variables in our study, along with Pearson correlations, are shown in Table 1 and Table 2. It can be seen in Table 1 that values of skewness and kurtosis for all variables fall around the acceptable range of -2 and +2 (George & Mallery, 2010). Regarding spiritual well-being, it turned out that participants manifest the lowest score on changes in spiritual life, while they score the highest on purpose/reason for being alive and hope. As can be seen in Table 2, Agreeableness correlates positively and significantly with religious activities, purpose/reason for being alive, and hope. Conscientiousness is positively related to religious activities, positive changes in life, and purpose/reason for being alive. Openness to experience correlates positively and significantly with positive changes in life and hope. Psychological inflexibility is positively and significantly related to spiritual life changes, and negatively to uncertainty, purpose/reason for being alive, and hope, while social support correlates positively and significantly with purpose/reason for being alive and hope. We also analyzed the relationship of demographic variables with different aspects of spiritual well-being. Age of participants correlated significantly and negatively with making positive changes in life due to the illness ($r = -.293$, $p = .019$), and with hope ($r = -.246$, $p = .050$), meaning that younger patients are more likely to experience positive life changes, and remain more hopeful. Furthermore, we explored possible differences in spiritual well-being domains regarding demographic/clinical variables such as work and marital status, chemotherapy status, and comorbid health conditions. One-way MANOVA showed that no significant differences in spiritual well-being were detected regarding work status, $F(14, 112) = .872$, $p = .591$, $\eta_p^2 = .098$, nor comorbidity, $F(7, 56) = 1.175$, $p = .332$, $\eta_p^2 = .128$. Marginally significant differences were found regarding chemotherapy status, $F(7, 56) = 2.172$, $p = .051$, $\eta_p^2 = .213$, with significant differences for uncertainty, $F(1, 62) = 4.374$, $p = .041$, $\eta_p^2 = .066$, meaning that patients who did not receive chemotherapy reported higher

levels of uncertainty about the future (M = 6.875, SD = 2.871), compared to those who did (M = 5.406, SD = 2.746). In addition, differences were found for positive changes in life due to the illness, $F(1, 62) = 4.621$, $p = .035$, $\eta_p^2 = .069$, with patients who received chemotherapy reporting greater levels of positive changes (M = 6.219, SD = 2.915), than those who did not (M = 4.406, SD = 3.774). Eventually, significant differences were obtained regarding marital status, $F(7, 56) = 2.310$, $p = .038$, $\eta_p^2 = .224$, specifically, for participation in religious activities such as praying or going to church/temple, $F(1, 42) = 9.136$, $p = .004$, $\eta_p^2 = .128$, with married women achieving higher scores (M = 6.500, SD = 3.953), than women who were single, divorced or widowed (M = 3.389, SD = 2.933).

Table 1.
Descriptive measures for spiritual well-being domains, personality traits, psychological inflexibility, and perceived social support

Variables	*M*	*SD*	*Sk*	*Ku*
Religious activities	5.625	3.934	-0.204	-1.559
Spiritual activities	5.375	3.885	-0.137	-1.575
Spiritual life changed	3.953	3.653	0.311	-1.421
Uncertainty	6.141	2.883	-0.284	-0.935
Positive changes in life	5.312	3.468	-0.267	-1.232
Purpose/Reason for being alive	8.359	2.242	-1.557	2.288
Hope	8.969	1.553	-1.679	2.132
Agreeableness	38.547	5.240	-0.625	-0.084
Conscientiousness	35.812	5.485	-0.111	-0.868
Openness to experience	36.328	7.107	-0.386	-0.079
Psychological inflexibility	21.234	10.512	0.675	-0.426
Perceived social support	82.172	11.541	-1.715	2.128

Table 2.
Pearson correlations between spiritual well-being domains, personality traits, psychological inflexibility, and perceived social support

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Religious activities (1)											
Spiritual activities (2)	.680**										
Spiritual life changed (3)	.413**	.502**									
Uncertainty (4)	-.076	-.012	-.304*								
Positive changes in life (5)	.308*	.149	.308*	.034							
Purpose/Reason for being alive (6)	.302*	.185	-.037	.191	.065						
Hope (7)	.320**	.257*	.134	.221	.302*	.441**					
Agreeableness (8)	.388**	.143	.034	.072	-.013	.414**	.260*				
Conscientiousness (9)	.274*	.048	.099	-.010	.250*	.328**	.186	.759**			
Openness to experience (10)	.109	-.032	.025	.043	.284*	.178	.358**	.458**	.578**		
Psychological inflexibility (11)	-.142	.045	.310*	-.301*	-.106	-.273*	-.253*	-.406**	-.369**	-.318*	
Perceived social support (12)	.125	-.057	-.144	.210	.133	.573**	.271*	.359**	.190	.346**	-.442**

Note. * $p < .05$, ** $p < .01$.

Repeated measures ANOVA with Greenhouse-Geisser correction yielded statistically significant differences regarding various aspects of spiritual well-being, $F(3.954, 249.130) = 25.065$, $p < .001$, $\eta_p^2 = .285$. Results of the post hoc analysis with a Bonferroni adjustment have shown that breast cancer patients score significantly higher on purpose/reason for being alive and hope compared to all other spiritual well-being domains ($p < .001$).

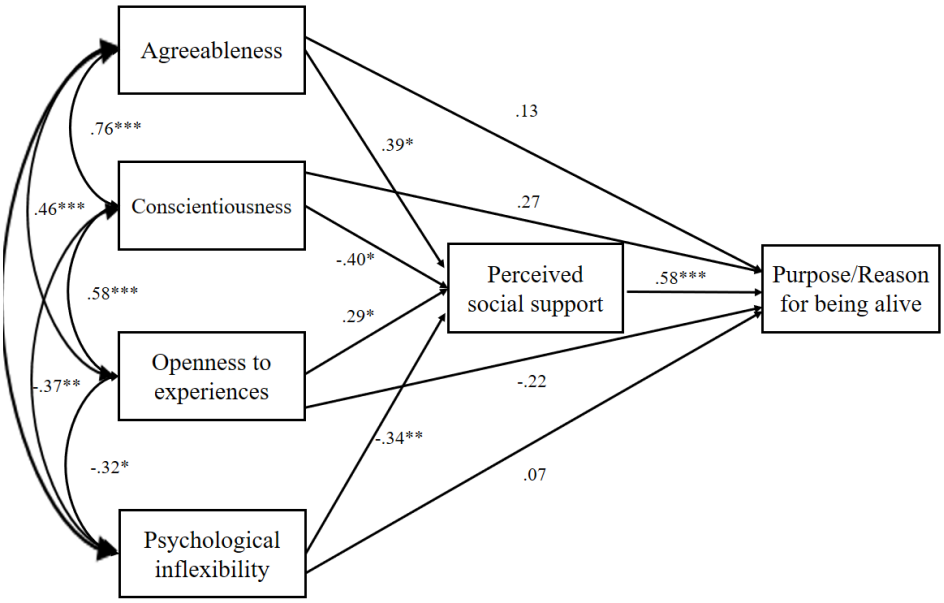
Table 3 shows the results of multiple regression analysis for different aspects of spiritual well-being in women with breast cancer. We can see that, among seven domains, statistically significant models were obtained for: positive changes in life (model explains about 31% of the variance – younger, less agreeable, that is more antagonistic, and more conscientious patients are more likely to experience positive changes in life after the illness), purpose/reason for being alive (model explains about 42% of criterion variance – patients with greater perceived social support manifested greater sense of purpose and reason for being alive), and for hope (model explains around 26% of criterion variance – younger and more open patients tend to be more hopeful).

Table 3.
Multiple regression analysis results for seven aspects of spiritual well-being

Model	Criterion variable	F	df_1	df_2	p	R^2	Predictors	**β**	p
1.	Religious activities	1.902	6	57	.096	.167			
2.	Spiritual activities	.517	6	57	.793	.052			
3.	Spiritual life changed	1.874	6	57	.101	.165			
4.	Uncertainty	1.275	6	57	.283	.118			
5.	Positive changes in life	4.194	6	57	.001	.306	Age	-.308	.009
							Agreeableness	-.581	.002
							Conscientiousness	.477	.017
							Openness to experience	.231	.114
							Psychological inflexibility	-.047	.721
							Perceived social support	.139	.302
6.	Purpose/Reason for being alive	6.985	6	57	.000	.424	Age	-.083	.428
							Agreeableness	.124	.457
							Conscientiousness	.251	.163
							Openness to experiences	-.199	.136
							Psychological inflexibility	.054	.652
							Perceived social support	.571	.000
7.	Hope	3.316	6	57	.007	.259	Age	-.293	.016
							Agreeableness	.187	.323
							Conscientiousness	-.281	.168
							Openness to experiences	.389	.011
							Psychological inflexibility	-.153	.265
							Perceived social support	.045	.744

Finally, we were interested to examine if there was a mediating role of perceived social support between personal characteristics such as Agreeableness, Conscientiousness, Openness to experiences and psychological inflexibility, and purpose/reason for being alive, as an indicator of spiritual well-being. The results of the analysis are shown in Figure 1 and in Table 4. It can be seen in Table 4 that statistically significant indirect effects were obtained for all predictors in the model. As direct effects were insignificant, full mediation of perceived social support is indicated (Kenny & Judd, 2014). The results suggest that patients who are more agreeable and open to experience, through greater perceived social support, achieve a higher sense of purpose or reason for being alive. At the same time, patients who are conscientious and psychologically inflexible perceive less social support, which results in a diminished sense of purpose or reason for being alive.

Figure 1.
Mediation model plot – mediating role of perceived social support



Note. Betas are completely standardized effect sizes, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4.

Mediation analysis effects

Predictors	Mediator	Outcome	Effects	Estimate	S.E	β	*Z*-value	*p*	95% C.I.	
									lower	upper
Agree-ableness	Social support	Purpose/ Reason for being alive	Direct	0.053	0.067	0.125	0.799	0.424	-0.078	0.185
			Indi-rect	0.097	0.045	0.227	2.174	0.030	0.010	0.185
			Total	0.151	0.076	0.352	1.974	0.047	0.001	0.300
Conscien-tiousness	Social support	Purpose/ Reason for being alive	Direct	0.111	0.068	0.272	1.638	0.101	-0.022	0.245
			Indi-rect	-0.095	0.045	-0.232	-2.094	0.036	-0.183	-0.006
			Total	0.017	0.078	0.041	0.214	0.831	-0.136	0.169
Openness to experi-ence	Social support	Purpose/ Reason for being alive	Direct	-0.068	0.039	-0.217	-1.768	0.077	-0.144	0.007
			Indi-rect	0.053	0.026	0.168	2.065	0.039	0.003	0.103
			Total	-0.015	0.044	-0.049	-0.346	0.729	-0.102	0.071
Psycho-logical inflexi-bility	Social support	Purpose/ Reason for being alive	Direct	0.014	0.024	0.066	0.583	0.560	-0.033	0.061
			Indi-rect	-0.042	0.016	-0.196	-2.540	0.011	-0.074	-0.010
			Total	-0.028	0.027	-0.130	-1.033	0.301	-0.080	0.025

Discussion

Spiritual well-being is considered to be an important resource for people with the experience of cancer, with a significant role in their life satisfaction, psychological adjustment to illness, and quality of life (Jafari et al., 2010; Kamijo & Miyamura, 2020; Wnuk, 2022; Yilmaz & Cengiz, 2020). Given that knowledge about correlates and mechanisms of spiritual well-being in breast cancer is still scarce, especially when it comes to the relationship with personality traits, psychological inflexibility, and social support, this study aimed to 1) examine which aspects of spiritual well-being measured in this research were the most/the least prevalent among breast cancer patients, 2) explore predictors of various aspects of spiritual well-being, and 3) investigate if perceived social support mediates the relationship between patients' characteristics and their sense of purpose and meaning in life.

Our results have shown that the most expressed aspects of spiritual well-being among breast cancer patients were the sense of purpose/reason for being alive and

hope. This could possibly indicate that these two aspects are of special importance for patients in the process of coping with breast cancer. Our results could be in accordance with statements of Scheier & Carver (2001), who argued that patients who adapt well to cancer diagnosis are those who manage to be hopeful, continue to find purpose, and remain engaged in life. Wnuk and colleagues (2012) have shown that purpose in life and hope were positively correlated with happiness and life satisfaction among cancer patients. Therefore, it is of particular importance to meet the spiritual needs of patients in clinical practice, in order to establish holistic support in oncology (Martins et al., 2020). Our finding might be useful in creating psychological support treatments for breast cancer patients, where successful psychological interventions could include specifically designed techniques, aimed at fostering hope and sense of purpose in life, as core resources in spiritual coping.

The relationship between certain aspects of spiritual well-being and demographic/clinical variables also revealed some relevant insights. Thus, patients who received chemotherapy tended to manifest lower levels of uncertainty, and higher levels of positive changes in life due to the illness. It may be that receiving chemotherapy, although psychologically very challenging, might have some positive effects on the spiritual well-being of patients. This finding sheds a rather new light on the psychological outcomes of chemotherapy. Furthermore, married women reported higher scores on participating in religious activities, such as going to church, praying, etc. It may be that having a partner could act as an encouraging factor when it comes to integration into the social community gathered around traditional values, religious practices, and interactions.

Our results regarding personality traits and their relationship with different domains of spiritual well-being among breast cancer patients are consistent with previous findings on non-clinical samples. As demonstrated in earlier studies (Saroglou, 2002; Saroglou & Muñoz-García, 2008), Agreeableness and Conscientiousness do correlate positively with religious aspects of spiritual well-being, which is not the case with Openness to experience (Saroglou, 2002; Saroglou & Muñoz-García, 2008). At the same time, all three personality traits also correlate positively with some of the non-religiously determined facets of spiritual well-being, such as positive changes in life, purpose/reason for being alive, and hope.

As for the predictors of different aspects of spiritual well-being, significant results were obtained for positive changes in life, purpose/reason for being alive, and hope. It turned out that younger, more conscientious, and, interestingly, less agreeable individuals, are more likely to make positive changes in life due to the illness. It has already been shown that younger age in women with breast cancer predicted effective stress management (Ozdemir & Tas Arslan, 2018). It is also possible that more organized, efficient, self-disciplined women are more likely to establish better compliance with medical professionals, and being

younger may help them to adopt more easily new, health-promoting habits. At the same time, it seems that those women who are nonconformists, ready to set healthy boundaries in social situations, and to give priority to their own needs, are more likely to make positive changes in life after the experience of illness. This finding is of special relevance in the context of previous literature which indicates that self-care behaviors such as preventive practices and taking care of own physical, psychological, and social needs are of great importance for the quality of life in breast cancer patients (Abdollahi et al., 2022; Chin et al., 2021). Sense of purpose or reason for being alive was positively predicted only by perceived social support. This result highlights the crucial importance of interpersonal relationships for breast cancer patients. Our finding is in line with the previous studies conducted on different samples; for example, one study showed that social support is strongly related to meaning in life in the elderly (Krause, 2007), while it was also demonstrated that social support for the terminally ill patients provided by close relatives had a positive influence on patients' meaning in life and life satisfaction (Dobríková et al., 2015). Similar results were observed in the sample of women with breast cancer, where a strong positive correlation between social support and meaning in life was found (Jadidi & Ameri, 2022). Also, social support has been found to be of key importance for effective stress management in women with the experience of breast cancer (Ozdemir & Tas Arslan, 2018). Our finding underscores the necessity of evaluating and addressing perceived social support of breast cancer patients during psychosocial assessment and support programs, in order to empower essential aspects of spiritual well-being. Finally, our results demonstrated that patients who are younger and more open to experience are more likely to be hopeful. This finding indicates that younger patients with personality characteristics such as curiosity, wide interests, and imaginativeness are more likely to remain hopeful in the face of adversities. Thus, it might be useful to evaluate Openness to experience among patients, as a potentially relevant factor for mental health and spiritual well-being outcomes.

Interestingly, psychological inflexibility was not found to be a significant predictor of any of the spiritual well-being domains when other variables such as age, personality, and perceived social support were taken into account. However, we can see that psychological inflexibility correlates negatively with the purpose/reason for being alive and hope. These results are in accordance with previous literature, showing that psychological inflexibility and avoidance of thoughts are related to worse mental health outcomes and psychological distress in breast cancer patients (González-Fernández et al., 2017), and in cancer patients in general (Brown et al., 2020). Meanwhile, an interesting finding emerged with the fact that psychological inflexibility correlates negatively with uncertainty - more psychologically inflexible patients report less uncertainty. Perhaps this is because psychologically flexible individuals allow themselves to be in contact with both pleasant and unpleasant inner content, such as worries, fears, and insecurities. In addition, our results indicate that psychological inflexibility correlates positively with changes in spiritual life,

although the applied questionnaire does not provide the information on what kind of change is in question, or whether people experience that change in a positive or negative way. Therefore, this should be further explored in future studies.

Finally, our results showed that patients who are more agreeable and more open to experience, through greater perceived social support, achieve a higher sense of purpose or reason for being alive. On the other hand, patients who are conscientious and psychologically inflexible perceive less social support, which results in a diminished sense of purpose. It seems that psychological determinants related to rigidity, inflexibility, lack of adaptability, and acceptance of constantly changing environment, are risk factors for perceiving less social support, which leads to a diminished sense of purpose in life. This finding is of great importance, as it draws attention to the fact that perceived social support might be an underlying mechanism in the relationship between personality and spiritual well-being – specifically the sense of purpose and meaning in life. Social support could modulate mental health outcomes, with the possibility of diminishing the negative psychological consequences of breast cancer, as Fekih-Romdhane and colleagues (2022) argue. Specific ACT and mindfulness-based techniques aimed at the enhancement of flexibility, acceptance, and openness could be employed, together with encouraging patients to openly and directly express their needs, seek support from those who are willing to provide it and recognize the support they receive (e.g. thank you lists, gratitude journals, etc).

Limitations and recommendations for future research

Lastly, besides many useful insights, our study has also some important limitations, such as a relatively small sample size and cross-sectional design, which hinders drawing conclusions about causality, and rather leaves space for generating hypotheses around causal relationships. Future studies could examine the role of social support in spiritual well-being among breast cancer patients from a longitudinal perspective, taking into account the relationship of patients with spiritual/religious content prior to disease. This is especially significant having in mind findings that negative religious coping by those who previously had minimal religious/spiritual engagement may lead to diminished well-being, and that spiritual/religious struggle in early phases of survivorship may be associated with reduced well-being, which might be resolved over time (Schreiber & Brockopp, 2012). These changing trajectories in spiritual well-being among breast cancer patients could be the focus of future studies. Furthermore, to gain more subtle and sophisticated insight into the relationship between spiritual well-being and personality, future research could focus on other personality models or on examining Big Five personality traits on facet rather than on factor level, as was done in some studies conducted on nonclinical samples (Saroglou & Muñoz-García, 2008). Finally, as this research is quantitative, subsequent studies could employ a

qualitative or mixed-method approach to gain a deeper understanding of patients' personal experiences – thoughts, feelings, and behaviors related to spiritual well-being and perceived social support. Researchers could use some more innovative approaches such as online photovoice, online interpretative phenomenological analysis, or community-based participatory research (Dari et al., 2023; Doyumgaç et al., 2021; Subasi, 2023), to set the ground for more effective healthcare services and holistic psychosocial support, tailored to the unique needs of breast cancer patients.

Conclusions

- Spiritual well-being is of great importance for patients who are being treated for breast cancer, especially those aspects related to the purpose/reason for being alive and hope. This fact should not be overlooked by healthcare providers and should be considered while planning and implementing programs of psychosocial support for breast cancer patients, in the manner of holistic approach to medical care.
- Personality traits, quality of social network, demographic and clinical factors should be taken into account in screening procedures, in order to detect patients who are at potential risk of developing mental health problems and spiritual distress, so they could be provided with support as early as possible.
- The inclusion of therapeutic techniques that could foster flexibility and openness, and provide patients with skills to establish, cultivate, and recognize supporting interpersonal relationships is of crucial importance, as perceived social support might be an underlying factor that intervenes between the capacity of an individual to be flexible, accepting and open, and sense of purpose and meaning in life.

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Authors' contribution. The author was engaged in conceptualization, investigation, methodology, data curation, data analysis, writing, and editing the manuscript.

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References

Abdollahi, A., Alsaikhan, F., Nikolenko, D. A., Al-Gazally, M. E., Mahmudiono, T., Allen, K. A., & Abdullaev, B. (2022). Self-care behaviors mediates the relationship between resilience and quality of life in breast cancer patients. *BMC Psychiatry*, *22*(1), 825. https://doi.org/10.1186/s12888-022-04470-5

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Berrocal Montiel, C., Rivas Moya, T., Venditti, F., & Bernini, O. (2016). On the contribution of psychological flexibility to predict adjustment to breast cancer. *Psicothema*, *28*(3), 266–271. https://doi.org/10.7334/psicothema2015.271

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire – II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy, 42*(4), 676–688. https://doi.org/10.1016/j.beth.2011.03.007

Brown, S. L., Roush, J. F., Marshall, A. J., Jones, C., & Key, C. (2020). The intervening roles of psychological inflexibility and functional impairment in the relation between cancer-related pain and psychological distress. *International Journal of Behavioral Medicine*, *27*(1), 100–107. https://doi.org/10.1007/s12529-019-09838-8

Chin, C. H., Tseng, L. M., Chao, T. C., Wang, T. J., Wu, S. F., & Liang, S. Y. (2021). Self-care as a mediator between symptom-management self-efficacy and quality of life in women with breast cancer. *PloS One*, *16*(2), e0246430. https://doi.org/10.1371/journal.pone.0246430

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. https://doi.org/10.1037//0033-2909.112.1.155

Dari, T., Fox, C., Laux, J. M., & Speedlin Gonzalez, S. (2023). The development and validation of the Community-based Participatory Research Knowledge Self-Assessment Scale (CBPR-KSAS): A Rasch analysis. *Measurement and Evaluation in Counseling and Development*, *56*(1), 64-79. https://orcid.org/0000-0002-3551-8593

Dobríková, P., Pčolková, D., AlTurabi, L. K., & West, D. J., Jr. (2015). The effect of social support and meaning of life on the quality-of-life care for terminally ill patients. *The American Journal of Hospice & Palliative Care*, *32*(7), 767–771. https://doi.org/10.1177/1049909114546208

Doyumgaç, I., Tanhan, A., & Kiymaz, M. S. (2021). Understanding the most important facilitators and barriers for online education during COVID-19 through online photovoice methodology. *International Journal of Higher Education*, *10*(1), 166-190. https://doi.org/10.5430/ijhe.v10n1p166

Du, S., Li, K., Wang, C., Li, Y., Li, J., Luan, Z., & Peng, X. (2022). Spiritual needs and their associated psychosocial factors among women with breast cancer: A cross-sectional study. *Journal of Advanced Nursing*, *78*(12), 4113–4122. https://doi.org/10.1111/jan.15416

Fekih-Romdhane, F., Riahi, N., Achouri, L., Jahrami, H., & Cheour, M. (2022). Social support is linked to post-traumatic growth among Tunisian postoperative breast cancer women. *Healthcare*, *10*(9), 1710. https://doi.org/10.3390/healthcare10091710

Ferrell, B. R., Dow, K. H., & Grant, M. (1995). Measurement of the quality of life in cancer survivors. *Quality of Life Research, 4*(6), 523-531. https://doi.org/10.1007/BF00634747

Ferrell, B. R., Dow, K. H., & Grant, M. (2012). *Quality of Life Instrument - Breast Cancer Patient Version (QOL-BC).* City of Hope National Medical Center. https://prc.coh.org/QOL-BC.pdf

Fong, A. J., Scarapicchia, T. M. F., McDonough, M. H., Wrosch, C., & Sabiston, C. M. (2017). Changes in social support predict emotional well-being in breast cancer survivors. *Psycho-oncology*, *26*(5), 664–671. https://doi.org/10.1002/pon.4064

Garssen, B., Visser, A., & Pool, G. (2021). Does spirituality or religion positively affect mental health? Meta-analysis of longitudinal studies. *International Journal for the Psychology of Religion, 31*(1), 4–20. https://doi.org/10.1080/10508619.2020.1729570

George, D., & Mallery, M. (2010). *SPSS for Windows step by step: A simple guide and reference, 17.0 Update* (10th ed). Pearson.

González-Fernández, S., Fernández-Rodríguez, C., Mota-Alonso, M. J., García-Teijido, P., Pedrosa, I., & Pérez-Álvarez, M. (2017). Emotional state and psychological flexibility in breast cancer survivors. *European Journal of Oncology Nursing*, *30*, 75–83. https://doi.org/10.1016/j.ejon.2017.08.006

Guarino, A., Polini, C., Forte, G., Favieri, F., Boncompagni, I., & Casagrande, M. (2020). The effectiveness of psychological treatments in women with breast cancer: A systematic review and meta-analysis. *Journal of Clinical Medicine*, *9*(1), 209. https://doi.org/10.3390/jcm9010209

Hajian-Tilaki, E., Hajian-Tilaki, K., Moslemi, D., Godazandeh, G., & Firouzbakht, M. (2022). Association of social support, spirituality with psychological factors in Iranian breast cancer survivors: An evidence from a cross-sectional study. *Nursing Open*, *9*(2), 1173–1180. https://doi.org/10.1002/nop2.1158

Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., Polusny, M. A., Dykstra, T. A., Batten, S. V., Bergan, J., Stewart, S. H., Zvolensky, M. J., Eifert, G. H., Bond, F. W., Forsyth, J. P., Karekla, M., & McCurry, S. M. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record, 54*(4), 553–578. https://doi.org/10.1007/BF03395492

Jadidi, A., & Ameri, F. (2022). Social support and meaning of life in women with breast cancer. *Ethiopian Journal of Health Sciences*, *32*(4), 709–714. https://doi.org/10.4314/ejhs.v32i4.6

Jafari, E., Najafi, M., Sohrabi, F., Dehshiri, G. R., Soleymani, E., & Heshmati, R. (2010). Life satisfaction, spirituality well-being and hope in cancer patients. *Procedia-Social and Behavioral Sciences*, *5*, 1362-1366. https://doi.org/10.1016/j.sbspro.2010.07.288.

James, G., Witten, D., Hastie, T., & Tibshirani R. (2017). *An introduction to statistical learning: With applications in R* (1st ed. 2013, corr. 7th printing 2017). Springer. https://doi.org/10.1007/978-1-4614-7138-7_1

The jamovi project (2023). *jamovi* (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory – Versions 4a and 54*. University of California, Berkley, Institute of Personality and Social Research. https://doi.org/10.1037/t07550-000

John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). Guilford Press.

Jovanović V., & Gavrilov-Jerković, V. (2015). Validacija srpskog prevoda skale Socijalne podrške MOS-SSS. *Primenjena Psihologija, 8*(3), 245-264. https://doi.org/10.19090/pp.2015.3.245-264

Kamijo, Y., & Miyamura, T. (2020). Spirituality and associated factors among cancer patients undergoing chemotherapy. *Japan Journal of Nursing Science*, *17*(1), e12276. https://doi.org/10.1111/jjns.12276

Kaplaner, K. (2019). Spirituality in the context of Acceptance and Commitment Therapy (ACT). *Spiritual Psychology and Counseling, 4,* 351–358. https://dx.doi.org/10.12738/spc.2019.4.3.067

Kenny, D. A., & Judd, C. M. (2014). Power anomalies in testing mediation. *Psychological Science, 25*(2), 334–339. https://doi.org/10.1177/0956797613502676

Krause N. (2007). Longitudinal study of social support and meaning in life. *Psychology and Aging*, *22*(3), 456–469. https://doi.org/10.1037/0882-7974.22.3.456

Kroenke, C. H., Kubzansky, L. D., Schernhammer, E. S., Holmes, M. D., & Kawachi, I. (2006). Social networks, social support, and survival after breast cancer diagnosis. *Journal of Clinical Oncology*, *24*(7), 1105–1111. https://doi.org/10.1200/JCO.2005.04.2846

Lace, J. W., Evans, L. N., Merz, Z. C., & Handal, P. J. (2020). Five-Factor Model personality traits and self-classified religiousness and spirituality. *Journal of Religion and Health*, *59*(3), 1344–1369. https://doi.org/10.1007/s10943-019-00847-1

Lazić, M., Belopavlović, R., & Cvejić-Starčević, N. (2013, October 11-13). *Psychometric characteristics of Acceptance and Action Questionnaire (AAQ-II): Serbian adaptation* [Paper presentation]. The Conference Current Trends in Psychology, Novi Sad, Serbia.

Löckenhoff, C. E., Ironson, G. H., O'Cleirigh, C., & Costa, P. T., Jr (2009). Five-factor Model personality traits, spirituality/religiousness, and mental health among people living with HIV. *Journal of Personality*, *77*(5), 1411–1436. https://doi.org/10.1111/j.1467-6494.2009.00587.x

Marks, L. (2005). Religion and bio-psycho-social health: A review and conceptual model. *Journal of Religion and Health, 44*(2), 173–186. https://doi.org/10.1007/s10943-005-2775-z

Martins, H., Dias Domingues, T., & Caldeira, S. (2020). Spiritual well-being in cancer patients undergoing chemotherapy in an outpatient setting: A cross-sectional study. *Journal of Holistic Nursing*, *38*(1), 68–77. https://doi.org/10.1177/0898010119858269

McGuire, S. (2016). World Cancer Report 2014. Geneva, Switzerland: World Health Organization, International Agency for Research on Cancer, WHO press, 2015. *Advances in Nutrition*, *7*(2), 418–419. https://doi.org/10.3945/an.116.012211

Mohebbifar, R., Pakpour, A. H., Nahvijou, A., and Sadeghi, A. (2015). Relationship between spiritual health and quality of life in patients with cancer. *Asian Pacific Journal of Cancer Prevention, 16*(16), 7321–7326. https://doi.org/10.7314/apjcp.2015.16.16.7321

Ozdemir, D., & Tas Arslan, F. (2018). An investigation of the relationship between social support and coping with stress in women with breast cancer. *Psycho-oncology*, *27*(9), 2214–2219. https://doi.org/10.1002/pon.4798

Palmer Kelly, E., Paredes, A. Z., Tsilimigras, D. I., Hyer, J. M., & Pawlik, T. M. (2022). The role of religion and spirituality in cancer care: An umbrella review of the literature. *Surgical Oncology*, *42*, 101389. https://doi.org/10.1016/j.suronc.2020.05.004

Pearce, M. J., Coan, A. D., Herndon, J. E., 2nd, Koenig, H. G., & Abernethy, A. P. (2012). Unmet spiritual care needs impact emotional and spiritual well-being in advanced cancer patients. *Supportive Care in Cancer*, *20*(10), 2269–2276. https://doi.org/10.1007/s00520-011-1335-1

Peteet, J. R., & Amonoo, H. L. (2023). Spirituality in the care of patients with cancer: What is the psychiatrist's role? *Palliative & Supportive Care*, *21*(1), 173–175. https://doi.org/10.1017/S1478951521001930

Polizzi, C., Lynn, S. J., & Perry, A. (2020). Stress and coping in the time of COVID-19: Pathways to resilience and recovery. *Clinical Neuropsychiatry, 17*(2), 59–62. https://doi.org/10.36131/CN20200204

Riba, M. B., Donovan, K. A., Andersen, B., Braun, I., Breitbart, W. S., Brewer, B. W., Buchmann, L. O., Clark, M. M., Collins, M., Corbett, C., Fleishman, S., Garcia, S., Greenberg, D. B., Handzo, R. G. F., Hoofring, L., Huang, C. H., Lally, R., Martin, S., McGuffey, L., Mitchell, W., … Darlow, S. D. (2019). Distress management, version 3.2019, NCCN clinical practice guidelines in oncology. *Journal of the National Comprehensive Cancer Network*, *17*(10), 1229–1249. https://doi.org/10.6004/jnccn.2019.0048

Saroglou, V. (2002). Religion and the five factors of personality: A meta-analytic review. *Personality and Individual Differences, 32*(1), 15–25. https://doi.org/10.1016/S0191-8869(00)00233-6

Saroglou, V., & Muñoz-García, A. (2008). Individual differences in religion and spirituality: An issue of personality traits and/or values. *Journal for the Scientific Study of Religion, 47*(1), 83–101. https://doi.org/10.1111/j.1468-5906.2008.00393.x

Scheier, M. F., & Carver, C. S. (2001). Adapting to cancer: The importance of hope and purpose. In A. Baum & B. L. Andersen (Eds.), *Psychosocial Interventions for Cancer* (pp. 15–36). American Psychological Association. https://doi.org/10.1037/10402-002

Schreiber, J. A., & Brockopp, D. Y. (2012). Twenty-five years later - what do we know about religion/spirituality and psychological well-being among breast cancer survivors? A systematic review. *Journal of Cancer Survivorship: Research and Practice, 6*(1), 82–94. https://doi.org/10.1007/s11764-011-0193-7

Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine, 32*(6), 705–714. https://doi.org/10.1016/0277-9536(91)90150-b

Subasi, Y. (2023). College belonging among university students during COVID-19: An online interpretative phenomenological (OIPA) perspective. *Journal of Happiness and Health*, *3*(2), 109–126. https://doi.org/10.47602/johah.v3i2.52

Sulmasy, D. P. (2002). A biopsychosocial-spiritual model for the care of the patients at the end of life. *The Gerontologist, 42*(3), 24–33. https://doi.org/10.1093/geront/42.suppl_3.24

Tanhan, A., & Young, J. S. (2022). Muslims and mental health services: A concept map and a theoretical framework. *Journal of Religion and Health*, *61*(1), 23–63. https://doi.org/10.1007/s10943-021-01324-4

Timmins, F., & Caldeira, S. (2017). Understanding spirituality and spiritual care in nursing. *Nursing Standard, 31*(22), 50-57. http://dx.doi.org/10.7748/ns.2017.e10311

Tsaras, K., Papathanasiou, I. V., Mitsi, D., Veneti, A., Kelesi, M., Zyga, S., & Fradelos, E. C. (2018). Assessment of depression and anxiety in breast cancer patients: Prevalence and associated factors. *Asian Pacific Journal of Cancer Prevention*, *19*(6), 1661–1669. https://doi.org/10.22034/APJCP.2018.19.6.1661

Unterrainer, H.-F., Ladenhauf, K. H., Moazedi, M. L., Wallner-Liebmann, S. J., & Fink, A. (2010). Dimensions of religious/spiritual well-being and their relation to personality and psychological well-being. *Personality and Individual Differences, 49*(3), 192–197. https://doi.org/10.1016/j.paid.2010.03.032

Unterrainer, H. F., Lewis, A. J., & Fink, A. (2014). Religious/spiritual well-being, personality and mental health: A review of results and conceptual issues. *Journal of Religion and Health*, *53*(2), 382–392. https://doi.org/10.1007/s10943-012-9642-5

Wang, F., Gao, Y., Han, Z., Yu, Y., Long, Z., Jiang, X., Wu, Y., Pei, B., Cao, Y., Ye, J., Wang, M., & Zhao, Y. (2023). A systematic review and meta-analysis of 90 cohort studies of social isolation, loneliness and mortality. *Nature Human Behaviour*. https://doi.org/10.1038/s41562-023-01617-6

WHO (2023, July 12). Breast cancer. https://www.who.int/news-room/fact-sheets/detail/breast-cancer

Wnuk, M., Marcinkowski, J. T., & Fobair, P. (2012). The relationship of purpose in life and hope in shaping happiness among patients with cancer in Poland. *Journal of Psychosocial Oncology*, *30*(4), 461–483. https://doi.org/10.1080/07347332.2012.684988

Wnuk M. (2022). Beneficial effects of spiritual experiences and existential aspects of life satisfaction of breast and lung cancer patients in Poland: A pilot study. *Journal of Religion and Health*, *61*(6), 4320–4336. https://doi.org/10.1007/s10943-022-01601-w

Yeung, N. C. Y., & Lu, Q. (2018). Perceived stress as a mediator between social support and posttraumatic growth among Chinese American breast cancer survivors. *Cancer Nursing*, *41*(1), 53–61. https://doi.org/10.1097/NCC.0000000000000422

Yilmaz, M., & Cengiz, H. Ö. (2020). The relationship between spiritual well-being and quality of life in cancer survivors. *Palliative and Supportive Care 18*(1), 55–62. https://doi.org/10.1017/S1478951519000464

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Research Article

Why Self-Care Is Not Enough: The Nature of True Well-Being

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Abstract
The notion of self-care—like its precursor, self-help—has emerged due to a spiritual vacuum in the contemporary world. The burgeoning mental health crisis that is prevalent today appears inseparable from the broader existential predicament facing humanity. Mainstream psychology and its therapies have not been able to address these challenges, in response to which we have seen the inevitable rise of self-care remedies. Across humanity's diverse spiritual cultures, these have always been available, yet they were invariably grounded in a religious tradition and its sacred psychology. The more we are marginalized from such roots, the more self-care is required—our current obsession with which is the unacknowledged search for wholeness due to modern people having lost their sense of the sacred.

Keywords:
Self-Care • Self-Help • Psychology • Mental health • Religion

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Introduction

Talk of "self-care" is heard everywhere today. It has become a buzzword that has entered every facet of mainstream society, becoming a secular mantra of the "therapeutic" ethos that has been absorbed into today's dominant culture, where we are continually called to *practice self-care*. We are usually not told exactly what this entails but are simply urged to undertake whatever works for us. Indeed, we are told that we can never do this enough.

Self-care is a nebulous term, and rarely is it asked: What is the self that we are trying to look after? Self-care is no longer limited to mindfulness, walks in nature, meditative apps, yoga, or even journaling for that matter; now anything is pretty much considered self-care: healthy or self-indulgent eating, being alone or socializing, exercising or resting ("me-time"), shopping or simplifying—everything finds a place under this all-encompassing rubric.

It is not difficult to identify certain resemblances between earlier forms of the New Age movement and *self-help*. The current obsession with *self-care*, appears to be a crafty rebranding of the older term which seemed to indicate a deficiency. "Self-care," by contrast, gives the impression that everything is already fine just the way it is. This stance is evidenced by an inordinate focus on the self, and a complete reliance on its capacity to help realize our human potential, as though this was the true meaning of our existence. Yet, to rely fully on the self is to forget that such potential is "on loan," so to speak, in that it belongs not to us but to the Divine. An essential distinction thus needs to be made between true self-care and its spurious modern replacements.

In the absence of a sacred orientation in people's lives, self-care has become a secular substitute for traditional forms of spiritual practice. Instead of practicing traditional virtues that help us conform to Divine reality, we are taught techniques—both arbitrary and individualistic—to manage our responses to the increasingly chaotic conditions of modern life. This inversion of traditional norms has contributed to the rise of "therapeutic" culture and to human beings in modernity being defined exclusively in "psychological" terms—these are signs, in themselves, of the decline that has brought on the current spiritual crisis in our midst.

No one will dispute that caring for ourselves is essential, but this cannot be done properly unless we focus on the whole self—comprising Spirit, soul, and body—and reconnect with our spiritual dimension. Any attempt to improve ourselves will fall short if we neglect our transcendent needs. Some distinctions have to be made between true self-care and self-indulgence, the former being that which supports our well-being, in contrast to simply surrendering to one's desires without regard to consequences. Central to this exploration is the need to recognize how selfhood is understood across the world's religions. While the Abrahamic monotheisms of

Judaism, Christianity, and Islam embrace a very different notion from what we find in the Hindu and Buddhist traditions, metaphysical reflection can help us to discern a unity that pervades them nevertheless.

True Self-Care

In light of the escalating mental health crisis today, we see the reduction of human reality to psychological phenomena alone, and an excessive pathologizing that views symptoms as signs of disorder. Not every dilemma needs to be diagnosed as a psychological disorder, and not all issues require mental health interventions. With the growing focus on personal strengths as opposed to pathology-driven ones, we can see that self-care options are a way of safeguarding ourselves from the trappings of a world that is preoccupied with illness and has lost its equilibrium.

Without spiritual discernment, we become readily prone to confusion and incapable of making proper distinctions. Secular approaches to self-care (akin to secular psychotherapy) can certainly have benefits such as setting boundaries in interpersonal relationships, being aware of our emotional life, engaging in meaningful activities, and regular exercise, for example. There is nothing wrong with addressing such matters in themselves, yet without knowing what it truly means to be human, everything that is intended for our good on the surface can be spiritually harmful and, therefore, serve to undermine our self-care in the end.

"Self-care" is often described as the cultivation of compassion for oneself. However, we can only become truly compassionate when we cleave to the Divine through our adherence to one of the world's great religions, for the true source of love and compassion is the highest reality itself. The secular world tries to convince us that we alone are able to provide for our own self-care; however, without grace nothing is possible, and it is through divine working that grace becomes active. Otherwise, we are apt to confuse immanence with transcendence. We are first called to see that "My kingdom is not of this world" (John 18:36) before we are able to acknowledge "The kingdom of God is within you" (Luke 17:21), "I am the Self … seated in the heart of all beings" (Bhagavad Gītā 10:20), or "We are nearer to him than the jugular vein" (Qur'ān 50:16).

A regard for all sentient beings, including ourselves and all the created order, is central to every spiritual tradition. In the Hindu and Buddhist traditions, it is envisaged as *benevolence* or *loving-kindness* (Pāli: *mettā*; Sanskrit: *maitrī*) and, within Mahāyāna Buddhism, it is simply called *compassion* (Sanskrit: *karuṇā*). In the Christian tradition, it is said that "God is love" (1 John 4:16) and, in Islam, Love (Arabic: *'ishq*) is an attribute of the Divine, as Rūmī (1207–1273) points out: "Love's creed is separate from all religions: The creed and denomination of lovers is God" (Chittick, 1983, p. 213). Although self-care rightly affirms the need for compassion

towards ourselves, its genesis lies solely in the Divine. We often hear today of the need to love ourselves, yet what we really need is to love not our egoic self, but the Divine within us and all beings, which is the true source of abiding felicity during our brief human sojourn, and beyond.

The growth of a global marketplace of self-care for mass consumption suggests that it is not for the betterment of the human condition, but rather a means of capitalizing on our distress instead of improving our well-being. To be sure, self-care is a big business, comprising a billion-dollar industry that has become a hallmark of corporate wellness programs around the globe. This problematic phenomenon is, perhaps, better known today by what Tibetan Buddhist teacher Chögyam Trungpa (1939–1987) has termed *spiritual materialism*. He writes: "The problem is that ego can convert anything to its own use, even spirituality" (2002, p. 13).

This is not to say, of course, that all mental health problems can be reduced to spiritual problems. The American clinical psychologist John Welwood (1943–2019) coined the term *spiritual bypassing* to describe a common tendency to adopt spiritual ideas and practices so as to avoid dealing with the "unfinished business" of our lives. He admits that it is "tempting to use spirituality as a way of trying to rise above this shaky ground. In this way, spirituality becomes just another way of rejecting one's experience" (2000, p. 207). It goes without saying that true spirituality has nothing to do with bypassing mental health issues, but is rather about encountering oneself fully in one's depths with a view to purifying the human psyche.

The Global Mental Health Crisis and its Ravages

Due to the burgeoning mental health epidemic and the inability of its practitioners to manage this crisis effectively, self-care has been proposed as a possible solution, especially as a way for mental health professionals to avoid burnout and compassion fatigue. Given the unprecedented number of suffering individuals, many have been encouraged to take responsibility for themselves, having fallen under the spell of self-care therapies as some kind of panacea. To get to the root of this phenomenon requires dispelling the myths and confusion that plague modern psychology.

Although the self-care movement urges us to engage in healthy socialization, and acknowledges the importance of human connection, it does so on purely individualistic terms, paradoxically leaving us to manage our inner lives in isolation from others, which runs counter to the advice we find among the spiritual traditions of the world. Today, the truth that "No man is an island" (Donne, 1923, p. 98), and that all of existence is interconnected, is often ignored. However, the human psyche is an integral part of the web of life and its underlying cosmic order. Given the heightened levels of alienation that we experience today, it is difficult to discern any apparent

wholeness. Isolated and disconnected, the human psyche remains fractured, unable to find psychological health and well-being.

Human beings are not altogether self-governing, despite the views of prominent thinkers like Michel Foucault (1926–1984), who defined man as being "destined to care for himself" (1986, p. 47). Yet, no amount of self-care or prescribed "me-time" will bring us to the realization of who we truly are and what we ultimately need, as these concerns cannot be addressed outside of a sacred context. Otherwise, the person that needs help is none other than the one who is expected to provide this very same care, thus perpetuating a vicious cycle. The transpersonal Self is not in need of care, for it alone can fulfill all our deeper needs. We are thus called to surrender and take refuge exclusively in the Divine, for this is the ultimate source of our well-being and wholeness. As we read in the Bhagavad Gītā: "Abandoning all dharmas, come to Me alone for shelter" (18:66).

In the midst all of this, a "culture of narcissism" is starting to emerge, as the prominent American historian and social critic Christopher Lasch (1932–1994) observed:

> Plagued by anxiety, depression, vague discontents, a sense of inner emptiness, the "psychological man" of the twentieth century seeks neither individual self-aggrandizement nor spiritual transcendence but peace of mind, under conditions that increasingly militate against it…. [I]n the struggle for composure; he [has] … hope[s] of achieving the modern equivalent of salvation, "mental health"…. (1978, p. 13)

There is no escaping the fact that, as a civilization, we have lost a sense of the sacred and that dehumanization is rampant in the modern world. Our preoccupation with self-care would not prevail in a society that is rooted in the sacred and, thus, spiritually healthy. It needs to be asked: how is self-care possible in a desacralized ambiance? Each day passes with increasing speed, placing greater responsibilities and burdens on people, leaving very little time to do much of anything, let alone contemplate the deeper truths of existence. To do so appears to many as a luxury—something that only the affluent can afford—but this is not the case. In fact, all spiritual traditions offer teachings and practices that can be adopted wherever we may find ourselves and in whatever circumstances.

Spiritually Informed Approaches

Prayer allows for a direct relationship to the Divine. When surveying the world's diverse religions, and their mystical dimensions, it becomes apparent that prayer defines the centrality of the human condition and holds an eschatological relevance. This is because human beings cannot go beyond themselves by personal effort alone; they need the support of that which transcends the empirical ego.

The prescription for all our earthly malaise has, traditionally, been the medicine of Divine Remembrance; in other words, prayer is the means by which we may become integrated into our transpersonal essence (see Laude, 2006). Within the Christian tradition, we find the Jesus Prayer that is supported by the injunction "Pray without ceasing" (1 Thessalonians 5:17). This remembrance of God (*dhikr Allāh*) in the Islamic tradition is considered therapeutic: "Verily in the remembrance of Allah do hearts find rest" (Qur'ān 13:28). In the Hindu tradition, the repetition (*japa*) of the Divine Names is a spiritual method available to all regardless of social status or spiritual aptitude. According to the 68th Jagadguru of Kanchi (1894–1994), this remembrance is always available: "He may think of god even on the bus or the train as he goes to his office or any other place" (2008, p. 5). Within the Buddhist tradition, there is the practice of *nembutsu* or invoking the name of Amida Buddha. This practice is also to be found within the religion of the First Peoples as indicated by the Lakota *wicasa wakan* or holy man Black Elk (1863–1950): "[W]e Indians know the One true God, and … we pray to Him continually" (1989, p. xx).

There is never a moment when the Divine is absent; rather, it is we who are absent—this is our greatest obstacle. The obsession with self-care is, in fact, linked to the spiritual crisis facing humanity. When properly understood, true self-care becomes impossible for one who accepts the modern worldview regarding who we are. An excessive focus on the profane self *is* the problem, because, relying on its own resources, it cannot support psychological well-being or the quest for our true Self.

The assumption behind obsessive self-care is that we are able to fully care for ourselves, but the notion that we have ultimate agency over our lives is illusory. While personal effort and perseverance are certainly necessary, taking refuge in the Divine ought to be our primary focus. We are told that true respite from the difficulties of daily life may only be found in spiritual refuge:

> Come unto me, all ye that labor and are heavy laden, and I will give you rest. Take my yoke upon you, and learn of me; for I am meek and lowly in heart: and ye shall find rest unto your souls. For my yoke is easy, and my burden is light. (Matthew 11:28–30)

Likewise, the antidote to anxiety is faith and trust in the highest reality:

> Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God. And the peace of God, which transcends all understanding, will guard your hearts and your minds in Christ Jesus. (Philippians 4:6–7)

It becomes apparent that before we can even discuss self-care, it is critical to establish what is meant by the very self whose care is being urged.

Paths Beyond Ego

Modern psychology for the most part is confined to a horizontal understanding of human identity, and is unable to recognize the vertical dimension that pertains to our primordial nature. The founder of the "talking cure," Sigmund Freud (1856–1939), writes: "The ego represents what may be called reason and common sense" (1989b, p. 19) and, likewise, "there is nothing of which we are more certain than the feeling of our self, of our own ego" (1989a, p. 12). At the same time, even he expresses its shortcomings: "the Ego is not master in its own house" (1955, p. 143).

To equate the self with the ego is a betrayal of the Spirit, which it seeks to replace. Therefore, whatever thwarts our remembrance of the Divine needs to be resisted. Many traditions assert the existence of both a lower self and one that is "transpersonal"—that is, grounded in a universal reality. Accordingly, it is a mistake to identify the lower self as the source of all our potential. Yet, it must be said that the lower self does determine our actions when the ego is enclosed in itself. The need to make effort on the human plane does not preclude the influence of divine reality in determining our will when we allow it to do so.

According to the Hindu tradition, it is the confused or deluded person who asserts "I am the doer" (Bhagavad Gītā 3:27), as in most cases it is the Divine alone who is the doer. Our identification with the "doer" is the problem, as Swami Ramdas (1884–1963) observed: "The ego is the cause of soul's bondage and misery" (as cited in Weeraperuma, 2005, p. 1). In the Taoist tradition, there is the notion of "non-action" (Chinese: *wu wei*), but this does not signify inertia, but rather stems from the very source of all action in the *Tao*, which is not the product of individual initiative. Shin Buddhism makes the distinction between "Other-Power" (*tariki*) and "self-power" (*jiriki*), which is to say the distinction between reliance on the Primal Vow of Amida Buddha, as opposed to our own efforts, to attain Nirvana. The Christian tradition teaches us to turn away from our self-preoccupation in an act of self-naughting; we must deny ourselves (Matthew 16:24; Mark 8:34; Luke 9:23) so as to make room in our hearts for something other than the human ego. This common theme among spiritual traditions shows that an exaggerated notion of our own agency can only lead to inadequate self-care.

If we ask ourselves who is the doer that practices self-care, we will get closer to resolving this question; however; this will not make sense in the absence of an appropriate metaphysical framework. This is made evident when St. Augustine (354–430) affirms: "For Thou hast made us for Thyself and our hearts are restless till they rest in Thee" (1959, p. 3). All attempts to seek wholeness in anything other than the Divine are bound to fail. As Julian of Norwich (c. 1342–c. 1416) rightly discerned: "Our soul may never have rest in anything which is beneath itself" (1978, p. 313). Mainstream

psychology and the field of mental health only know of a self that is separate—not one that transcends the psycho-physical order. The lower levels of our being are unable to grasp that which is higher, seeing as the latter transcend (yet include) the former. Through abiding in the Divine, we may gain access to our core identity.

A significant burden on people living in a desacralized world is that they are engaged in work that is not in conformity with their true vocation. They are simply compelled to do so by the need to secure an income, which undoubtedly contributes to widespread discontent in our era. Therefore, there is a need today for clear boundaries between one's professional and personal life, where we often find a divide between what we do for a living and what nourishes our spirit.

Now that misconceived notions of self-care have been addressed, we will consider the correct understanding of how traditional cosmology and psychology view the human body as a reflection of the cosmos. Throughout the sacred scriptures, we are reminded that our "bodies are temples of the Holy Spirit" (1 Corinthians 6:19) and, in the Qur'ān's account of the creation of man, God says "I blew into him of My spirit" (Qur'ān 15:29, 38:72). This is why we are instructed to care for the human body, but we must not do so according to our own individualistic notions, for we are given clear guidance by humanity's sapiential traditions.

Human beings are not limited to their corporeal reality; rather, we consist of a tripartite nature—Spirit, soul, and body. It is the transpersonal dimension that animates both soul and body, thus rendering them whole; without the soul, the body cannot come alive; without the body, the soul would be bereft of a suitable dwelling; and, without the Spirit, neither would exist. Therefore, any discussion of self-care must be mindful of both the science of nature, as well as that of the human soul.

Discerning the True Self

The more we seek the source of self-care in our lower selves, the more fleeting it becomes. The act of self-care requires doing something in order to stay well or keep going, which implies constant maintenance. Again, it is never asked who the "doer" is; only that its activity continues. Any fixation can take us in the opposite direction to what we originally intended. In the often-cited words of Dōgen (1200–1253): "To learn the Buddha Way is to learn one's self. To learn one's self is to forget one's self" (1972, p. 134). This is reminiscent of the spiritual advice of St. Ignatius of Loyola (1491–1556), the Spanish Catholic theologian: "For each one must realize that he will make progress in all spiritual matters in proportion to his flight from self-love, self-will, and self-interest" (1964, p. 87). Neither happiness nor fulfillment can be procured outside of the sacred. To be fully human is to recognize our fundamental relationship with the Absolute, which is to say that our true identity in the Divine

is the primordial nature (*fiṭrah*), the "image of God" (*imago Dei*), Buddha-nature (*Buddha-dhātu*), or the Self (*Ātmā*).

The Old Testament upholds the belief that human beings are a composite of Spirit, soul, and body. We see this, for example, in Genesis: "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (2:7). While this triadic division of the self is found within Judaism and Christianity, it also exists in the Islamic tradition (as *Rūḥ*/*ʿAql*, *nafs*, and *jism*). The Arabic term *ʿaql* is used to denote both reason and intellect, although the relationship between them (the first being horizontal and the second vertical) is always recognized. *Rūḥ* and *ʿAql* are found to be synonymous with spirit and Intellect. The *nafs* (soul, self, or ego) is often conflated with *Rūḥ* or Spirit, as is evidenced by these terms being used interchangeably; however, they represent two markedly different ways of viewing the self ontologically.

Similarly, Hindu and Buddhist conceptions of the self, while divergent on one level, can be reconciled to form a unity in a broader metaphysical context. The highly influential *Abhidharmakośa* by Vasubandhu (fourth to fifth century) states: "It is a mistake ... to consider as a self that which is not the self; but [nowhere does the Buddha say that] it is a mistake to consider as a self that which is the self" (as cited in Conze, 1983, p. 129). The Buddha does not take issue with the Hindu understanding of the Self (*Ātman*) as *neti*, *neti* ("not this, not this") which, by means of a double negation, conveys an apophatic understanding that eliminates all determinate conceptions, leaving in its place only the consciousness of that which is, the Self alone; all that is not this is non-Self (*anattā*). This position is summarized in the Buddha's words, "What is not self, that is not my self." (as cited in Horner, 1973, p. 32).

Our true Self cannot be understood through the myopic lens of modern science, which has proven incapable of delivering itself from its erroneous theoretical foundations. The same applies to the radically limited scope of modern psychology, and its mental health treatments, which are devoid of a transpersonal dimension. As René Guénon (1886–1951) explains:

> As for modern Western psychology, it deals only with a quite restricted portion of the human individuality, where the mental faculty is in direct relationship with the corporeal modality, and, given the methods it employs, it is incapable of going any further. In any case, the very objective which it sets before itself and which is exclusively the study of mental phenomena [the empirical ego], limits it strictly to the realm of the individuality, so that the state which we are now discussing [the Self (Ātmā)] necessarily eludes its investigations. (2004, p. 96)

In a sense, all true spiritual practices sanctioned by revealed traditions aid us in returning to ourselves. Even within the realm of mental health, there is often the self-care prescription of breathing slowly and deeply in order to be mindful of our breath.

It is worth recalling that the term Spirit derives from the Latin word *spiritus*, meaning "spirit" or "breath," which stems from the verb *spirare*, "to breathe." It appears to be so simple to breathe, yet, in our fast-paced digital age, we forget to be aware of even this vital process. It is thus evident that human beings are inherently connected to the sacred and made for the Absolute.

When the separate self is given prominence and its maintenance is supported above all else, it becomes an obstacle to the unfolding of the true Self. Many mistaken ideas are prevalent in the current *zeitgeist*, one of them being that this existence owes us something, or that we are free to pursue whatever we desire. Nothing could be further from the truth. We are entitled to nothing and are only given the blessing of this life—with all of its trials and tribulations—for the sole purpose of encountering the Divine in ourselves, in others, and in the world around us. The universal and timeless wisdom found throughout the diverse cultures of the world teaches an essential truth: "Your natural state is one of happiness" (Ramana, 1996, p. 284).

Conclusion

Prioritizing our personal welfare, though understandable in light of our biological needs, often leads to a host of problems. A complete human being is selfless rather than selfish, and we can attenuate the demands of our egoic self when purged of all that does not truly belong to us, which means to overcome ourselves. Self-care, in the truest sense, is to rest, at all times, in an awareness of the Absolute—the more we surrender to it, the less importance we place on ourselves. To remember the "one thing needful" (Luke 10:42) is to cease being a spiritual "doer" so that we can awaken to our true Self. It cannot be forgotten that no matter how much so-called self-care we practice, we are unknowingly always searching to transcend ourselves because we can never find satisfaction within the confines of our limited lives, lived "horizontally" in a world that is similarly constricted.

Paradoxical as it may appear at first, it could be said that self-care has inadvertently become infused with the true meaning of *religion*. We recall that the etymological root of the English word "religion" is the Latin *religare*, meaning to "to re-bind" or "to bind back," by implication to the Divine or a transcendent reality. Recovering our primordial nature, a task thwarted by our desacralized world, is the path toward true self-care.

The entirety of our existence may be described as a journey from the wilderness of our fragmented self to the true home that is our transpersonal Self. It goes without saying that were it not for the chaotic conditions of modern life—and for humanity having lost its moorings in the venerable spiritual paths of humanity—there would be no need to discuss self-care. It is only when self-care practices are restored to what they were understood to have been across religious traditions over millennia, that

they will be able to provide the lasting efficacy that we seek from them. We would do well to recall the words of the great Bard: "This above all: to thine own self be true" (Shakespeare, 1899, p. 33).

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References

Augustine of Hippo, Saint. (1959). *The confessions of St. Augustine* (F. J. Sheed, Trans.). Sheed & Ward, 1959.

The Bhagavad-Gītā with the commentary of Śrī Śankarachāryā. (1961). (A. Mahadeva Sastri, Trans.). V. Ramaswamy Sastrulu & Sons.

Black Elk. (1989). Foreword. In J. E. Brown, *The sacred pipe: Black Elk's account of the seven rites of the Oglala Sioux* (pp. xix–xx). University of Oklahoma Press.

Chittick, W. C. (1983). *The Sufi path of love: The spiritual teachings of Rumi*. State University of New York Press.

Conze, E. (1983). *Buddhist thought in India: Three phases of Buddhist philosophy*. George Allen & Unwin.

Dōgen. (1972). Shōbōgenzō Genjōkōan. (N. Waddell & M. Abe, Trans.). *Eastern Buddhist 5*(2), 129–140. http://www.jstor.org/stable/44361338

Donne, J. (1923). *Devotions upon emergent occasions*. Cambridge University Press.

Foucault, M. (1986). *The history of sexuality: Vol. 3. The care of the self* (R. Hurley, Trans.). Pantheon Books.

Freud, S. (1989a). *Civilization and its discontents* (J. Strachey, Trans.). W. W. Norton & Company.

Freud, S. (1989b). *The ego and the id* (J. Riviere, Trans.). W. W. Norton & Company.

Freud, S. (1955). *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 17, J. Strachey, Trans.). Hogarth Press and the Institute of Psycho-Analysis.

Guénon, R. (2004). *Man and his becoming according to the Vedānta* (R. C. Nicholson, Trans.). Sophia Perennis.

The Holy Bible, King James Version. (1944). National Bible Press.

Horner, I. B. (1973). Attā and Anattā. *Studies in Comparative Religion 7*(1), 31–35.

Ignatius of Loyola, Saint. (1964). *The spiritual exercises of St. Ignatius* (A. Mottola, Trans.). Image Books.

Jagadguru of Kanchi, H. H. the 68th. (2008). *Introduction to Hindu dharma: Illustrated*. World Wisdom.

Julian of Norwich. (1978). *Showings* (E. Colledge, J. Walsh, & J. Leclercq, Trans.). Paulist Press.

Lasch, C. (1978). *The culture of narcissism: American life in an age of diminishing expectations*. W. W. Norton & Company.

Laude, P. (Ed.) (2006). *Pray without ceasing: The way of the invocation in world religions*. World Wisdom.

Nasr, S. H., Dagli, C. K., Dakake, M. M., Lumbard, J. E. B., & Rustom, M. (Eds.). (2015). *The study Quran: A new translation and commentary*. Harper Collins.

Ramana M. (1996). *Talks with Sri Ramana Maharshi*. Sri Ramanasramam.

Shakespeare, W. (1899). *The tragedy of Hamlet*. Methuen and Company.

Trungpa, C. (2002). *Cutting through spiritual materialism*. Shambhala Publications.

Weeraperuma, S. (Ed.) (2005). *The essential Swami Ramdas: Commemorative edition*. World Wisdom.

Welwood, J. (2000). *Toward a psychology of awakening: Buddhism, psychotherapy, and the path of personal and spiritual transformation*. Shambhala Publications.

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Research Article

Unveiling the Healing Power of Spirituality: Exploring the Impact on Post-Earthquake Trauma among Türkiye Survivors

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Abstract
The trauma experienced after the earthquake affects the well-being of the survivors and makes it difficult for them to adapt to daily life. The level of individuals being affected by trauma may vary depending on many factors such as demographic variables and spiritual well-being. The aim of this study is to examine the relationship between post-earthquake trauma and spiritual well-being and various sociodemographic variables among survivors of the 6 February 2023 earthquake in Türkiye. In this study, the question of whether survivors' post-earthquake trauma levels are significantly explained by their spiritual well-being was sought to be answered. Relational survey model of quantitative research method was used in the study. The sample of the study consists of 440 participants who were reached by convenience sampling technique from earthquake survivors in 11 provinces in Türkiye who survived the earthquake centred in Kahramanmaraş Province. The Scale for Determining the Level of Post-Earthquake Trauma, Spiritual Well-Being Scale, and Sociodemographic Information Form were used as data collection tools in the study. The data obtained were analysed using one-way analysis of variance, t-test and simple regression analysis. As a result of the study, it was determined that there was a low level, negative and significant relationship between the participants' post-earthquake trauma levels and their spiritual well-being. While there was no significant difference in terms of post-earthquake trauma level between the groups with different residence, education level, and frequency of religious beliefs, a significant difference was found between the post-earthquake trauma level and variables such as gender, age, loss of relatives in the earthquake, perceived economic status, and damage status of the house. The findings show that there is a partial effect of spiritual well-being factor in reducing the negative effects of post-earthquake trauma and the importance of spiritual support in mental health interventions.

Keywords:
Earthquake • Post-earthquake trauma • Spiritual well-being • Post-traumatic stress disorder

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Introduction

Natural disasters have affected people in every period of history and caused great destruction (Adeagbo et al., 2016; Lazzaroni & van Bergeijk, 2014). Among natural disasters, earthquakes are among the major disasters that can cause loss of life and property. In addition to destructive physical damages, earthquakes can also have long-lasting psychosocial effects. Individuals exposed to earthquakes may encounter various psychological and social problems after the earthquake due to their traumatic experiences (Beaglehole et al., 2019). Factors such as loss of life and property, injury, homelessness, inability to access food and services, fear, and loss of control in earthquakes have serious psychological effects on individuals and cause post-traumatic stress disorder, anxiety, depression, anxiety disorder, anger, sleep problems, and many other symptoms (Bertinelli et al., 2023; Lu et al., 2023; Norris et al., 2002; Sezgin & Punamäki, 2012).

On 6 February 2023, two devastating earthquakes of magnitude 7.7 and 7.6 struck Kahramanmaraş and 11 surrounding provinces in southern Türkiye, causing significant human and material losses (WHO, 2023). These earthquakes, which affected 16.4 per cent of the Turkish population, killed over 50,000 people and injured over 100,000 due to damage and collapse of buildings (Disaster and Emergency Management Presidency, 2023; Strategy and Budget Directorate, 2023; Yılmaz, 2023). People in the region were physically and psychologically exhausted due to traumatic events such as the loss of their relatives, abandonment of their damaged homes, and the collapse of social structures, and experienced prolonged fear and helplessness due to the continuation of aftershocks (WHO, 2023). However, despite these traumatic experiences, some people can overcome this challenging period better thanks to their psychological resilience and spiritual well-being (Hardiman & Simmonds, 2013; Park, 2004; Park & Gutierrez, 2013). Therefore, the main purpose of this article is to examine the effect of spiritual well-being on the post-earthquake trauma levels of the survivors of the 6 February 2023 Kahramanmaraş Earthquake.

Post-Earthquake Traumatic Stress

Earthquakes are natural disasters that can cause long-term physical and psychological damage to exposed individuals (WHO, 2021). One of the common psychological consequences of earthquake experience is post-traumatic stress disorder (PTSD). PTSD is a complex psychiatric disorder characterised by intrusive re-experiencing of the traumatic event, avoidance of trauma-related stimuli, negative changes in mood and cognition, increased arousal and reactivity. Many studies have revealed the high prevalence of PTSD symptoms among earthquake survivors and emphasised the need for effective interventions to address post-earthquake trauma (Divsalar & Dehesh, 2020; Liang et al., 2019; Wang et al., 2015).

PTSD is a condition that can occur after experiencing severe traumatic events. These events include interpersonal violence, war, life-threatening accidents, or natural disasters. Symptoms of PTSD include disturbing and intrusive memories and nightmares of the trauma, irritability, hypervigilance (hypersensitivity to threats or constant thoughts of danger), sleep problems, emotional withdrawal, and difficulty focusing. Individuals with PTSD generally tend to avoid places, activities or objects that may remind them of the trauma (Yehuda et al., 2015). In post-disaster settings, many risk factors have been identified for the development of psychopathologies such as posttraumatic stress disorder (PTSD), depression, and anxiety disorder (Norris et al., 2002). These factors are categorised as risk factors that occur pre-event (such as personal or family history of mental health disorders and history of exposure to traumatic events and life stressors), during the event (such as loss of family members or close friends, communication difficulties, degree of injury and witnessing dead bodies) and post-event (such as loss of financial and social support resources). However, there is considerable heterogeneity between individual responses to the same event, and while some people may adapt well even after extreme experiences, certain population groups, such as people who have experienced pre-disaster difficulties, may be more vulnerable to post-disaster mental health problems (Cerdá et al., 2013; Galea et al., 2005).

In societies exposed to natural disasters such as earthquakes, the rates of post-traumatic stress disorder may be high (Galea et al., 2005). In a meta-analysis of studies on post-earthquake survivors, it was reported that the incidence of PTSD after earthquakes was 23.66% (Dai et al., 2016). In a study conducted on adults in Nepal, the prevalence of PTSD was found to be 24.10% (Adhikari Baral & K.C, 2019). In addition to demographic characteristics such as age, gender and educational status, factors such as the severity of earthquakes, the prevalence of loss of life and property, and how the victims were exposed to the disaster affect the level of trauma (Karamustafalıoğlu et al., 2023). Earthquakes can cover more than one problem area different from other traumatic life events due to reasons such as sudden occurrence of earthquakes that affect daily life routines, having a destructive effect, causing death and injuries. In addition, aftershocks that continue after earthquakes can have chronic effects on the psychology of the person (Tanhan & Kayri, 2013).

Life events with many difficulties such as earthquakes can negatively affect the psychosocial and physical quality of life of individuals (Karanci & Rüstemli, 1995; Kılıç & Ulusoy, 2003; Niitsu et al., 2014). Especially in individuals exposed to earthquake, the risk of conditions such as PTSD, depression, anxiety disorders, acute stress disorder and burnout increases (Cénat et al., 2020; Jin et al., 2018; Xu & Wei, 2013). In addition to psychological effects, physical health problems may also occur after an earthquake. Injuries that occur during or after the earthquake can negatively

affect the physical health of individuals (Gunn, 1995; Teramoto et al., 2015). Due to the stress and difficulties experienced, sleep patterns of individuals exposed to earthquakes are disrupted, eating habits change, and physical activity decreases (Chen et al., 2021; Labra et al., 2017; Tempesta et al., 2013). When these factors come together, general health status and physical quality of life in individuals are negatively affected. Therefore, it is important to provide psychological and physical support services to individuals after an earthquake (Sumer et al., 2005). In addition, the use of support resources such as spirituality facilitates the coping process of individuals.

Spiritual Well-Being and Mental Health

Spirituality is a multidimensional structure that encompasses the individual's search for meaning, purpose and connection with a power greater than oneself (Dyson et al., 1997; Grouden & Jose, 2015; Pargament, 2013). The concept of spiritual well-being is defined as a positive perception reflected upon oneself from a qualified interaction with the transcendent power, others, nature and the self (Tan & Yıldız, 2022). Spiritual well-being, which is an important component of psychological and social well-being, which is one of the main determinants of health, is generally associated with positive mental health outcomes (Chirico, 2016; Lee, 2017; Rahmat et al., 2022; Unterrainer et al., 2014). It includes elements such as religious beliefs, faith, sense of transcendence, personal values, interpersonal relationships, and connection with a higher power or a broader sense of purpose (Pargament, 1992; Park, 2013; Steger et al., 2010). Research shows that spiritual well-being can play a protective role in promoting resilience, coping and psychological adaptation in the face of extraordinary situations and difficulties in life, including traumatic events (Chen & Koenig, 2006; Ekşi et al., 2020; Momeni et al., 2013).

In recent years, there has been an increase in studies examining the relationship between spiritual well-being and mental health. These studies show that individuals with high levels of spiritual well-being are less likely to exhibit psychological distress, anxiety and depression (Abu-Raiya et al., 2015; Fradelos et al., 2019; Koenig, 2012; Taheri-Kharameh, 2016; Volcan et al., 2003). They also tend to have higher levels of hope, optimism, and subjective well-being (Conversano et al., 2010; Gallagher & Lopez, 2009; Moore, 2005; Schrank et al., 2008). Coping mechanisms associated with spiritual well-being, such as seeking social support from religious or spiritual communities, finding solace in prayer or meditation, and deriving a sense of meaning and purpose from one's beliefs, may contribute to psychological resilience and facilitate posttraumatic recovery (Edwards et al., 2020; Feder et al., 2013). In this context, spiritual well-being is defined as a state of "well-being" resulting from the underlying mental health status and it is emphasised that it is an indicator of the quality of life of the individual in the spiritual dimension (Fisher, 1998).

The relationship between spiritual well-being and trauma is based on the potential of spiritual beliefs and values to support as a protective factor against the negative psychological effects of traumatic events (Park, 2013). The presence of a strong spiritual foundation can increase the individual's ability to make sense of the traumatic experience, to find meaning in suffering, and to promote a sense of hope and transcendence beyond immediate distress (Deal, 2011). Furthermore, spiritual well-being can facilitate the process of posttraumatic growth by contributing to the reconstruction of a coherent life narrative after trauma (de Castella & Simmonds, 2013).

Previous studies examining the role of spirituality in disaster settings have reported positive relationships between spiritual well-being and posttraumatic outcomes, such as reduced PTSD symptoms, improved psychological functioning, and greater resilience (Blanc et al., 2016; Kula, 2002; Park, 2017). However, there is limited research focusing on the effect of spiritual well-being on post-earthquake trauma levels, especially in the context of the 6 February Kahramanmaraş Earthquake. Therefore, this study aims to fill this gap by investigating the effect of spiritual well-being on the post-earthquake trauma levels of survivors by this particular earthquake. Given the unique cultural and religious context of Kahramanmaraş and its surroundings, it is particularly important to investigate the role of spiritual well-being after the 6 February Kahramanmaraş Earthquake. Religious and spiritual beliefs are deeply rooted in the lives of many individuals in this region and can serve as powerful sources of solace, meaning and support in times of distress (Okumuş, 2008).

In the light of the explanations mentioned above, the aim of this study is to examine the role of spiritual well-being and sociodemographic variables in explaining the post-earthquake trauma levels of survivors by the 6 February Türkiye Earthquake. In line with the aim of the research, the following questions were sought to be answered:

1. What is the level of post-earthquake trauma and spiritual well-being of earthquake survivors?

2. Is there a significant difference between the post-earthquake trauma levels of earthquake survivors and various sociodemographic variables (gender, age, economic status, place of residence, damage status of the dwelling, loss of relatives, frequency of religious belief practice)?

3. Are the spiritual well-being levels of earthquake survivors a significant predictor of post-earthquake trauma symptoms?

Method

In this research, relational survey model was used based on quantitative approach. In this study, it was tried to determine the relationships between post-earthquake

traumatic stress levels, spiritual well-being and sociodemographic characteristics of earthquake survivors.

Participants and procedure

This is a cross-sectional study. A total of 440 earthquake survivors (335 women and 105 men) aged between 18 and 60 (mean age: 25.12 ± 8.48 years) participated in this study. Although 448 participants were initially recruited, only 440 successfully completed the study. Convenience sampling method were used to avoid loss of time, money and effort. Inclusion criteria included having experienced the 6 February earthquake, falling within the age range of 18- 60, and literacy. Detailed participant information can be found in Table 1.

Table 1.
Sociodemographic characteristics of the participants

Variables	N	%
Gender		
Female	335	76.1
Male	105	23.9
Age group		
18-25	322	73.2
26-34	63	14.3
35-60	55	12.5
Level of education		
Primary/Secondary School	13	3.0
High School	186	42.3
Associate Degree	111	25.2
Licence	130	29.5
Perceived family income level		
Lower	97	22.0
Medium	321	73.0
Higher	22	5.0
Settlement		
Metropolitan	150	34.1
City centre	115	26.1
District centre	106	24.1
Town/Village	69	15.7
Frequency of religious beliefs, if any		
None	20	4.5
Rarely	24	5.5
Occasionally	135	30.7
Regular	238	54.1
Frequently	23	5.2
Death of relatives due to the earthquake		
Yes	312	70.9
No	128	29.1
Damage status of the dwelling after the earthquake		
No damage at all	86	19.5
Slightly damaged	212	48.2
Moderately Damaged	61	13.9
Heavily damaged	60	13.6
Completely demolished	21	4.8
Total	440	100

In this study, in which the relational survey model was used, data were collected using a cross-sectional approach. The data collection process targeted survivors living in the earthquake zone or who temporarily migrated to other cities due to the damage to their houses. Two months after the earthquake, the researchers reached out to psychosocial support professionals who were assisting earthquake survivors and university students residing in the affected zone, sharing the link to the research. Data were obtained online from earthquake survivors who voluntarily agreed to participate in this study.

Measures

Sociodemographic Information Form

It is a form prepared by the researchers and includes questions about the age group, gender, perceived income level, education level, place of residence, frequency of religious belief, death of relatives due to the earthquake, and the damage status of the house after the earthquake.

Scale for Determining the Level of Post-Earthquake Trauma

The scale was developed by Tanhan and Kayri (2013) and is a measurement tool that assesses the level of traumatic stress experienced by earthquake survivors after the earthquake. The scale is designed as a 5-point Likert scale, and the highest score that can be obtained from the scale is 100 and the lowest score is 20. A decrease in scores indicates a decrease in the level of post-earthquake trauma. The scale has five sub-dimensions. These dimensions were named as Behavioural Problems, Emotional Limitation, Affective, Cognitive Structure and Sleep Problems. Each dimension reflects the trauma behaviours contained in specific items in the scale. The scale factors accounted for 54.29% of the total variance, with varying loading values across sub-dimensions. These loadings ranged from 0.516 to 0.691 in the first sub-dimension, 0.429 to 0.812 in the second, 0.454 to 0.679 in the third, 0.476 to 0.689 in the fourth, and 0.493 to 0.813 in the fifth. Correlations among scale items ranged from 0.355 to 0.596. The scale demonstrated high internal reliability, with a Cronbach's alpha coefficient of .92, indicating strong consistency across items.

Spiritual Well-Being Scale

The scale was developed by Ekşi and Kardaş (2017) and is used to evaluate the process of understanding and living life within the framework of values and ultimate meanings. This scale consists of three sub-dimensions (transcendence, harmony with nature and anomie) covering personal, social, environmental and transcendental aspects of life and includes 29 items in total. The scale is used by making a five-point Likert-type evaluation. The highest score that can be obtained from the scale is 145,

and the lowest score is 29. In the research conducted to evaluate the validity of the scale, the fit indices of the model were determined as (x^2/sd = 4.11, RMESEA = .06, SRMR = .50, NFI = .90, CFI = .92). These results show that the scale is appropriate in terms of validity. The internal consistency coefficient (Cronbach's alpha value) of the scale was calculated as .88. In addition, when the sub-dimensions were analysed, it was found that the transcendence dimension had a reliability level of .95, harmony with nature .86, and anomie .85. In this study, the internal consistency coefficient of the scale was calculated as .89.

Data Analysis

Prior to analysis, the collected data were screened to identify both univariate and multivariate outliers. Parametric analyses were used in the statistical procedures, as all scales had skewness and kurtosis values between +1.5 and -1.5 as recommended by Tabachnick and Fidell (2013). In line with the purpose of the study, one-way analysis of variance and t-tests were used to determine how participants' post-earthquake trauma levels differed in terms of different socio-demographic variables. In cases where the frequency of some data was low, non-parametric tests were also used (Karagöz, 2010). In the continuation of the study, simple regression analysis was used to predict the participants' post-earthquake trauma levels and determine the relationship with their spiritual well-being. The SPSS 23.0 Statistics Package Program was used to analyse the data.

Results

In this section, in line with the aim of the research, it was revealed whether the participants' post-earthquake trauma levels were significantly explained by their spiritual well-being and other variables. The analysis of the findings is presented in the tables below.

Table 2.
Descriptive values of the scale for determining the level of post-earthquake trauma and spiritual well-being scale

	Min.	Max.	M	α	SK	KU
Post-Earthquake Trauma	1.05	4.95	3.29	.04	-.285	.588
Behavioural Problems	1.00	5.00	2.72	.04	.206	-.601
Excitement Limitation	1.00	5.00	3.02	.05	.065	-1.021
Affective	1.00	5.00	3.42	.04	-.260	-.170
Cognitive Configuration	1.00	5.00	3.76	.04	-.684	-.282
Sleep Problems	1.00	5.00	3.52	.05	-.464	-.711
Spiritual Well-Being	2.14	4.97	4.05	.02	-.575	-.149

When Table 2 is examined, it is seen that the mean score of the participants' post-earthquake trauma level is 3.29±0.04 and the mean score of spiritual well-

being level is 4.05±0.02. The mean of behavioural problems sub-dimension of the participants' post-earthquake trauma levels was 2.72±1.01, the mean of excitability sub-dimension was 3.02±1.13, the mean of affective sub-dimension was 3.42±0.84; the mean of cognitive configuration sub-dimension was 3.76±0.98, and the mean of sleep problems sub-dimension was 3.52±1.14.

Table 3.
Examination of post-earthquake trauma level in terms of gender and loss of relatives in the earthquake

Variables		n	M	ss	sd	t	p
Gender	Female	335	3.39	0.83	438	4.519	.000*
	Male	105	2.97	0.81			
Death of a relative in the earthquake	Yes	312	3.39	0.81	438	3.678	.000*
	No	128	3.06	0.88			

*p<0.05

According to the t-test conducted to analyse the relationship between post-earthquake trauma and gender and the status of having lost a relative in the earthquake in Table 3, there is a significant difference between the level of post-earthquake trauma and both variables. According to the averages in the table, women and those who lost a relative in the earthquake have higher levels of post-earthquake trauma.

Table 4.
Examination of post-earthquake trauma level in terms of age group and place of residence

Variables		n	M	α	F	p	Binary Difference
Age Group	18-25	322	3.36	.82	6.584	.002*	3<1
	26-34	63	3.27	.78			
	35-60	55	2.92	.96			
Place of Settlement	Metropolitan	150	3.34	.81	0.876	.454	-
	City Centre	115	3.24	.89			
	District Centre	106	3.36	.82			
	Town/Village	69	3.29	.84			

*p<0.05

According to the one-way ANOVA test conducted to analyse the level of post-earthquake trauma in terms of age group and place of residence, there is no significant difference between the type of place of residence and the level of post-earthquake trauma, while there is a significant difference between the age group and the level of post-earthquake trauma. As the earthquake survivors' age increases, their post-earthquake trauma levels decrease.

Table 5.
Examination of post-earthquake trauma level in terms of educational status, perceived economic status, damage status of the house, frequency of living religious beliefs

Variables		n	Rank Mean	Sd	X^2	p	Binary Dif.
Education Level	Primary/Secondary School	13	193.69	2	6.611	.085	-
	High School	186	228.58				
	Associate Degree	111	235.41				
	Bachelor's Degree	130	198.89				
Perceived Economic Status	Lower	97	259.30	2	12.105	.002*	2<1
	Medium	321	210.82				
	Higher	22	190.68				
Damage to the house	No damage at all	86	176.10	4	16.471	.002*	1<2,3,5
	Slightly damaged	212	224.92				
	Moderately damaged	61	242.57				
	Heavily damaged	60	227.36				
	Completely demolished	21	273.95				
Frequency of religious beliefs, if any	None	20	232.90	4	7.703	.103	-
	Rarely	24	264.23				
	Occasionally	135	228.02				
	Regularised	238	207.45				
	Very Frequently	23	255.00				

*p<0.05

According to the Kruskal Wallis H Test for the relationship between post-earthquake trauma level and education and perceived economic status in Table 5, no significant difference was found between the participants' education level and post-earthquake trauma levels. There is a significant difference between the perceived economic status of the participants and their post-earthquake trauma levels. According to the results of Mann Whitney U Test conducted between the groups in order to determine the source of the difference, participants with a low income level have higher post-earthquake trauma levels than those with a medium income level. According to the Kruskal Wallis H Test conducted to determine the relationship between the level of post-earthquake trauma, the damage status of the house and the frequency of experiencing religious beliefs; there is no significant difference between the frequency of experiencing religious beliefs and the level of post-earthquake trauma, while there is a statistically significant difference between the damage status of the house and the level of post-earthquake trauma. According to the Mann Whitney U Test conducted between the groups in order to determine between which variables the difference is, the post-earthquake trauma levels of those whose houses were not damaged at all after the earthquake are lower than those whose houses were damaged and completely destroyed.

The correlation between the variables of the study was examined before the simple linear regression analysis performed to test the explanatory power of spiritual well-being on the level of post-earthquake trauma. In this direction, the correlation between the variables is shown in Table 6.

Table 6.
Correlation coefficient between variables

	1	2
1. Post-Earthquake Trauma	1	-.217**
2. Spiritual Well-Being		1

**p<0.01

According to Table 6, there is a negative and low level significant correlation (r= 0,21 p<,01) between spiritual well-being and post-earthquake trauma level. According to these findings, as the earthquake survivors' spiritual well-being increases, their post-earthquake trauma levels decrease.

Table 7.
Spiritual well-being as a predictor of post-earthquake trauma

Factor	B	SE	β	t	p	95% CI	F	R^2	(AjR^2)
Constant	4.824	.330		14.608	.000	4.17-5.47	21.64***	.047	.045
SWB	-.376	.081	-.217	-4.652	.000	-0.53 to -0.21			

***p<0.01

In the initial multiple linear regression analysis for PET, it is seen that there is a low level, negative and significant relationship between participants' spiritual well-being and post-earthquake trauma levels, and that spiritual well-being scores explain 4.5% of the variance observed in post-earthquake trauma level scores (R=.217 R^2=.047 F(1-438)=21.64 p<.001) (see Table 7).

Discussion

This study was conducted to examine the effect of spiritual well-being and various sociodemographic variables on the post-earthquake trauma levels of survivors by the 6 February Türkiye Earthquake. The study found that the post-earthquake trauma (65.8%) of those exposed to the earthquake was at a moderate level and their mental well-being (81%) was at a high level. The fact that the mean of the cognitive configuration sub-dimension of the post-earthquake trauma level (3,76) was higher than the other sub-dimensions shows that the participants continue to worry that an earthquake will occur at any moment and that earthquake images continue to exist in their minds. In a recent study conducted by Koçoğlu et al. (2023) on university students, the levels of post-earthquake trauma and cognitive structuring sub-dimension of survivors coincide with the findings of this study. Similarly, in a study conducted in the USA on 130 Californian earthquake survivors who were interviewed three months after the earthquake, it was reported that only 13% of the participants met the full PTSD criteria and 48% met the re-experiencing and hyperarousal criteria of PTSD (McMillen et al., 2000). In a study conducted in Türkiye after the Marmara Earthquake, the prevalence of posttraumatic stress disorder was found to be 43%, and the prevalence of major depression was found to be 31% (Başoğlu et al., 2002). In a study conducted in 2008 on those exposed to the

8.0 magnitude earthquake near Chengdu, the capital of Sichuan province of China, the prevalence of post-traumatic stress disorder was found to be 45% in heavily damaged areas. It was emphasised that symptoms such as recurrent thoughts and sleep disorders were very common in individuals who survived the earthquake (Kun et al., 2009). In a meta-analysis study examining 46 studies on survivors after earthquakes, it was emphasised that the prevalence of post-traumatic stress disorder was 23.66% (Dai et al., 2016). Since the research was conducted in the two month of the earthquake, the high cognitive structure sub-dimension scores of the participant earthquake survivors were an important finding in terms of showing that the effects of traumatic experiences were still continuing and the healing process would take time. Following a traumatic event such as an earthquake, individuals' perception of danger and anxiety increase. Concerns about the possibility of recurrence of the earthquake due to the continuation of aftershocks create a constant sense of threat and cause the images related to the earthquake to be constantly revived in the minds of individuals and the fear to continue.

In this study, it was observed that there was a negative and significant relationship between the post-earthquake trauma levels of the participants and their spiritual well-being, albeit at a low level. Individuals with high spiritual well-being have lower levels of post-earthquake traumatic stress. In a study conducted on survivors after the 2010 Haiti Earthquake, in which more than 220 thousand people died, it was found that spirituality and positive religious coping reduced post-traumatic stress symptoms (Mesidor & Sly, 2019). Similarly, there are findings that religious and spiritual coping reduces posttraumatic stress in individuals exposed to various natural disasters (Aten et al., 2019; Ferguson, 2023; Sun et al., 2019). In some studies, it is pointed out that negative religious coping (perceiving the earthquake as God's punishment as a result of their own sins and lack of spirituality) increases posttraumatic stress symptoms (Feder et al., 2013). In a study conducted with individuals affected by natural disasters, it was found that spiritual support had a significant negative relationship with posttraumatic stress symptoms (Ai et al., 2023). In a study conducted after a natural disaster in Indonesia, it was determined that spirituality contributed 10.7% to posttraumatic development (Subandi et al., 2014). In a study conducted by Sezgin and Punamäki (2012) on earthquake survivors in the Southeastern Anatolia region of Türkiye, approximately half of the women explained the trauma as God's will and guidance, 41% as a natural event, and 9% as human irresponsibility. Spiritual well-being, which is related to the ability to find meaning and purpose in life, can facilitate the individual who encounters a natural disaster such as an earthquake to make sense of the unexpected traumatic experience and reduce the level of post-traumatic stress. Individuals with high levels of spiritual well-being may have more internal resources such as hope, gratitude and commitment that are effective in coping with difficulties. In the post-traumatic process, spiritual values can enable individuals to evaluate events from a broader perspective and create new meanings.

In this study, women who experienced the earthquake and individuals who lost their relatives had higher levels of post-earthquake trauma. Similarly, in the studies conducted after the Marmara Earthquake, traumatic stress levels of women exposed to the earthquake and individuals who lost their relatives were found to be higher (Başoğlu et al., 2002; Livanou et al., 2002; Salcioglu et al., 2007). There are many studies indicating that women exposed to earthquake have higher traumatic stress levels than men (Adhikari Baral & K.C, 2019; Cofini et al., 2015; Dell'Osso et al., 2013; Tang et al., 2017; Zhou et al., 2013). The fact that daily routine tasks such as cooking, cleaning, and care are mostly performed by women in temporary living spaces after the earthquake increases women's stress levels (Yoosefi Lebni et al., 2020). In addition, studies emphasise that those who lost their relatives in the earthquake have higher levels of post-traumatic stress (Fan et al., 2015; Feder et al., 2013; Liu et al., 2019). The death of a family member, especially the loss of a child, increases the posttraumatic stress levels of surviving adults (Chan et al., 2011). The loss of a close person causes a deep mourning process and seriously affects the emotional, social and psychological balance of the individual. Breaking the ties with the deceased person and changes in future expectations may lead to an increase in the level of trauma. In addition, individuals have to cope with the guilt, emotional pain, feeling of emptiness, longing and grief caused by the loss of their loved ones, and this emotional intensity increases the level of trauma.

In this study, it was determined that the trauma levels of earthquake survivors decreased as their age increased. Similarly, in a study conducted on Taiwanese earthquake survivors, the traumatic stress levels of earthquake survivors between the ages of 25-44 were found to be higher than those of the group over the age of 60 (Kuo et al., 2007). In a study conducted in Italy, it was reported that younger earthquake survivors had higher levels of traumatic stress (Dell'Osso et al., 2013). After the earthquake, young people whose education and participation in employment are disrupted have higher future anxiety (Cadichon et al., 2017). With increasing age, individuals generally have more experiences. Past life experiences may increase the likelihood of developing more psychological resilience in coping with a traumatic event. In addition, since adults who have reached a certain age maturity have relatively more self-regulation and adaptation skills, their recovery processes after trauma are faster. Since older adults have wider social support networks, they have more resource options to receive support and help after trauma. Social support is also recognised as an important factor in the posttraumatic recovery process (Dell'Osso et al., 2013).

In this study, no significant difference was found between the participants' place of residence and education level and post-earthquake trauma levels. Similarly, in a study conducted in Italy, it was stated that the educational status of earthquake survivors did not affect the level of posttraumatic stress (Cofini et al., 2015). In a

study conducted in Nepal, a significant difference was found between the traumatic stress levels of earthquake survivors and their educational status (Adhikari Baral & K.C, 2019). In another study conducted in Nepal, it was emphasised that illiterate earthquake survivors had higher levels of traumatic stress (Acharya Pandey et al., 2023). The educational status of the participants alone may not be a determining factor on the level of post-earthquake trauma. The traumatic effects of the earthquake may be caused by more complex components such as the intensity of the individual's extraordinary experiences, social support, psychological resilience and other environmental factors.

In this study, it was observed that the trauma levels of participants with low income levels were higher. Similarly, many studies have reported that unemployed and low-income earthquake survivors are more vulnerable to trauma (Cofini et al., 2015). In a study conducted in Peru, a significant relationship was found between household income status and traumatic stress levels of earthquake survivors (Valladares-Garrido et al., 2022). People with low income levels generally live in lower quality houses. Since these houses are more vulnerable to natural disasters such as earthquakes, they are exposed to greater damage. Damage to the dwelling increases the level of trauma by increasing the risk of homelessness, safety concerns, and difficulties in meeting basic needs. In addition, individuals with low income generally have more fragile social networks and support systems.

In this study, the trauma levels of those whose houses were not damaged in the earthquake were found to be lower. Similarly, in a study conducted in China, the traumatic stress level of individuals living in places where the earthquake caused severe damage was found to be higher (Kun et al., 2009). In another study, it was stated that there was a significant difference between the level of traumatic stress and the damage and destruction of the house (Chan et al., 2011). Individuals whose houses have not damaged after the earthquake are relatively less traumatised because they feel safer and perceive that they have more control over events. Being safely evacuated from the undamaged dwelling during the earthquake may facilitate the management of the disaster experience and therefore the level of traumatic stress may be lower. In addition, individuals whose houses have not damaged are less likely to experience stress because they do not have the risk of losing important and valuable items in their homes.

In this study, no significant difference was found between the frequency of practising religious beliefs and the level of post-earthquake trauma. Similarly, in a study conducted in New Zealand, no relationship was found between having religious beliefs and the subjective well-being of earthquake survivors (Sibley & Bulbulia, 2012). In a study conducted on Van Earthquake survivors, it was found

that religiosity was not effective in reducing post-traumatic stress and it was stated that religiosity may not reduce trauma-related symptoms after disasters, but may help acceptance and thus tolerance of these symptoms (Ikizer et al., 2016). Since the religious beliefs and experiences of each individual affected by the disaster will be different, post-traumatic reactions may also vary from person to person. Religious beliefs can be a strong source of support and meaning for some people, while its effect may be less pronounced for others. Moreover, since the effects of religious beliefs on well-being are complex and multifactorial, it is not possible to determine the relationship between the frequency of religious belief practice and traumatic stress reactions determined by a single self-report question.

Conclusions

As a result of this study, which examined the role of spiritual well-being and various demographic variables in explaining the post-earthquake trauma levels of adult survivors of the earthquake that occurred on 6 February 2023 in Kahramanmaraş, Türkiye, it was found that there was a low, negative and significant relationship between the participants' spiritual well-being and post-earthquake trauma levels. It was determined that the traumatic stress levels of women, individuals who lost any relatives in the earthquake, younger adults, those with low income level, and those whose residence was damaged in the earthquake had higher levels of traumatic stress. Other sociodemographic factors such as the frequency of practising religious beliefs and educational level of the participants did not have a determining effect on the level of post-earthquake trauma. The findings of the study show that spiritual well-being may have a positive effect on reducing posttraumatic stress. Spiritual and religious values may play a role in the healing process of individuals with PTSD by providing a sense of meaning, social support, coping mechanisms, facilitating forgiveness, and personal development. However, further research is needed to better understand the specific mechanisms through which spirituality and religion exert their effects and to develop holistic psychosocial support approaches that effectively integrate these elements.

This study shows that survivors' post-earthquake trauma is at a moderate level, even though 2 months have passed since the earthquake. In this context, the psychosocial support services provided by public institutions and non-governmental organisations for earthquake survivors should be extended and sustained at individual, group and community levels over time. Access to psychosocial support services for all earthquake survivors, especially for women earthquake survivors, should be increased and the effectiveness of these services should be improved. In addition, cooperation and coordination should be ensured among all stakeholders such as public institutions, local administrations, non-governmental organisations, academic institutions, and

other relevant organisations in earthquake zones. This co-operation is important for effective planning and implementation of pre-earthquake preparedness, emergency management, relief, and support services.

Scientists who are experts on earthquakes draw attention to the importance of emergency planning in reducing post-earthquake trauma (Khan et al., 2023). For this reason, mandatory emergency plans should be established in regions with high earthquake risk and regular drills of these plans should be carried out. It is important that issues such as what the public should do in case of an earthquake, emergency communication channels, and gathering points should be conveyed to individuals and constantly reminded. In this way, panic and confusion during an earthquake can be prevented and the level of traumatic stress can be reduced.

Limitations

Although this research helps to understand the effect of spiritual well-being on the level of post-earthquake trauma, it has some limitations. The research data were obtained through a questionnaire form delivered via the internet to those who volunteered to participate in the study through convenience sampling and were based on the subjective responses of the participants. This situation limits the representativeness of the sample and affects the generalisability of the results. For this reason, it is recommended to conduct more comprehensive post-traumatic stress studies using different sampling methods. In addition, the fact that the study was conducted in the second month of the earthquake may have had positive/negative effects on the results due to timing. In addition, although the study examined the relationship between post-earthquake trauma level and spiritual well-being and sociodemographic variables, other potential influencing factors were not taken into consideration. Further research should be conducted to measure the effect of factors such as pre-earthquake trauma history, social support network, and psychological resilience on trauma level. Finally, the findings of this study do not provide an evaluation on the access of earthquake survivors to post-traumatic psychosocial support services or the effectiveness of these services. It is recommended that more comprehensive studies be conducted to evaluate the accessibility and effectiveness of existing psychosocial support services.

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Authors' contribution. Conceptualization, Z.K. and E.T.; methodology Z.K.; software, Z.K.; validation, E.T.; formal analysis, Z.K.; investigation, E.T.; resources, Z.K.; data curation, Z.K.; writing—original draft preparation, Z.K. and E.T.; writing—review and editing, Z.K.; visualization, Z.K.; project administration, Z.K. and E.T.; All authors have read and agreed to the published version of the manuscript.

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References

Abu-Raiya, H., Pargament, K. I., Krause, N., & Ironson, G. (2015). Robust links between religious/spiritual struggles, psychological distress, and well-being in a national sample of American adults. *American Journal of Orthopsychiatry*, 85, 565-575. https://doi.org/10.1037/ort0000084

Acharya Pandey, R., Chalise, P., Khadka, S., Chaulagain, B., Maharjan, B., Pandey, J., Nepal, J., & Pandey, C. (2023). Post-traumatic stress disorder and its associated factors among survivors of 2015 earthquake in Nepal. *BMC Psychiatry*, 23(1), 340. https://doi.org/10.1186/s12888-023-04836-3

Adeagbo, A., Daramola, A., Carim-Sanni, A., Akujobi, C., & Ukpong, C. (2016). Effects of natural disasters on social and economic well-being: A study in Nigeria. *International Journal of Disaster Risk Reduction*, 17, 1-12. https://doi.org/10.1016/j.ijdrr.2016.03.006

Adhikari Baral, I., & K.C, B. (2019). Post-traumatic stress disorder and coping strategies among adult survivors of earthquake, Nepal. *BMC Psychiatry*, *19*(1), 118. https://doi.org/10.1186/s12888-019-2090-y

Ai, A. L., Raney, A. A., & Paloutzian, R. F. (2023). Perceived spiritual support counteracts the traumatic impact of extreme disasters: Exploration of moderators. *Psychological Trauma: Theory, Research, Practice, and Policy*, *15*, 199-209. https://doi.org/10.1037/tra0001133

Aten, J. D., Smith, W. R., Davis, E. B., Van Tongeren, D. R., Hook, J. N., Davis, D. E., Shannonhouse, L., DeBlaere, C., Ranter, J., O'Grady, K., & Hill, P. C. (2019). The psychological study of religion and spirituality in a disaster context: A systematic review. *Psychological Trauma: Theory, Research, Practice, and Policy*, *11*, 597-613. https://doi.org/10.1037/tra0000431

Başoğlu, M., Şalcioğlu, E., & Livanou, M. (2002). Traumatic stress responses in earthquake survivors in Turkey. *Journal of Traumatic Stress*, *15*(4), 269-276. https://doi.org/10.1023/A:1016241826589

Beaglehole, B., Mulder, R. T., Boden, J. M., & Bell, C. J. (2019). A systematic review of the psychological impacts of the Canterbury earthquakes on mental health. *Australian and New Zealand Journal of Public Health*, *43*(3), 274-280. https://doi.org/10.1111/1753-6405.12894

Bertinelli, L., Mahé, C., & Strobl, E. (2023). Earthquakes and mental health. *World Development*, *169*, 1-21. https://doi.org/10.1016/j.worlddev.2023.106283

Blanc, J., Rahill, G. J., Laconi, S., & Mouchenik, Y. (2016). Religious beliefs, PTSD, depression and resilience in survivors of the 2010 Haiti earthquake. *Journal of Affective Disorders*, *190*, 697-703. https://doi.org/10.1016/j.jad.2015.10.046

Cadichon, J. M., Lignier, B., Cénat, J.-M., & Derivois, D. (2017). Symptoms of PTSD among adolescents and young adult survivors six years after the 2010 Haiti Earthquake. *Journal of Loss and Trauma*, *22*(8), 646-659. https://doi.org/10.1080/15325024.2017.1360585

Cénat, J. M., McIntee, S.-E., & Blais-Rochette, C. (2020). Symptoms of posttraumatic stress disorder, depression, anxiety and other mental health problems following the 2010 earthquake in Haiti: A systematic review and meta-analysis. *Journal of Affective Disorders*, *273,* 55-85. https://doi.org/10.1016/j.jad.2020.04.046

Cerdá, M., Paczkowski, M., Galea, S., Nemethy, K., Péan, C., & Desvarieux, M. (2013). Psychopathology in the aftermath of the Haiti Earthquake: A population-based study of posttraumatic stress disorder and major depression. *Depression and Anxiety*, *30*(5), 413-424. https://doi.org/10.1002/da.22007

Chan, C. L. W., Wang, C.-W., Qu, Z., Lu, B. Q., Ran, M.-S., Ho, A. H. Y., Yuan, Y., Zhang, B. Q., Wang, X., & Zhang, X. (2011). Posttraumatic stress disorder symptoms among adult survivors of the 2008 Sichuan earthquake in China. *Journal of Traumatic Stress*, *24*(3), 295-302. https://doi.org/10.1002/jts.20645

Chen, X.-Y., Shi, X., Zhou, Y., Chen, H., Ma, Y., Wang, T., & Fan, F. (2021). Change patterns of sleep problems predict mental health problems among adolescents: A 10-year cohort study of Chinese Wenchuan earthquake. *Journal of Affective Disorders*, *287*, 138-144. https://doi.org/10.1016/j.jad.2021.02.080

Chen, Y. Y., & Koenig, H. G. (2006). Traumatic stress and religion: Is there a relationship? A review of empirical findings. *Journal of Religion and Health*, *45*(3), 371-381. https://doi.org/10.1007/s10943-006-9040-y

Chirico, F. (2016). Spiritual well-being in the 21st century: It is time to review the current WHO's health definition. *Journal of Health and Social Sciences*, *1*(1), 11-16. https://doi.org/10.19204/2016/sprt2

Cofini, V., Carbonelli, A., Cecilia, M. R., Binkin, N., & di Orio, F. (2015). Post-traumatic stress disorder and coping in a sample of adult survivors of the Italian earthquake. *Psychiatry Research*, *229*(1), 353-358. https://doi.org/10.1016/j.psychres.2015.06.041

Conversano, C., Rotondo, A., Lensi, E., Della Vista, O., Arpone, F., & Reda, M. A. (2010). Optimism and its impact on mental and physical well-being. *Clinical Practice and Epidemiology in Mental Health: CP & EMH*, *6*, 25-29. https://doi.org/10.2174/1745017901006010025

Dai, W., Chen, L., Lai, Z., Li, Y., Wang, J., & Liu, A. (2016). The incidence of post-traumatic stress disorder among survivors after earthquakes:a systematic review and meta-analysis. *BMC Psychiatry*, *16*(1), 188. https://doi.org/10.1186/s12888-016-0891-9

de Castella, R., & Simmonds, J. G. (2013). "There's a deeper level of meaning as to what suffering's all about": Experiences of religious and spiritual growth following trauma. *Mental Health, Religion & Culture*, *16*, 536-556. https://doi.org/10.1080/13674676.2012.702738

Deal, B. (2011). Finding meaning in suffering. *Holistic Nursing Practice*, *25*(4), 205-210. https://doi.org/10.1097/HNP.0b013e31822271db

Dell'Osso, L., Carmassi, C., Massimetti, G., Stratta, P., Riccardi, I., Capanna, C., Akiskal, K. K., Akiskal, H. S., & Rossi, A. (2013). Age, gender and epicenter proximity effects on post-traumatic stress symptoms in L'Aquila 2009 earthquake survivors. *Journal of Affective Disorders*, *146*(2), 174-180. https://doi.org/10.1016/j.jad.2012.08.048

Disaster and Emergency Management Presidency (2023, February). *Information on the Earthquake in Kahramanmaraş-Pazarcık.* T.R. Ministry of Interior Disaster and Emergency Management Presidency. https://www.afad.gov.tr/kahramanmaras-pazarcikta-meydana-gelen-deprem-hakkinda-bilgilendirmee-merkezicerik

Divsalar, P., & Dehesh, T. (2020). Prevalence and predictors of post-traumatic stress disorder and depression among survivors over 12 years after the Bam Earthquake. *Neuropsychiatric Disease and Treatment*, *16*, 1207-1216. https://doi.org/10.2147/NDT.S252730

Dyson, J., Cobb, M., & Forman, D. (1997). The meaning of spirituality: A literature review. *Journal of Advanced Nursing*, *26*(6), 1183-1188. https://doi.org/10.1046/j.1365-2648.1997.00446.x

Edwards, L., Bretherton, R., Gresswell, M., & Sabin-Farrell, R. (2020). The relationship between social support, spiritual well-being, and depression in Christian clergy: A systematic literature review. *Mental Health Religion & Culture*, *23*(10), 857-873. https://doi.org/10.1080/13674676.2020.1838459

Ekşi, H., & Kardaş, S. (2017). Spiritual well-being: scale development and validation. *Spiritual Psychology and Counseling*, *2*(1), 73-88. https://doi.org/10.12738/spc.2017.1.0022

Ekşi, H., Kermen, U., Dinçer, F., & Musa, H. (2020). Investigating teachers' happiness in the contexts of spiritual well-being and stress in Turkey. *Mental Health, Religion & Culture*, *23*(1), 10-23. https://doi.org/10.1080/13674676.2019.1710828

Fan, F., Long, K., Zhou, Y., Zheng, Y., & Liu, X. (2015). Longitudinal trajectories of post-traumatic stress disorder symptoms among adolescents after the Wenchuan Earthquake in China. *Psychological Medicine*, *45*(13), 2885-2896. https://doi.org/10.1017/S0033291715000884

Feder, A., Ahmad, S., Lee, E. J., Morgan, J. E., Singh, R., Smith, B. W., Southwick, S. M., & Charney, D. S. (2013). Coping and PTSD symptoms in Pakistani earthquake survivors: Purpose in life, religious coping and social support. *Journal of Affective Disorders*, *147*(1), 156-163. https://doi.org/10.1016/j.jad.2012.10.027

Ferguson, C. (2023). *Exploring the role of religious coping in natural disaster survivors in the Bahamas*. [Unpublished doctoral dissertation]. Liberty University https://digitalcommons.liberty.edu/doctoral/4471

Fisher, J. W. (1998). *Spiritual health: Its nature and place in the school curriculum.* [Unpublished doctoral dissertation]. University of Melbourne. https://minerva-access.unimelb.edu.au/items/0fb9d10e-efe0-5538-ae82-d79f7c463895

Fradelos, E. C., Kapsiocha, E., Tzavella, F., Kastanidou, S., Tsaras, K., Papagiannis, D., & Papathanasiou, I. V. (2019). Factors associated with psychological distress in university students and the relation to emotional intelligent and spirituality: A cross-sectional study. *Materia Socio-Medica*, *31*(4), 262-267. https://doi.org/10.5455/msm.2019.31.262-267

Galea, S., Nandi, A., & Vlahov, D. (2005). The epidemiology of post-traumatic stress disorder after disasters. *Epidemiologic Reviews*, *27*(1), 78-91. https://doi.org/10.1093/epirev/mxi003

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*, 548-556. https://doi.org/10.1080/17439760903157166

Grouden, M. E., & Jose, P. E. (2015). Do sources of meaning differentially predict search for meaning, presence of meaning, and wellbeing. *International Journal of Wellbeing*, *5*(1). https://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/313

Gunn, S. W. A. (1995). Health effects of earthquakes. *Disaster Prevention and Management: An International Journal*, *4*(5), 6-10. https://doi.org/10.1108/09653569510100956

Hardiman, P., & Simmonds, J. G. (2013). Spiritual well-being, burnout and trauma in counsellors and psychotherapists. *Mental Health, Religion & Culture*, *16*(10), 1044-1055. https://doi.org/10.1080/13674676.2012.732560

Huck, S. W. (2012). *Reading statistics and research (6.)*. Pearson.

Ikizer, G., Karanci, A. N., & Doğulu, C. (2016). Exploring factors associated with psychological resilience among earthquake survivors from Turkey. *Journal of Loss and Trauma*, *21*(5), 384-398. https://doi.org/10.1080/15325024.2015.1108794

Jin, Y., Sun, C., Wang, F., An, J., & Xu, J. (2018). The relationship between PTSD, depression and negative life events: Ya'an earthquake three years later. *Psychiatry Research*, *259*, 358-363. https://doi.org/10.1016/j.psychres.2017.09.017

Karagöz, Y. (2010). The power and effectiveness of nonparametric techniques. *Electronic Journal of Social Sciences*, *9*(33), 18-40. https://dergipark.org.tr/en/pub/esosder/issue/6147/82524

Karamustafalıoğlu, O. K., Fostick, L., Çevik, M., Zukerman, G., Tankaya, O., Güveli, M., Bakım, B., Karamustafalıoğlu, N., & Zohar, J. (2023). Ten-year follow-up of earthquake survivors: Long-term study on the course of PTSD following a natural disaster. *The Journal of Clinical Psychiatry*, *84*(2), 45763. https://doi.org/10.4088/JCP.22m14377

Karanci, A. N., & Rüstemli, A. (1995). Psychological consequences of the 1992 Erzincan (Turkey) Earthquake. *Disasters*, *19*(1), 8-18. https://doi.org/10.1111/j.1467-7717.1995.tb00328.x

Khan, S. M., Shafi, I., Butt, W. H., Diez, I. de la T., Flores, M. A. L., Galán, J. C., & Ashraf, I. (2023). A systematic review of disaster management systems: Approaches, challenges, and future directions. *Land*, *12*(8). https://doi.org/10.3390/land12081514

Kılıç, C., & Ulusoy, M. (2003). Psychological effects of the November 1999 earthquake in Turkey: An epidemiological study. *Acta Psychiatrica Scandinavica*, *108*(3), 232-238. https://doi.org/10.1034/j.1600-0447.2003.00119.x

Koçoğlu, E., Demir, F. B., Ulukaya-Öteleş, Ü. & Özeren, E. (2023). Post-earthquake trauma levels of university students evaluation: Example of 6 February Kahramanmaraş Earthquake. *Higher Education Studies*, *13*(2), 121-127. https://doi.org/10.5539/hes.v13n2p121

Koenig, H. G. (2012). Religion, spirituality, and health: the research and clinical implications. *International Scholarly Research Notices*, 2012, 1-33. https://doi.org/10.5402/2012/278730

Kula, N. (2002). Earthquake and religious coping. *Gazi University Corum Journal of Faculty of Theology*, *1*(1), 234-255. https://dergipark.org.tr/en/pub/hititilahiyat/issue/7703/100920

Kun, P., Chen, X., Han, S., Gong, X., Chen, M., Zhang, W., & Yao, L. (2009). Prevalence of post-traumatic stress disorder in Sichuan Province, China after the 2008 Wenchuan earthquake. *Public Health*, *123*(11), 703-707. https://doi.org/10.1016/j.puhe.2009.09.017

Kuo, H. W., Wu, S. J., Ma, T. C., Chiu, M.-C., & Chou, S.-Y. (2007). Posttraumatic symptoms were worst among quake victims with injuries following the Chi-chi quake in Taiwan. *Journal of Psychosomatic Research*, *62*(4), 495-500. https://doi.org/10.1016/j.jpsychores.2004.11.012

Labra, O., Maltais, D., & Tremblay, G. (2017). Chilean men exposed to the major earthquake in 2010: Investigation of the impacts on their health. *American Journal of Men's Health*, *11*(2), 392-403. https://doi.org/10.1177/1557988316681669

Lazzaroni, S., & van Bergeijk, P. A. G. (2014). Natural disasters' impact, factors of resilience and development: A meta-analysis of the macroeconomic literature. *Ecological Economics*, *107*, 333-346. https://doi.org/10.1016/j.ecolecon.2014.08.015

Lee, H. I. (2017). Correlation between spiritual well-being and mental health of nursing students. *Journal of Korean Academy of Nursing*, *32*(1), 7-15. https://doi.org/10.4040/jkan.2002.32.1.7

Liang, Y., Cheng, J., Ruzek, J. I., & Liu, Z. (2019). Posttraumatic stress disorder following the 2008 Wenchuan earthquake: A 10-year systematic review among highly exposed populations in China. *Journal of Affective Disorders*, *243*, 327-339. https://doi.org/10.1016/j.jad.2018.09.047

Liu, Q., Jiang, M., Yang, Y., Zhou, H., Zhou, Y., Yang, M., Xu, H., & Ji, Y. (2019). Prevalence of posttraumatic stress disorder (PTSD) and its correlates among junior high school students at 53 months after experiencing an earthquake. *Disaster Medicine and Public Health Preparedness*, *13*(3), 414-418. https://doi.org/10.1017/dmp.2018.76

Livanou, M., Bassoglu, M., Ssalcioglu, E., & Kalendar, D. (2002). Traumatıc stress responses in treatment-seekıng earthquake survıvors in Turkey. *The Journal of Nervous and Mental Disease*, *190*(12), 816. https://pubmed.ncbi.nlm.nih.gov/12486369

Lu, W.-T., Zhao, X.-C., Wang, R., Li, N., Song, M., Wang, L., Yu, L.-L., Gao, Y.-Y., Wang, Y.-M., An, C.-X., & Wang, X.-Y. (2023). Long-term effects of early stress due to earthquake exposure on depression symptoms in adulthood: A cross-sectional study. *Injury*, *54*(1), 207-213. https://doi.org/10.1016/j.injury.2022.07.047

McMillen, J. C., North, C. S., & Smith, E. M. (2000). What parts of PTSD are normal: Intrusion, avoidance, or arousal? Data from the Northridge, California, earthquake. *Journal of Traumatic Stress*, *13*(1), 57-75. https://doi.org/10.1023/A:1007768830246

Mesidor, J. K., & Sly, K. F. (2019). Religious coping, general coping strategies, perceived social support, PTSD symptoms, resilience, and posttraumatic growth among survivors of the 2010 earthquake in Haiti. *Mental Health, Religion & Culture*, *22*(2), 130-143. https://doi.org/10.1080/13674676.2019.1580254

Momeni, K., Karami, J., & Rad, A. S. (2013). The relationship between spirituality, resiliency and coping strategies with students' psychological well-being. *Journal of Kermanshah University of Medical Sciences*, *16*(8). https://brieflands.com/articles/jkums-77274.html#abstract

Moore, S. L. (2005). Hope makes a difference. *Journal of Psychiatric and Mental Health Nursing*, *12*(1), 100-105. https://doi.org/10.1111/j.1365-2850.2004.00802.x

Niitsu, K., Watanabe-Galloway, S., Sayles, H., Houfek, J., & Rice, M. (2014). A pilot study of the psychological impact of the great east Japan Earthquake and Tsunami. *Journal of the American Psychiatric Nurses Association*, *20*(3), 194-202. https://doi.org/10.1177/1078390314536615

Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981—2001. *Psychiatry*, *65*(3), 207-239. https://doi.org/10.1521/psyc.65.3.207.20173

Okumuş, E. (2008). Turkey-religiosity and the PRA. *The Muslim World*, *98*, 345-362. https://doi.org/10.1111/j.1478-1913.2008.00232.x

Pargament, K. I. (1992). Of means and ends: Religion and the search for significance. *The International Journal for the Psychology of Religion*, *2*(4), 201-229. https://doi.org/10.1207/s15327582ijpr0204_1

Pargament, K. I. (2013). Searching for the sacred: Toward a nonreductionistic theory of spirituality. In K. I. Pargament, J. J. Exline & J. W. Jones (Eds.), *APA handbook of psychology, religion and spirituality: Context, theory and research* (pp. 257–273). American Psychological Association. https://doi.org/10.1037/14045-014

Park, C. L. (2004). The notion of growth following stressful life experiences: Problems and prospects. *Psychological Inquiry*, *15*(1), 69-76. https://www.jstor.org/stable/20447205

Park, C. L. (2013). Religion and meaning. In. R. F. Paloutzian and C. L. Park (Eds.)*, Handbook of the psychology of religion and spirituality* (2nd ed.) (pp. 357-379). The Guilford Press. https://psycnet.apa.org/record/2013-26878-000

Park, C. L. (2017). Spiritual well-being after trauma: Correlates with appraisals, coping, and psychological adjustment. *Journal of Prevention & Intervention in the Community*, *45*(4), 297-307. https://doi.org/10.1080/10852352.2016.1197752

Park, C. L., & Gutierrez, I. A. (2013). Global and situational meanings in the context of trauma: Relations with psychological well-being. *Counselling Psychology Quarterly*, *26*(1), 8-25. https://doi.org/10.1080/09515070.2012.727547

Rahmat, H. K., Basri, A. S. H., Putra, R. M., Mulkiyan, M., Wahyuni, S. W., & Casmini, C. (2022). The influenced factors of Spiritual well-being: A systematic review. *Sociocouns: Journal of Islamic Guidance and Counseling*, *2*(1). https://doi.org/10.35719/sjigc.v2i1.23

Salcioglu, E., Basoglu, M., & Livanou, M. (2007). Post-traumatic stress disorder and comorbid depression among survivors of the 1999 earthquake in Turkey. *Disasters*, *31*(2), 115-129. https://doi.org/10.1111/j.1467-7717.2007.01000.x

Strategy and Budget Directorate (2023). 2023 *Kahramanmaraş and Hatay Earthquakes report.* Presidency of the Republic of Turkey, Strategy and Budget Directorate. https://www.sbb.gov.tr/wp-content/uploads/2023/03/2023-Kahramanmaras-ve-Hatay-Depremleri-Raporu.pdf

Schrank, B., Stanghellini, G., & Slade, M. (2008). Hope in psychiatry: A review of the literature. *Acta Psychiatrica Scandinavica*, *118*(6), 421-433. https://doi.org/10.1111/j.1600-0447.2008.01271.x

Sezgin, U., & Punamäki, R.-L. (2012). Earthquake trauma and causal explanation associating with PTSD and other psychiatric disorders among South East Anatolian women. *Journal of Affective Disorders*, *141*(2), 432-440. https://doi.org/10.1016/j.jad.2012.03.005

Sibley, C. G., & Bulbulia, J. (2012). Faith after an Earthquake: A longitudinal study of religion and perceived health before and after the 2011 Christchurch New Zealand Earthquake. *Plos One*, *7*(12), 1-10. https://doi.org/10.1371/journal.pone.0049648

Steger, M. F., Pickering, N. K., Adams, E., Burnett, J., Shin, J. Y., Dik, B. J., & Stauner, N. (2010). The quest for meaning: Religious affiliation differences in the correlates of religious quest and search for meaning in life. *Psychology of Religion and Spirituality*, *2*, 206-226. https://doi.org/10.1037/a0019122

Subandi, M. A., Achmad, T., Kurniati, H., & Febri, R. (2014). Spirituality, gratitude, hope and post-traumatic growth among the survivors of the 2010 eruption of Mount Merapi in Java, Indonesia. *Australasian Journal of Disaster and Trauma Studies*, *18*, 19-26. https://psycnet.apa.

org/record/2014-55116-003

Sumer, N., Karanci, A. N., Berument, S. K., & Gunes, H. (2005). Personal resources, coping self-efficacy, and quake exposure as predictors of psychological distress following the 1999 earthquake in Turkey. *Journal of Traumatic Stress*, *18*(4), 331-342. https://doi.org/10.1002/jts.20032

Sun, L., Su, G., Tian, Q., Qi, W., Liu, F., Qi, M., & Li, R. (2019). Religious belief and Tibetans' response to earthquake disaster: A case study of the 2010 Ms 7.1 Yushu earthquake, Qinghai Province, China. *Natural Hazards*, *99*(1), 141-159. https://doi.org/10.1007/s11069-019-03733-x

Tabachnick, B. G. & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Allyn and Bacon.

Taheri-Kharameh, Z. (2016). The relationship between religious-spiritual well-being and stress, anxiety, and depression in university students. *Health Spiritual Med Ethics*, *3*, 30-35.

Tan, H. N. & Yıldız, M. (2022). The formation and definition of the concept of "spritual well-being". *The Journal of Religious Studies*, *25*(63), 447-476. https://doi.org/10.15745/da.1175149

Tang, B., Deng, Q., Glik, D., Dong, J., & Zhang, L. (2017). A meta-analysis of risk factors for post-traumatic stress disorder (ptsd) in adults and children after earthquakes. *International Journal of Environmental Research and Public Health*, *14*(12). https://doi.org/10.3390/ijerph14121537

Tanhan, F., & Kayri, M. (2013). Validity and reliability study of the post-earthquake trauma level determination scale. *Educational Sciences in Theory and Practice*, *13*(2), 1013-1025. https://files.eric.ed.gov/fulltext/EJ1017259.pdf

Tempesta, D., Curcio, G., Gennaro, L. D., & Ferrara, M. (2013). Long-term impact of earthquakes on sleep quality. *Plos One*, *8(*2), e55936. https://doi.org/10.1371/journal.pone.0055936

Teramoto, C., Nagata, S., Okamoto, R., Suzuki, R., Kishi, E., Nomura, M., Jojima, N., Nishida, M., Koide, K., Kusano, E., Iwamoto, S., & Murashima, S. (2015). Identifying residents' health issues six weeks after the Great East Japan Earthquake. *Public Health Nursing*, *32*(6), 654-661. https://doi.org/10.1111/phn.12201

Unterrainer, H. F., Lewis, A. J., & Fink, A. (2014). Religious/spiritual well-being, personality and mental health: A review of results and conceptual issues. *Journal of Religion and Health*, *53*(2), 382-392. https://doi.org/10.1007/s10943-012-9642-5

Valladares-Garrido, M. J., Zapata-Castro, L. E., Peralta, C. I., García-Vicente, A., Astudillo-Rueda, D., León-Figueroa, D. A., & Díaz-Vélez, C. (2022). Post-traumatic stress disorder after the 6.1 Magnitude Earthquake in Piura, Peru: A cross-sectional study. *International Journal of Environmental Research and Public Health*, *19*(17), 11035. https://doi.org/10.3390/ijerph191711035

Volcan, S. M. A., Sousa, P. L. R., Mari, J. de J., & Horta, B. L. (2003). Relationship between spiritual well-being and minor psychiatric disorders: A cross-sectional study. *Revista de Saúde Pública*, *37*, 440-445. https://doi.org/10.1590/S0034-89102003000400008

Wang, L., Zhang, L., Armour, C., Cao, C., Qing, Y., Zhang, J., Liu, P., Zhang, B., Wu, Q., Zhao, Z., & Fan, G. (2015). Assessing the underlying dimensionality of DSM-5 PTSD symptoms in Chinese adolescents surviving the 2008 Wenchuan earthquake. *Journal of Anxiety Disorders*, *31*, 90-97. https://doi.org/10.1016/j.janxdis.2015.02.006

WHO. (2021). *WHO guidance on research methods for health emergency and disaster risk management.* World Health Organization. https://iris.who.int/handle/10665/345591

WHO. (2023). *Earthquake response in Türkiye and whole of Syria*. World Health Organization. https://www.who.int/publications/m/item/who-flash-appeal--earthquake-response-in-t-rkiye-and-whole-of-syria

Xu, J., & Wei, Y. (2013). Social Support as a Moderator of the Relationship between Anxiety and Depression: An Empirical Study with Adult Survivors of Wenchuan Earthquake. *Plos One*, *8*(10), e79045. https://doi.org/10.1371/journal.pone.0079045

Yehuda, R., Hoge, C. W., McFarlane, A. C., Vermetten, E., Lanius, R. A., Nievergelt, C. M., Hobfoll, S. E., Koenen, K. C., Neylan, T. C., & Hyman, S. E. (2015). Post-traumatic stress disorder. *Nature Reviews Disease Primers*, *1*(1). https://doi.org/10.1038/nrdp.2015.57

Yıldız, M., & Kuruoğlu-Göker, M. N. (2004). Psychiatric comorbidity in post-traumatic stress disorder among people seeking treatment after the Marmara Earthquake. *International Journal of Mental Health*, *33*(1), 59-66. https://doi.org/10.1080/00207411.2004.11043359

Yılmaz, A. (2023, March 20). *The number of people who lost their lives in Kahramanmaraş-centred earthquakes was fifty thousand ninety-six.* Anadolu Agency. https://www.aa.com.tr/tr/asrin-felaketi/kahramanmaras-merkezli-depremlerde-hayatini-kaybedenlerin-sayisi-50-bin-96-oldu/2850716

Yoosefi Lebni, J., Khorami, F., Ebadi Fard Azar, F., Khosravi, B., Safari, H., & Ziapour, A. (2020). Experiences of rural women with damages resulting from an earthquake in Iran: A qualitative study. *BMC Public Health*, *20*(1), 625. https://doi.org/10.1186/s12889-020-08752-z

Yorbik, Ö., Akbıyık, D. İ., Kırmızıgül, P., & Söhmen, T. (2004). Post-traumatic stress disorder symptoms in children after the 1999 Marmara Earthquake in Turkey. *International Journal of Mental Health*, *33*(1), 46-58. https://doi.org/10.1080/00207411.2004.11043360

Zhou, X., Kang, L., Sun, X., Song, H., Mao, W., Huang, X., Zhang, Y., & Li, J. (2013). Prevalence and risk factors of post-traumatic stress disorder among adult survivors six months after the Wenchuan earthquake. *Comprehensive Psychiatry*, *54*(5), 493-499. https://doi.org/10.1016/j.comppsych.2012.12.010

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Research Article

A Tale of Resilience and Faith: Understanding Grief Through Islamic Coping Mechanisms

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Abstract

This study investigates the interplay between religious cognition within Islamic beliefs and the psychological experience of grief, focusing on Ms. H.B., a 72-year-old mother who faced the heartrending loss of her three children to heart disease. It explores the role of Islamic tenets—tawakkul (reliance on God), Qadr (divine decree), and Yaqin (certainty)—in shaping her coping strategies amidst such profound losses. The case of Ms. H.B. was particularly chosen for its rich narrative that encapsulates both the depth of personal tragedy and the strength of religiously informed resilience, offering invaluable insights into the mechanisms of spiritual coping. This study emphasizes how Ms. H.B.'s reliance on her faith facilitated a unique pathway to acceptance and trust, challenging traditional concepts of psychological resilience. It prompts a re-evaluation of the cross-cultural applicability of these religious principles and their integration into mental health practices, highlighting the supportive role of faith-based communities in providing solace and strength during times of extreme adversity. Ms. H.B.'s poignant narrative underlines the intricate connection between religious faith and psychological fortitude, advocating for an integrated perspective that respects the synergistic relationship between spiritual and mental health. Conducted within an Islamic context, this research contributes to ongoing discussions on intersecting themes across disciplines within the domains of psychology, theology, and sociology, shedding light on the complex dynamics of faith, acceptance, and endurance in the face of life's most challenging circumstances.

Keywords:
Spiritual Psychology • Profound losses and Grief • Islamic coping • Tawakkul • Qadr • Yaqin • Coping mechanisms

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Introduction

The interface between religion and psychology has emerged as a focal point of scholarly inquiry, particularly in the context of mental health and resilience. Individuals may experience alienation even though their roots are based in tradition and belief. Public health paradigms have increasingly leaned on antipsychotic drugs and a spectrum of psychological interventions to mitigate such psychosocial adversities (Park & Halifax, 2021). Prior to these modern interventions, the coping mechanisms people employed in the face of conflict, trauma, and profound sorrow were deeply intertwined with their religious convictions and rituals (McBridge, 2014). This case report delves into the psychological underpinnings of religiously oriented coping in the face of trauma and grief. It does so by integrating psychological theories of coping, such as Lazarus and Folkman's transactional model of stress and coping (Avcıoğlu, Karancı & Soygur, 2019), to contextualize how religious practices provide cognitive and emotional succor. Furthermore, it examines the role of religious rituals in facilitating emotional expression, offering a sense of community, and fostering meaning-making processes that are central to psychological theories of grief and trauma recovery. By analyzing a poignant real-life account, this study aims to elucidate the nuanced psychological benefits and potential detriments of religious coping strategies, thereby enriching our understanding of their role within the broader tapestry of human resilience and psychological adaptation.

Grief: An In-Depth Exploration

Grief is an inherently human experience that shapes and is shaped by psychological processes. This multifaceted emotional journey, characterized by stages of shock, anger, and yearning, is deeply influenced by individual psychological makeup and cultural context. Attachment theory postulates that the bonds formed during life continue post-loss, influencing the bereavement process (Bowlby, 1979). The dual process model further explicates that effective adaptation to loss entails engaging with and at times retreating from grief-related stressors (Stroebe & Schut, 1999). These models provide a framework for understanding the cognitive impairments and social withdrawal that often accompany the irreversibility of loss. In Western societies, the extended period of mourning emphasizes the struggle to release the emotional attachment to what we've lost, reflecting the broader difficulty of accepting the temporary nature of life's relationships and pleasures. Grief, though typically associated with the death of loved ones, is also experienced by the dying, who grieve over the loss of their identity and autonomy. Anticipatory grief encapsulates this pre-loss mourning, with its own unique psychological manifestations (Sweeting & Gilhooly, 1990). The resolution of grief is an essential psychological process, yet Western cultural practices surrounding death can inadvertently complicate this journey. These practices—while serving important social and ritualistic functions—

can also interfere with the natural course of grief resolution, as they often demand emotional and cognitive resources at a time when individuals are most vulnerable. Conversely, religious, and spiritual practices across cultures often provide a structured pathway through the grieving process (Neimeyer & Burke, 2015), offering narratives of meaning, communal support, and rituals that validate and express grief. While numerous studies have examined the spiritual aspects of bereavement, there is still a need for detailed case studies that specifically explore how these dimensions play out in individual experiences of grief. This gap may be attributed to the complexity of integrating metaphysical constructs with empirical inquiry. However, it is imperative that we embrace these spiritual aspects to gain a holistic view of grief, recognizing its potential to foster post-traumatic growth and greater existential awareness (Pargament, 2000). By weaving together the psychological and spiritual threads that constitute the fabric of grief, we can begin to appreciate its complexity and its capacity to transform human experience.

Integrating Qadr, Tawakkul, and Yaqin in the Treatment of Complicated Grief and PTSD

In addressing the complexities of bereavement and the psychological aftermath of trauma, the rich tapestry of Islamic spiritual principles provides a healing framework that interweaves personal grief with divine wisdom. Qadr, the concept of Divine Decree, teaches that every event, including loss, occurs within the will of Allah, inviting individuals to find solace in the understanding that their pain is part of a larger, divine purpose. This perspective can reshape the experience of loss, guiding the bereaved through a process of acceptance that is both transformative and grounded in spiritual surrender (Frei-Landau et al., 2023).

Tawakkul, or Trust in God, stands as a cornerstone of resilience in the face of life's trials, encouraging a heartful reliance on the sustenance and guidance of Allah. For those grappling with the symptoms of PTSD, Tawakkul can be a source of strength, fostering a sense of security and support that transcends worldly uncertainties. By placing their trust in Allah, individuals can navigate the storm of their emotions with a steadfast spirit, engendering a healing journey marked by spiritual growth and psychological recovery (Alhafiza, Hanum & Funum, 2022).

Yaqin, which signifies Certainty in the truths of faith, offers a beacon of light amidst the darkness of grief. It reaffirms the transient nature of worldly life and the reality of the hereafter, promising an ultimate reunion with lost loved ones under the grace of Allah. This deep-rooted certainty can be profoundly comforting, providing a stable ground for the bereaved to stand upon as they reconcile with their loss (Mahmoodi, Akhavan, & Virk, 2023).

The therapeutic incorporation of Islamic concepts such as tawakkul, qadr, and beliefs about the afterlife can be specifically tailored to meet the needs of Muslim individuals experiencing complicated grief and PTSD. This approach offers not just clinical intervention but also spiritual solace. Aligning therapeutic goals with the values of faith allows clinicians to facilitate healing that respects both psychological and spiritual aspects of recovery. An integrative approach like this acknowledges the unique nature of the grieving process in an Islamic context, aiding the journey towards a redefined sense of purpose and inner peace. Recent field research, such as the work by Işık, Z. (2022) in 'Growth with Death,' provides empirical support for this approach. It shows that beliefs and attitudes rooted in Islamic teachings can help individuals accept death, prevent grief from escalating into pathological mourning, and promote spiritual maturation. Such findings underscore the importance of incorporating these spiritual dimensions into therapeutic practices for Muslim clients.

Key Concepts of Islamic Religiously Oriented Thinking: A Holistic Perspective Through Modern and Post-Modern Psychological Paradigms

Islamic religiously oriented thinking, a holistic framework deeply rooted in the teachings of the Quran and the Prophet Muhammad (pbuh), can be examined through the lens of both modern and post-modern psychological paradigms. This framework offers profound insights into the psychological well-being and spiritual resilience derived from the foundational concepts of Qadr, Tawakkul, and Yaqin (Tantray & Khan, 2021; Al-Din & Siraj, 2015).

Qadr and Psychological Resilience: The concept of Qadr, akin to the principle of radical acceptance found in Dialectical Behavior Therapy (DBT), (Robins, & Chapman, 2004), resonates with William James' view of religion as a way to make sense of the world (James, 1988), providing a framework for understanding and accepting life's unpredictable events. Acceptance, as James posits, is essential for psychological health and is a form of coping with the vicissitudes of life.

Tawakkul and Anxiety Reduction: Tawakkul reflects C.G. Jung's idea of the collective unconscious (Jung, 1936), where trust in God aligns with archetypal patterns of surrender and faith found across various cultures. This trust can be therapeutic, as Jung would argue, facilitating individuation and psychological integration. Furthermore, Tawakkul can be related to Viktor Frankl's logotherapy (Frankl, 1967a), which emphasizes the search for meaning in life, particularly in the face of suffering. Frankl's notion that meaning comes from every form of existential courage aligns with the active trust embodied in Tawakkul.

Yaqin and Cognitive Clarity: Yaqin echoes the existential clarity that Rollo May (1953) describes, where the certainty in one's values and beliefs provides a compass

amidst life's chaos. It also parallels Abraham Maslow's concept of self-actualization (Maslow, 1965a), which involves an unwavering understanding of one's purpose and potential. The certainty of Yaqin provides a psychological anchor, much like the peak experiences Maslow identifies as moments of highest happiness and fulfillment.

Integration of Daily Practices: The integration of these concepts into daily Islamic practices—such as Salah (prayer), Shukr (gratitude), and Zakat (charity)—can be viewed through the positive psychology lens, similar to the interventions suggested by Martin Seligman (Seligman et al., 2009). These practices promote well-being, much like the flow experiences Mihaly Csikszentmihalyi describes, where engagement in meaningful activities leads to optimal experiences (Tse, Nakamura & Csikszentmihalyi, 2022).

Contemporary Mental Health Implications: The work of Kenneth I. Pargament on religious coping mechanisms further illustrates the relevance of these Islamic concepts. Pargament's research highlights how spiritual beliefs can be mobilized to cope with life's challenges, supporting the idea that religiously oriented thinking can contribute significantly to psychological resilience (Pargament, 2013).

In applying these seminal psychological theories to the understanding of Islamic principles, this manuscript offers a nuanced perspective on the intersection of spirituality and psychology. Our primary motivation for this research stems from the recognition of a significant gap in the literature regarding the incorporation of Islamic spiritual principles within the field of psychology. By exploring religiously oriented thinking, particularly within Islam, this study endeavors to bridge this gap, proposing a powerful framework for personal development and emotional health that can enrich contemporary mental health practices with a holistic approach. This integration aims to provide practitioners and clients with a more comprehensive understanding of the spiritual dimensions of well-being, thereby contributing to the advancement of mental health disciplines.

Method

Design

This study adopts a narrative research design, a qualitative methodology that involves collecting and analyzing the stories of individuals to understand their experiences and the meanings they ascribe to them. This approach is particularly suitable for exploring the lived experiences of individuals like Ms. H.B., as it allows for an in-depth examination of her journey through loss and grief within her specific cultural and religious context. By engaging with her narrative, we can gain a comprehensive depiction of her personal growth and coping mechanisms, providing valuable insights into the psychological processes at play.

Participant and Ethical Considerations

Ms. H.B. voluntarily participated in this study. Informed consent was obtained, ensuring confidentiality and the right to withdraw at any point. Ethical approval was granted by Institutional Review Board of İstanbul Nişantaşı University (2023/42), consistent with the ethical standards of the 1964 Helsinki declaration and its later amendments.

Data Collection

Data was collected through a series of in-depth, semi-structured interviews with Ms. H.B. These interviews were conducted in a private, comfortable setting and were audio-recorded with the participant's consent. The interviews were guided by open-ended questions that encouraged Ms. H.B. to share her experiences of grief and the role of her faith in coping with loss. Additional data was gleaned from personal diaries provided by Ms. H.B., which offered rich, introspective insights into her emotional and spiritual journey. This triangulation of data sources provided a multi-dimensional view of her experience.

Data Analysis

The data analysis followed a narrative method, which involved transcribing interviews, meticulously reading, and re-reading the transcripts to understand the chronology and the connections between events and emotions described by Ms. H.B. Thematic analysis was employed to identify recurring themes related to grief, resilience, and religious coping. To ensure analytical rigor, member checking was conducted, which allowed Ms. H.B. to review the findings and provide feedback, thereby validating the accuracy of the accounts and interpretations. Additionally, peer debriefing was undertaken with a panel of three experts in the field of spiritual psychology, each with a unique specialization in clinical psychology, spiritual practices, and bereavement counseling. This process served to challenge and refine the emerging analysis, enhancing its credibility. Case Presentation: The findings are presented in a case study format, thoughtfully organized chronologically and thematically to deliver a coherent narrative account of Ms. H.B.'s experiences. Such a format provides a thorough understanding of the personal and spiritual dimensions of grief, thus offering a comprehensive view into the lived reality of the participant.

Case

Case background: Ms. H.B. - A tale of resilience and faith.

Ms. H.B., a 72-year-old woman from Trabzon, now residing in Istanbul, has lived through a mosaic of sociocultural transitions and personal upheavals. Married at 16

to her cousin in an arrangement that was customary within her traditional community, she quickly transitioned from adolescent to adult, from daughter to wife, and soon after, to motherhood. Within this familial role, Ms. H.B. anchored her life, dedicating herself to the upbringing of her children, with the initial hope to raise a small family that could enjoy the educational opportunities and comforts she never had.

Sociodemographically, Ms. H.B. represents a segment of the Turkish population that has undergone significant transformation in the last half-century, moving from rural areas to urban centers, from traditional roles to those reshaped by the evolving societal norms. Yet, her life was uniquely marked by a series of personal tragedies that intersected with these broader social changes.

The loss of her children was not just a personal tragedy but a reflection of the public health issues facing her community. The first loss occurred when her second child, an eight-year-old boy, succumbed to cardiomyopathy, a heart condition that was poorly understood at the time within her community. This loss heralded a period of intense personal conflict and grief, compounded by the medical fragility of her family, as this condition proved to be hereditary. In the years that followed, she endured the death of two more children to the same disease, a repetition of grief that tested the limits of her resilience.

The strife within her household extended beyond these losses. Her husband suffered a debilitating stroke, an event that not only challenged the family's emotional stability but also their socio-economic status, as medical expenses and care requirements mounted. Ms. H.B.'s role expanded from caretaker to provider, navigating the complexities of a healthcare system that was often inaccessible to those of her socioeconomic standing.

Ms. H.B. encountered a severe health crisis, facing her own mortality as she was preparing for a heart operation—a situation that mirrored the condition which led to the loss of her children. This juxtaposition of personal health struggles and the grief of familial loss presents a unique psychological context for analysis. Notably, Ms. H.B. did not seek psychiatric or psychological support during her coping process. This decision was shaped by cultural norms that often view mental health services with skepticism and by her personal beliefs, which may discount the benefits of such interventions. The absence of professional mental health care in her journey highlights the complex interplay of culture, personal belief systems, and the approaches to coping with adversity.

Today, Ms. H.B.'s life is a testament to human survival and adaptability, underscored by the presence of her six surviving children, who range in age from 31 to 54. The support and solace she find in her living children are crucial elements in her journey through grief, providing her with reasons to maintain hope and strength.

Her narrative not only demonstrates her profound resilience and inner strength in facing life's severe trials but also highlights the significance of family bonds in her coping process. This raises an intriguing question: would her strong faith and coping mechanisms have been as effective if she had no surviving children? To understand the full impact of religious belief on such traumatic experiences, further research involving a comparative case study with an individual who has lost all children and relies solely on their faith for coping could provide valuable insights. Such an analysis would offer a more comprehensive understanding of the intricate interplay between faith, family support, and resilience in the face of extreme loss.

Initial grief and spiritual healing: a journey of acceptance in Islamic perspective with insights from psychological paradigms.

Ms. H.B.'s experience with grief after her son's death from cardiomyopathy presents a profound case of psychospiritual evolution. Prior to this tragedy, she affirmed having faith, but not to the depth that she discovered in its aftermath. This significant deepening of her faith highlights a transformative journey that was catalyzed by her loss. Her increased reliance on Islamic principles such as Tawakkul (reliance on God), Qadr (divine decree), and Sabr (patience) suggests a remarkable shift in her spiritual resilience and coping mechanisms. The psychosomatic manifestation of her husband's stroke underscores the powerful mind-body connection recognized in psychosomatic medicine, highlighting how emotional distress can precipitate physical health issues. In her search for solace, Ms. H.B. turned to her Islamic faith, experiencing a transformative moment during prayer. This spiritual awakening to the concept that children are a trust from God reflects the psychological process of cognitive restructuring, a fundamental aspect of cognitive-behavioral therapy. By reframing the loss of her son as a transition within God's divine plan (Qadr), she found a path to acceptance, echoing the concept of Sabr (patience) in Islamic tradition. This is reminiscent of William James' pragmatism, where the utility of religious belief lies in its ability to provide comfort in the face of life's adversities (James, 2020). Ms. H.B.'s realization during prayer aligns with Viktor Frankl's logotherapy, where finding meaning in suffering is crucial for emotional healing. Her experience also mirrors Carl Jung's individuation process (Kincel, 1975), where confronting the shadow—here represented by grief—can lead to personal growth. The Islamic practice of Tawakkul provided Ms. H.B. a framework to process her grief. This surrender to God can be seen through the lens of Rollo May's existential psychology, where an individual confronts the conditions of existence—freedom, isolation, meaninglessness, and death—and emerges with a stronger sense of self. Tawakkul allows for a reconciliation of personal autonomy with a trust in the transcendent, which can be compared to Abraham Maslow's concept of self-actualization (Maslow, 1965b), as both involve the realization of one's potential within the context of a greater reality. By adopting a posture of Tawakkul, Ms. H.B.

demonstrated a form of spiritual resilience. This resilience is not only in line with Islamic teachings but also with modern psychological understandings of resilience as a dynamic process of positive adaptation in the context of significant adversity. Kenneth Pargament's work on religious coping (Pargament et al., 2005) can further elucidate how individuals like Ms. H.B. mobilize their spiritual beliefs to navigate life's challenges. Ultimately, Ms. H.B.'s narrative is a powerful testament to the integration of spiritual principles with psychological coping mechanisms, highlighting the potential for religious beliefs to coalesce with psychological healing. Her journey of bereavement offers profound insights into how individuals across cultures can draw upon their faith to find strength and meaning in the face of loss.

Second grief: embracing Qadr- acceptance in the face of tragedy.

As Ms. H.B. grappled with the loss of her second child, her journey was not just one of personal bereavement but also a testament to the resilience described in modern psychological paradigms. Her active acceptance of Qadr—the divine decree—mirrors the process of meaning-making (Işik et al., 2021) that is central to post-traumatic growth, a concept elucidated by psychologists such as Tedeschi and Calhoun. This process is an active re-engagement with life, transforming tragedy into a crucible for personal development. Ms. H.B.'s steadfast belief in the predetermined nature of life's events can be viewed through the prism of Viktor Frankl's logotherapy (Frankl, 1967b), which posits that finding meaning in suffering is essential for psychological health. Frankl's assertion that striving to find meaning in life is the primary motivational force in humans aligns with Ms. H.B.'s faith-based resilience. Her prioritization of her family's well-being over her grief reflects the concept of prioritized coping, resonating with Maslow's hierarchy of needs, where the safety and security of her children took precedence, even as she navigated her own emotional turmoil. The concept of Qadr as a scaffold for psychological resilience parallels Carl Jung's individuation process, where the integration of life's experiences, including profound loss, contributes to the wholeness of the self. Moreover, Ms. H.B.'s acceptance aligns with the radical acceptance aspect of Dialectical Behavior Therapy developed by Marsha Linehan (Linehan, 2020), which emphasizes the necessity of accepting reality as it is to reduce suffering and distress. Ms. H.B.'s story illustrates the therapeutic power of integrating spiritual principles with psychological resilience. It underscores the potential for religious beliefs to coalesce with psychological healing, as also noted in the work of Kenneth Pargament, who has extensively researched the efficacy of religious coping strategies. By juxtaposing Ms. H.B.'s Islamic faith with these psychological constructs, we see how religious and spiritual worldviews can be integrated into modern psychological practice. Her narrative offers a clear example of how deeply held religious beliefs can function as a powerful force for resilience, providing a compelling framework for enduring life's greatest challenges.

Third Grief: Yaqin - Certainty in the Face of Personal Tragedy Interpreted Through Psychological Paradigms

Ms. H.B.'s third and intensely personal experience of grief brought her face-to-face with her mortality. The emotional whirlwind that ensued following the ironic halt of her life right before a potentially life-extending operation plunged her into deep self-reproach. This is a clear manifestation of the kind of ruminative thinking outlined by cognitive theories of grief, where guilt can spiral into chronic grieving if left unaddressed. However, it was through the Islamic principle of Yaqin—certainty in God's omniscience—that Ms. H.B. found a path to psychological peace. This principle resonates with the existentialist perspectives of psychologists like Rollo May and Viktor Frankl (Yalom & May, 2011), who emphasize the need for an authentic encounter with life's realities, including the inevitability of death. Yaqin allowed Ms. H.B. to confront her existential angst and find meaning in her circumstances, paralleling Frankl's concept of meaning-making even in suffering. The cognitive reframing she underwent, informed by her faith, mirrors the therapeutic approaches advocated by Aaron T. Beck, where altering one's perception of events can lead to emotional relief (Beck & Weishaar, 1989). By acknowledging her daughter's predestined lifespan, Ms. H.B. transitioned from a stance of guilt to one of acceptance, a process akin to the acceptance and commitment therapy which stresses the importance of accepting what is out of one's personal control. Ms. H.B.'s embrace of her daughter's fated life duration also draws parallels to Carl Jung's idea of synchronicity (Jung, 1997) —where events are "meaningful coincidences" that reflect a larger order in the universe. Her realization is a profound psychological reconciliation with mortality, a testament to the human ability to find solace in a larger cosmic order. The balance Ms. H.B. achieved, marked by her expressions of natural human emotion amidst a steadfast belief in a divine order, reflects the prophetic model of grieving found in Islamic tradition. This model is based on the ways the Prophet Muhammad is reported to have dealt with loss: by openly expressing sorrow and shedding tears, yet without questioning the wisdom of God's plan. It is a form of grieving that involves a compassionate acceptance of loss as part of life's decree while maintaining a composed submission to God's will. This dual approach exemplifies the Islamic view of grief as an experience that combines human vulnerability with spiritual resilience, thereby allowing for emotional release while also reinforcing faith and patience.

In synthesizing Islamic principles with psychological coping strategies, Ms. H.B.'s journey underscores the holistic approach to managing life's tribulations. Her narrative demonstrates the complementary nature of faith and psychological acceptance in fostering resilience and grace. Such an integrative approach offers valuable insights for psychological practice, especially in culturally sensitive contexts, underscoring the potential of spiritual certitude to bolster psychological resilience.

Results

This research delves into the poignant story of Ms. H.B., a 72-year-old mother who navigated the tumultuous waters of grief following the loss of her three children. It is within the rich narrative of her faith-informed resilience that we find a powerful interplay of tawakkul (reliance on God), qadr (divine decree), and yaqin (certainty) — core Islamic concepts that have shaped her coping strategies in the face of heartrending tragedies. This study sheds light on the multifaceted nature of psychological resilience, particularly in the context of spiritual coping mechanisms across different cultures. It underscores the necessity to reassess the integration of religious principles in modern mental health practices, highlighting the importance of an integrative approach. By interweaving psychology, theology, and sociology, the research aims to articulate how spiritual well-being and psychological strength are interconnected and can be harmoniously aligned in therapeutic settings.

Integration of Faith and Psychological Resilience:

- **Islamic View**: Reliance on God (tawakkul) is essential for enduring life's trials, suggesting that faith can provide a source of strength and acceptance in the face of uncontrollable events.
- **Modern Psychology**: This concept aligns with the idea of resilience in positive psychology, where individuals draw upon internal and external resources to thrive amidst adversity.

Spiritual Coping Mechanisms in Trauma:

- **Islamic View**: Qadr (divine decree) and yaqin (certainty) offer a framework for accepting life's challenges as part of a divine plan, providing solace, and reducing existential anxiety.
- **Modern Psychology**: Similar to the concept of radical acceptance in Dialectical Behavior Therapy (DBT), it helps individuals to acknowledge their reality without judgment, which can mitigate the intensity of grief and trauma.

Cultural and Spiritual Narratives in Grief Processing:

- **Islamic View**: The spiritual narrative provides a structured pathway through the grieving process, with religious rituals offering communal support and a means to express and validate grief.
- **Modern Psychology**: This resonates with the dual process model of coping, which posits that people oscillate between confronting and avoiding the reality of loss to facilitate adaptation. The dual process model of coping in modern psychology, which posits that people oscillate between confronting and avoiding the reality of loss,

parallels Islamic coping strategies. In Islam, coping involves a balance of emotional expression and maintaining faith, akin to the model's emphasis on oscillation for adaptation. The Islamic concept of Sabr (patience) and Tawakkul (trust in God's plan) aligns with this model, as both advocate for a dynamic approach to grief, recognizing the need for both engagement and temporary withdrawal from the emotional impact of loss. This comparison underscores the compatibility of Islamic principles with contemporary psychological models in understanding the grieving process.

Cross-Cultural Application of Islamic Coping Strategies:

- **Islamic View**: The principles of tawakkul, qadr, and yaqin are seen as universally applicable, offering a spiritual template for resilience that transcends cultural boundaries.
- **Modern Psychology**: The universality of these principles reflects Jung's collective unconscious, suggesting that certain archetypes of coping and resilience are shared across cultures.

Psychological Theories and Religious Coping:

- **Islamic View**: Islamic coping strategies are grounded in a holistic view of the human experience, integrating emotional, spiritual, and psychological well-being.
- **Modern Psychology**: These strategies can be seen through the lens of cognitive-behavioral therapy, where the restructuring of beliefs around loss and suffering can lead to emotional healing.

Complicated Grief and Psychological Disorders:

- **Islamic View**: Persistent grief may be interpreted as a challenge to one's faith and understanding of qadr, requiring a re-alignment of spiritual beliefs.
- **Modern Psychology**: Complicated grief parallels the cognitive stress models of PTSD, where maladaptive thoughts hinder the process of recovery, necessitating targeted interventions like cognitive-behavioral therapy.

Empirical Exploration of Spiritual Dimensions:

- **Islamic View**: Encourages a deeper exploration of spirituality as an empirical study within the context of grief, recognizing its potential to foster growth and existential awareness.
- **Modern Psychology**: Supports the incorporation of spirituality into research, acknowledging its transformative potential in the human experience of grief and recovery.

Transformation through Grief:

- **Islamic View**: Grief, when approached through the lens of faith, can lead to personal growth and a deeper understanding of life's purpose.
- **Modern Psychology**: Aligns with theories of post-traumatic growth, where individuals find new meaning and strength following a traumatic experience.

Methodological Approach to Spiritual Coping:

- **Islamic View**: Narrative research captures the personal and spiritual dimensions of coping with loss, emphasizing the importance of individual stories in understanding grief.
- **Modern Psychology**: Narrative methods align with qualitative research approaches in psychology, valuing the depth and richness of personal experience in scientific inquiry.

Faith in the Face of Mortality:

- **Islamic View**: Yaqin provides a steadfast belief in an afterlife and divine wisdom, which can bring peace and acceptance of death.
- **Modern Psychology**: Reflects existentialist perspectives that emphasize the importance of confronting mortality and finding authentic meaning in life and death.

Spiritual and Psychological Integration for Therapeutic Practice:

- **Islamic View**: Proposes an integrated approach that honors spiritual beliefs as part of the therapeutic process, recognizing their foundational role in the individual's coping mechanism.
- **Modern Psychology**: Encourages a culturally sensitive therapeutic approach that incorporates the patient's religious and spiritual beliefs into treatment plans for grief and trauma.

Discussion

The journey of Ms. H.B. provides valuable insights into the interplay between Islamic teachings and psychological resilience. Her reliance on tawakkul, or trust in God, can be likened to the surrender to a higher power that William James identified as a key component of religious experiences, which can bolster resilience in the face of life's uncertainties. The concept of Qadr, or divine decree, is not unique to Islam; it is reflected in many cultural traditions that acknowledge the role of fate or destiny. Carl Jung's theory of the collective unconscious, a shared reservoir of experiences inherited by all humans, parallels this idea. Jung identified recurring motifs, or

archetypes, which emerge in myths and dreams, revealing universal themes. These archetypes act as symbolic blueprints for understanding human experiences, much like the concept of Qadr provides a framework for believers to interpret life events as part of a broader, preordained cosmic plan. This universal applicability of Qadr aligns with Jung's view that certain psychological structures are shared among people across different cultures, thereby offering a common narrative through which individuals can find meaning in their personal journeys. Yaqin, or certainty in God's plan, is critical in confronting mortality. This concept parallels Viktor Frankl's existential analysis, where belief in an overarching meaning or higher purpose is central to enduring life's trials. Frankl's logotherapy emphasizes the will to meaning as essential for psychological well-being, aligning with the Islamic perspective of finding peace in divine certainty. Ms. H.B.'s narrative raises questions about the interaction between psychological resilience, often conceptualized within the positive psychology movement by figures like Seligman, and spiritual resilience. Abraham Maslow's later work on self-transcendence, which extended beyond self-actualization to include spiritual and mystical experiences, can be particularly relevant in understanding the depth of Ms. H.B.'s spiritual resilience. The cultural context of Ms. H.B.'s coping mechanisms underscores the role of cultural beliefs in shaping individual responses to grief, resonating with the cross-cultural studies of grief and resilience. Ken Wilber's integral psychology, which considers multiple facets of human existence including the cultural and spiritual, can also offer a comprehensive framework for understanding Ms. H.B.'s experiences. Communities and religious institutions can draw on the work of Rollo May, who emphasized the importance of community in providing a space for individuals to navigate existential crises. May's existential psychotherapy could offer guidance in creating support structures that acknowledge the interplay of faith, culture, and individual psychology. Ms. H.B.'s resilience, illuminated by her faith, provides a narrative that aligns with universal themes of acceptance and trust, and is supported by the transformative theories of spiritual psychology. Her experiences offer a window into the human capacity to find peace and purpose amidst adversity, enriching our understanding of resilience as both a psychological construct and a spiritual phenomenon.

Conclusion

Ms. H.B.'s odyssey, etched with deep grief and empowered by her unwavering faith, exemplifies the remarkable resilience of the human spirit. Her narrative, while deeply personal, offers universal insights into the transformative power of acceptance and trust, principles that transcend the boundaries of Islamic teachings to touch upon universal human experiences. Her spiritual fortitude, nourished by the principles of tawakkul, Qadr, and Yaqin, reflects the profound role that spiritual resilience plays in human psychology. This resilience, as seen through the lens of William James'

pragmatic philosophy, emphasizes the practical value of religious beliefs in managing life's vicissitudes. Carl Jung's concept of the collective unconscious refers to a level of the psyche that contains inherited, universal themes and patterns, which he termed archetypes. These are not personal memories but rather predispositions to respond to the world in certain ways, and they manifest across different cultures and religions through myths, stories, and dreams. In the case of Ms. H.B., her spiritual experiences during times of grief can be seen to resonate with such archetypes. For example, the archetype of the 'wounded healer' reflects the idea that through suffering and healing oneself, a person gains insight and the ability to help heal others. Ms. H.B.'s journey through loss and her subsequent resilience could be viewed as embodying this archetype, connecting her individual experience to a universal pattern that is recognizable and meaningful in diverse cultural contexts. By drawing on her deep faith to navigate her losses, she taps into a source of strength and understanding that echoes these shared human experiences, providing a narrative framework within which her personal grief aligns with collective human themes of trial, transformation, and transcendence. Ms. H.B.'s journey prompts a reexamination of resilience, inviting a dialogue that bridges psychological endurance with spiritual depth. Her story encourages an integrative approach to well-being, one that is echoed in Abraham Maslow's later work on self-transcendence and Viktor Frankl's logotherapy, both of which recognize the importance of spiritual and existential dimensions in achieving psychological health. Such inspirational stories call upon communities to create environments that nurture spiritual resilience. In the spirit of Ken Wilber's integral psychology, this can involve a holistic embrace of individual experiences, acknowledging the interplay of faith, culture, and psychology in the healing process.

In conclusion, Ms. H.B.'s life story stands as a call to introspection on the myriad sources of our resilience. It is a poignant testament to the human capacity to navigate adversity with grace, drawing upon a harmonious blend of faith, acceptance, and a profound belief in the soul's journey. As we reflect upon her legacy, we are reminded of the potential within each of us to transcend our struggles and find peace in the confluence of our spiritual beliefs and psychological fortitude.

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Peer-review. The research was rigorously evaluated by two or more experts in the field, and the study was refined based on their recommendations.

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References

Alhafiza, R. G., Hanum, S., & Funun, F. (2022). Tawakkul in the Qur'an as coping mechanism for IIUM student mastery in coping with the Covid-19 challenges. *Mashdar: Jurnal Studi Al-Qur'an dan Hadis*, *4*(2), 205-218. http://doi.org/10.15548/mashdar.v4i2.4824

Avcıoğlu, M. M., Karancı, A. N., & Soygur, H. (2019). What is related to the well-being of the siblings of patients with schizophrenia: An evaluation within the Lazarus and Folkman's Transactional Stress and Coping Model. *International Journal of Social Psychiatry*, *65*(3), 252-261. https://doi.org/10.1177/0020764019840061

Beck, A.T., Weishaar, M. (1989). Cognitive Therapy. In: Freeman, A., Simon, K.M., Beutler, L.E., Arkowitz, H. (eds) *Comprehensive Handbook of Cognitive Therapy.* Springer, New York, NY. https://doi.org/10.1007/978-1-4757-9779-4_2

Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, *2*(4), 637-638. http://doi.org/10.1017/S0140525X00064955

Frankl, V. E. (1967a). Logotherapy and existentialism. *Psychotherapy: Theory, Research & Practice, 4*(3), 138–142. https://doi.org/10.1037/h0087982

Frankl, V. E. (1967b). Logotherapy and existentialism. *Psychotherapy: Theory, Research & Practice, 4*(3), 138–142. https://doi.org/10.1037/h0087982

Frei-Landau, R., Abo-Mokh, I., & Ben-Yehoshua, N. S. (2023). Religious meaning-making among Muslim parents bereaved by homicide: Struggling to accept 'God's will'and yearning for 'Qayama'day. *Heliyon*, *9*(9). http://doi.org/10.1016/j.heliyon.2023.e20246

Işık, Z., (2022). *Ölümle büyümek.* İz Yayıncılık.

James, W. (1988). *William James: Writings 1902-1910 The varieties of religious experience/ pragmatism/a pluralistic universe/the meaning of truth/some problems of philosophy/essays* (6th ed.). Library of America.

Jung, C. G. (1936). The concept of the collective unconscious. *Collected Works*, *9*(1), 42.

Jung, C. G. (1997). *Jung on synchronicity and the paranormal*. New York, Routledge.

Kincel, R. L. (1975). *CG Jung's individuation process* (Publication No. 10169573) [Doctoral dissertation, University of Ottawa]. Retrieved from: https://ruor.uottawa.ca/bitstream/10393/21039/1/DC53272.PDF

Linehan, M. M. (2020). *Dialectical behavior therapy in clinical practice*. Guilford.

Maslow, A. (1965a). *Self-actualization and beyond*. Institute of Education Sciences.

Maslow, A. (1965b). *Self-actualization and beyond*. Institute of Education Sciences.

Mahmoodi, V., Akhavan, A., & Virk, Z. (2023). Integration of Islamic spirituality in the treatment of grief for pregnancy loss: A case series of loss during early, mid-, and late pregnancy. *Spirituality in Clinical Practice*, *10*(1), 52. http://doi.org/10.1037/scp0000312

McBride, J. L. (2014). *Spiritual crisis: Surviving trauma to the soul*. Routledge. https://doi.org/10.4324/9781315809991

Mosher, L. (Ed). (2021). *Freedom: Christian and muslim perspectives*. Georgetown University.

Neimeyer, R. A., & Burke, L. A. (2015). Loss, grief, and spiritual struggle: The quest for meaning in bereavement. *Religion, Brain & Behavior*, *5*(2), 131-138. https://doi.org/10.1080/2153599X.2014.891253

Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*, *56*(4), 519-543. https://doi.org/10.1002/(SICI)1097-4679(200004)56:4<519::AID-JCLP6>3.0.CO;2-1

Pargament, K. I., Ano, G. G., & Wachholtz, A. (2005). The religious dimension of coping. In Raymond F. Paloutzıan Crystal L. Park (Eds), *Handbook of the psychology of religion and spirituality*, (pp.479-495). The Guilford.

Pargament, K. I. (Ed.). (2013). Searching for the sacred: Toward a nonreductionistic theory of spirituality. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 1): Context, theory, and research* (pp. 257–273). American Psychological Association. https://doi.org/10.1037/14045-014

Park, C. L., & Halifax, R. J. (2021). Religion and spirituality in adjusting to bereavement: Grief as burden, grief as gift. In Robert A. Neimeyer, Darcy L. Harris, Howard R. Winokuer, Gordon Thornton (Eds.), *Grief and Bereavement in Contemporary Society*, 355-363.

Robins, C. J., & Chapman, A. L. (2004). Dialectical behavior therapy: Current status, recent developments, and future directions. *Journal of Personality Disorders*, *18*(1), 73-89. https://doi.org/10.1521/pedi.18.1.73.32771

Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, *35*(3), 293-311. https://doi.org/10.1080/03054980902934563

Stroebe, M. S., & Schut, H. (2001). Models of coping with bereavement: A review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 375–403). American Psychological Association. https://doi.org/10.1037/10436-016

Sweeting, H. N., & Gilhooly, M. L. (1990). Anticipatory grief: A review. *Social Science & Medicine*, *30*(10), 1073-1080. https://doi.org/10.1016/0277-9536(90)90293-2

Tantray, M. A., & Khan, T. R. (2021). *Concepts in Muslim Philosophy*. Rudra.

Tse, D. C., Nakamura, J., & Csikszentmihalyi, M. (2022). Flow experiences across adulthood: Preliminary findings on the continuity hypothesis. *Journal of Happiness Studies*, *23*(6), 2517-2540. https://doi.org/10.1007/s10902-022-00514-5

Yalom, I., & May, R. (2011). Existential Psychotherapy. In Raymond J. Corsini Danny Wedding (Eds), C*urrent Psychotherapies*, 310. Cengage Learning.

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Research Article

The Relationship between Spiritual Health and Spiritual Care Competencies in Nurses: A Cross-Sectional Study

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Abstract

The aim of this study is to explore the relationship between spiritual health and spiritual care competencies among nurses. A cross-sectional study was conducted with nurses employed at a hospital in 2022 (n=205). Data were collected using the "Socio-demographic Information Form," "Spiritual Health Scale-Short Form," and "Spiritual Care Competence Scale-Turkish." The study found that nurses exhibited a moderate level of spiritual health and spiritual care competence. Nurses with higher levels of education and those who had undergone courses or training in spiritual care demonstrated higher levels of spiritual health and spiritual care competencies. A significant correlation was observed between spiritual health and spiritual care competence. Factors such as increased spiritual health, age, level of education, years of professional experience, and participation in religious activities were identified as predictors of enhanced spiritual care competence among nurses. These findings suggest that nurses' spiritual care competence is influenced by their levels of spiritual health. Based on the study results, it is recommended to incorporate educational and consultancy services aimed at enhancing and developing spiritual health (including assessing and supporting spiritual needs) into the curriculum for nursing students, as well as organizing educational seminars for practicing nurses.

Keywords:
Spiritual health • Spiritual care competence • Nursing education • Nurses

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Introduction

Spiritual health is acknowledged as a fundamental dimension of overall health. It positively influences not only individuals' mental health and emotional well-being but also their physical, mental, and social dimensions (Cone & Giske, 2022; Jaberi et al., 2019; Sadat Hoseini et al., 2019). The theoretical framework of the concept of spirituality is generally defined as the sum of beliefs, cultural systems, and world views, and includes the concept of religion. The concept of religion is an organized system of belief and worship defined as the individual's desire to find meaning and value in life (Sadat Hoseini et al., 2019). Spirituality is a broader concept than religion and encompasses all existential aspects of an individual's life (Ghorbani et al., 2020; Sadat Hoseini et al., 2019). Spiritual health concept includes a purposeful life, transcendence and actualization of different dimensions and capacities of human beings. Spiritual health creates a balance between physical, psychological, and social aspects of human life (Jaberi et al., 2019). Studies have found that spiritually healthy individuals have higher levels of hope, self-esteem, happiness, mental well-being and well-being, cope with stress better, and have a higher quality of life. The concept of spirituality, which is so important, has taken its place in the health system as spiritual care. Spiritual care is defined as nurses taking interventions to meet the spiritual needs of their patients and evaluating this process (Ghorbani et al., 2021; Willemse et al., 2020). Although spiritual care had been overlooked in nursing care in the past (Alshehry, 2018), more attention has been given to the spiritual care needs of patients in recent years (Jaberi et al., 2019). Both national and international nursing organizations (American Nurses Association, 2022; ICN, 2012) emphasize that nurses are responsible for providing spiritual care (Hu et al., 2019). Spiritual care in nursing is defined as activities and procedures that improve patients' spiritual quality of life and spiritual well-being (Adib-Hajbaghery et al., 2017).

Addressing these needs and applying interventions to address them can contribute to patients' recovery processes and coping skills (Wu et al., 2015; Ghorbani et al., 2021). Spiritual care interventions applied to the patients by the nurses can be categorized in different ways such as providing religious materials to the patients, supporting patients' religious activities (i.e. prayer), referring patients to spiritual counsellors, or helping patients communicate with people valuable to them (Willemse et al., 2020; Ghorbani et al., 2021). Spiritual care may be necessary for all patient groups during hospitalization. Addressing these needs through appropriate interventions can significantly contribute to patients' recovery processes, enhance their coping skills, and improve their health-related quality of life. Research indicates that spiritual care positively impacts patients' recovery (AdibHajbaghery et al., 2017). Because it is required for nurses to have spiritual care competence for them to provide good spiritual care (Heidari et al., 2022). Spiritual care competence is the ability to have a

high awareness of the patient's values, show an empathetic approach to worldviews and develop individual interventions specific to each patient (van Leeuwen et al., 2009). While spiritual care competence includes a set of knowledge, skills and attitudes that enable nurses to practice holistic care in their care behaviours, spiritual care behaviours are closely related to their spiritual health (Heidari et al., 2022).

Spiritual health is associated with the meaning and purpose of life, transcendence, faithfulness, and interconnectedness, and constitutes an essential dimension of holistic being (Jaberi et al., 2019). Spiritually healthy nurses can better help patients by providing spiritual care (Chiang et al., 2021). Spiritual health serves as an empowering factor for nurses in delivering spiritual care. Beyond enhancing their ability to provide effective spiritual support, spiritual health contributes to personal and professional outcomes, including happiness, resilience, improved quality of life, enhanced job performance, and reduced burnout (Chiang et al., 2021; Akbari et al., 2018). Studies noted that nurses' own spiritual health might influence their awareness of the spiritual needs of their patients and their ability to provide spiritual care to them (Heidari et al., 2022; Jafari et al., 2021). The spiritual health of nurses plays a crucial role in the effectiveness of spiritual care interventions within care settings. Nevertheless, there remains a scarcity of literature examining how the spiritual health of nurses impacts the delivery of spiritual care (Atashzadeh-Shoorideh et al., 2017; Chiang et al., 2016; Chung et al., 2007; Hu et al., 2019; Yari et al., 2018). In the studies conducted in Iran and China, significant positive relationships were found between nurses' spiritual well-being and their spiritual care competencies (Jafari et al., 2021; Heidari et al., 2022; Hu et al., 2019; Wang et al., 2022). It is very important for nurses to have spiritual care competencies in terms of quality of care. Strategies to increase spiritual care competencies in health professionals have recently continued with increasing interest (Han et al., 2023; Kurtgöz et al., 2023; Manookian et al., 2023). This study is based on the idea that spiritual health is a potential factor in increasing spiritual care competence among nurses and may therefore aid interventions to increase spiritual care competence. From this perspective, the spiritual well-being of nurses can make significant contributions to the development of new strategies to increase the spiritual care competence of nurses, especially by making critical care environments such as intensive care, palliative, and oncology less stressful and less challenging. Therefore, to increase awareness of spiritual health for nurses and develop care competence, it is important to identify different individual and/or external potential factors associated with nurses' ability to provide spiritual care. However, in our country, no relationship has been found between nurses' spiritual health and spiritual care competence. The purpose of this study, it was aimed to examine the relationship between the spiritual health and spiritual care competence of nurses.

Method

Study Design, Setting and Sample

The study design is quantitative, correlational survey. A correlational research design investigates relationships between two variables (or more) without the researcher controlling or manipulating any of them. The study population consisted of nurses from a hospital (public hospital) located in western Turkey. The sample consisted of nurses who met the inclusion criteria which were as follows: (1) practicing the nursing profession for more than 6 months, (2) working full-time in the clinic, and (3) agreeing to participate in the study. The exclusion criteria from the study were (1) working in units such as an outpatient clinic or operating room. For the research, a two-tailed hypothesis was formulated, and the sample size was calculated using G*Power 3.1.9.7. In the calculation, the correlation value of 0.264 obtained from the study conducted by Jafari et al. in 2021 was used as a basis, and for a correlation analysis with a 5% error margin (α=0.05), a correlation value of 0 for h0, and a power of 89.5%, the required sample size was calculated to be at least 150 individuals. The convenience sampling method was used in this study. The study was completed with a total of 205 nurses who met the inclusion criteria.

Data Collection Tools

Socio-demographic information form, Spiritual Health Scale-Short Form and Spiritual Care Competence Scale were used as data collection tools in the study.

Socio-demographic information form: The form was prepared by the researchers by screening the literature. This form consists of 8 questions including the age, gender, marital status, income level, education level, attending religious activities, and the status of having training or taking training courses about spiritual care (Jafari et al., 2021; Heidari et al., 2022; Wang et al., 2022).

Spiritual Health Scale-Short Form (SHS-SF): The SHS-SF, which was developed by Hsiao et al. (2013), is used to measure spiritual health among nursing students. The scale consists of a total of 24 items and five sub-dimensions. Turkish validity and reliability studies of the scale were performed by Kartal et al. (2022). The sub-dimensions were the connection to others, meaning derived from living, transcendence, religious attachment, and self-understanding. All the items included in the scale were positive statements. Individuals were asked to answer each item by selecting from a range of completely disagree (1) to completely agree (5) on a 5-point Likert-type. The scores of the Turkish SHS-SF ranged from 24 to 120, with a higher score indicating better spiritual health. The Cronbach's alpha value of the total scale was 0.91, and it was 0.83, 0.86, 0.86, 0.92 and 0.77 for the sub-dimensions, respectively. The Goodness of fit indices of the scale were as follows: $x^2/(df)= 2.39$,

RMSEA= 0.067, CFI= 0.92, TLI= 0.91, IFI= 0.92. In our study, the Cronbach alpha value of the scale was found to be 0.91.

Spiritual Care Competence Scale (SSCS-T): This scale, which was developed by van Leeuwen et al. (2009) in the Netherlands, measures students' perceptions of their competence in providing spiritual care (Van Leeuwen et al., 2009). The validity and reliability studies of the Turkish version were conducted by Dağhan et al. (2019). It is a 5-point Likert-type scale ("strongly disagree=1, "strongly agree"=5). The scale consists of 27 items and three sub-dimensions which are the evaluation and implementation of spiritual care, professionalization in spiritual care and patient counselling, and attitudes towards the patient's spirituality and communication. The highest possible competence score that can be achieved is 135, and the lowest possible score is 27. A high score shows that perceived competence related to spiritual care is high. The Cronbach α coefficient was found to be 0.97 in the validity and reliability studies of the Turkish scale. Cronbach's alpha coefficients of the three-factor scale were .94 for the first factor, .96 for the second factor, and .97 for the third factor. While the Spearman-Brown coefficient was .88 for the whole SCCS-T, it was .93, .89, and .96 for the first, second, and third factors, respectively. The goodness of fit indices of the scale were $x^2/(df)$= 3.86, RMSEA= 0.099, GFI= 0.76, CFI= 0.98, NNFI= 0.98, and IFI= 0.98. In our study, the Cronbach alpha value of the scale was found to be 0.95.

Data Collection Process

First, information about the purpose and content of the study was given to the participants. Before they filled out the data collection tools, their informed consent was obtained. The data were collected through the face-to-face interview technique in the hospital between 20th October to 30th December 2022. Filling out the data collection tools took about 30 minutes.

Data Analysis

The data were analysed using the Statistical Package for the Social Sciences (SPSS) version 22.0. The normality of the data was examined using the Kurtosis and Skewness values. In this study, parametric tests were used because SHS-SF and SSCS-T fit normal distribution (Skewness/Kurtosis value for SHS-SF= -0.358/0.450; Skewness/Kurtosis value for SSCS-T= 0.256/0.842). According to this test, it was determined that the data were suitable for normal distribution (p>0.05). Therefore, parametric tests were used in the study. Descriptive statistics including mean data, standard deviations and percentages were used to present the demographic data and the spiritual health and spiritual care competence scores. Independent Sample t-test and the Bonferroni corrected One-way ANOVA tests were used to determine the relationship between

mean spiritual health and spiritual care competence scores and socio-demographic characteristics of nurses. Linear regression analysis was carried out to determine the predictors affecting spiritual health and spiritual care competencies.

Results

Participant characteristics

The mean age of the participants was 31.90±1.10 years. The mean year of clinical experience of the participants were 9.96±8.22 years. In the study, 23.40% of the nurses' work in surgical units, 22.00% in internal medicine, and 21.50% in intensive care units. Many of the nurses were women (89.3%), married (59.0%) and bachelor's degree (67.80%). Many of the participants 67.80% were engaging in religious activities (prayer, fasting, etc.), and 19.00% were taking courses/training on spiritual care (Table 1).

Table 1.
Demographic Characteristics of the Participants (n= 205)

Characteristics	*n (%)*	*Mean ± SD*
Age (year)		31.90±1.10
Year of occupation		9.96±8.22
Gender		
Female	183 (89.3)	
Male	22 (10.70)	
Clinic		
Surgical clinics	48 (23.40)	
Internal medicine clinics	45 (22.00)	
Intensive care unit	44 (21.50)	
Palliative clinic	16 (7.80)	
Neurology clinic	15 (7.30)	
Oncology clinic	14 (6.80)	
Obstetrics clinic	10 (4.90)	
Pediatric clinic	9 (4.40)	
Psychiatry clinic	4 (2.00)	
Marital status		
Married	121 (59.0)	
Single	84 (41.0)	
Education level		
High school degree	13 (6.30)	
Associate degree	17 (8.30)	
Bachelor degree	139 (67.80)	
Master/doctoral degree	36 (17.60)	
Income		
Income less than expense	34 (16.60)	
Income equals expense	131 (63.90)	
Income more than expense	40 (19.50)	
Engaging in religious activities (prayer, fasting, etc.)		
Yes	139 (67.80)	
No	66 (32.20)	
Taking courses/education on spiritual care		
Yes	39 (19.00)	
No	166 (81.00)	

SD= Standard Deviation

Spiritual health and spiritual competence levels of the nurses

In this study, the SHS-SF mean score was 93.81±12.19 while the SCCS-T mean score was 105.45±17.10. Nurses' SHS-SF and SCCS-T levels were found to be moderate (Table 2).

Table 2.
Spiritual Health and Spiritual Competence Levels

Scale and subscales	*Mean± SD*
SHS-SF	93.81±12.19
Connection to others	17.29±2.89
Meaning derived from living	25.01±4.03
Transcendence	22.02±3.22
Religious attachment	16.73±3.22
Self-understanding	16.96±2.75
SCCS-T	105.45±17.10
Evaluation and Practice of Spiritual Care	23.17±4.97
Professionalism and Patient Counseling in Spiritual Care	56.61±10.34
Attitude and Communication of the Patient towards Spirituality	25.66±4.24

SD= Standard Deviation
SHS-SF= Spiritual Health Scale-Short Form, SCCS-T= Spiritual Care Competence Scale-Turkish

Spiritual health and spiritual competence between relationship

In this study, there is a positive and moderately significant relationship between SHS-SF and SCCS-T (r=0.534; p=0.000). In addition, a significant relationship was found between the total scales and their subscales (Table 3).

Table 3.
Spiritual Health and Spiritual Competence between Relationship

	SSCS-T	EPSC	PPCSC	ACPTS
SHS-SF	0.534***	0.450***	0.484***	0.479 ***
Connection to others	0.464***	0.439***	0.337***	0.532***
Meaning derived from living	0.546***	0.465***	0.513***	0.406***
Transcendence	0.270***	0.171*	0.265***	0.243**
Religious attachment	0.271***	0.202**	0.251***	0.243**
Self-understanding	0.470***	0.429***	0.412***	0.387***

SHS-SF= Spiritual Health Scale-Short Form, SCCS-T= Spiritual Care Competence Scale-Turkish, EPSC= Evaluation and practice of spiritual care, PPCSC = Professionalism and patient counseling in spiritual care, ACPTS= Attitude and communication of the patient towards spirituality, * p < .05, ** p < .01, *** p < .001

Relationship between socio-demographic characteristics and spiritual health, spiritual care competence scores

The mean SCCS-T score of female nurses were found to be significantly higher than male nurses (106.56 vs 94.22±16.88). Nurses working in intensive care unit, pediatrics, and obstetrics clinics have been found to have higher scores on both SHS-SF and SCCS-T total scales (p<0.05). Undergraduate and master/doctoral graduates had a higher SHS-SF and SCCS-T mean. The SHS-SF mean score of the nurses who

participated in religious activities was found to be higher. The SCCS-T score of the nurses who received a course/training about spiritual care was higher (p<0.05). There was no difference between the groups in terms of other variables (p>0.05) (Table 4).

Table 4.
Investigation of Spiritual Health and Spiritual Care Competence Scores in terms of Socio-demographic Characteristics

Characteristics	*SHS-SF*	*SCCS-T*
Gender		
Female	94.29±12.09	106.56±16.88
Male	89.86±12.59	94.22±16.44
t- test	1.616 p=0.108	2.720 p=0.007
Clinic		
(1) Surgical clinics	99.22±10.83	105.52±15.50
(2) Internal medicine clinics	92.24±16.46	97.06±18.88
(3) Intensive care unit	101.81±10.49	111.522±15.22
(4) Palliative clinic	97.18±10.22	108.81±15.47
(5) Neurology clinic	92.60±13.22	95.00±14.90
(6) Oncology	99.78±10.02	105.28±15.11
(7) Obstetrics clinic	103.00±6.87	112.50±10.87
(8) Pediatric clinic	104.77±13.82	118.55±17.81
(9) Psychiatry clinic	97.50±12.36	111.50±14.70
Anova	2.753 p=0.007 2 vs 3<0.05 3 vs 5<0.05	4.235 p=0.000 2 vs 3<0.05 3 vs 5<0.05 5 vs 8<0.05
Marital status		
Married	93.32±12.31	106.79±16.22
Single	94.53±12.06	103.52±18.21
t- test	-0.699 p=0.485	1.349 p=0.179
Education level		
(1) High school degree	94.30±9.56	108.46±13.44
(2) Associate degree	87.35±20.54	102.47±23.38
(3) Bachelor degree	92.75±11.03	102.37±15.12
(4) Master/doctoral degree	100.80±9.38	117.66±17.08
Anova	6.350 p=0.000 1 vs 3<0.05 2 vs 4<0.05 3 vs 4<0.05	8.843 p=0.000 2 vs 4<0.05 3 vs 4<0.05
Income		
(1) Income less than expense	95.85±10.42	102.64±14.48
(2) Income equals expense	93.09±12.99	105.55±17.35
(3) Income more than expense	9.45±10.84	107.50±18.35
Anova	0.752 p=0.473	0.745 p=0.476
Engaging in religious activities		
Yes	95.33±12.28	105.25±17.02
No	90.62±11.46	105.86±17.38
t- test	2.624 p=0.009	-0.236 p=0.814
Taking courses/trainings on spiritual care		
Yes	96.48±7.82	110.74±16.51
No	93.19±12.95	104.21±17.04
t- test	1.522 p=0.043	2.166 p=0.031

Note. F= One-way ANOVA, Bonferroni, SHS-SF= Spiritual Health Scale-Short Form, SCCS-T= Spiritual Care Competence Scale-Turkish, t= Independent sample t-test <0.05

Predictors affecting spiritual health and spiritual care competence levels in nurses

According to the results of Table 4, multiple linear regression analysis was performed to determine the common effects of the variables that were found to cause differences in the spiritual health and spiritual care competence levels of nurses. The predictors affecting the spiritual health and spiritual care competence level of nurses are shown in Table 5.

Table 5.
Predictors Affecting Spiritual Health and Spiritual Care Competence Levels in Nurses

	Independent Variables	*B*	*SE*	*Beta (β)*	*t*	*p*	*F*	*Model (p)*	R^2	*Durbin Watson*
SCCS-T	Constant	67.952	13.71	-	4.956	0.000***	18.008	0.000***	00.390	2.243
	SHS-SF	0.671	0.083	0.478	8.080	0.000***				
	Age	1.326	0.438	0.583	2.896	0.004**				
	Gender (female)	3.748	3.194	0.068	1.173	0.242				
	Education level (Master/doctoral degree)	9.148	2.655	0.204	3.445	0.001**				
	Year of occupation	1.402	0.420	0.674	3.334	0.001**				
	Engaging in religious activities (yes)	4.184	2.078	0.115	2.013	0.045*				
	Taking courses/ training on spiritual care (yes)	4.181	2.474	0.096	1.690	0.093				
SHS-SF	Constant	92.547	9.721	-	9.520	0.000***	4.390	0.000***	0.117	1.777
	Gender (female)	3.136	2.725	0.080	1.151	0.251				
	Age	0.276	0.392	0.170	0.705	0.482				
	Education level (Master/doctoral degree)	8.081	2.199	0.253	3.674	0.000***				
	Year of occupation	0.228	0.360	0.154	0.635	0.526				
	Engaging in religious activities (yes)	4.709	1.747	0.181	2.695	0.008**				
	Taking courses/ training on spiritual care (yes)	2.069	2.113	0.067	0.979	0.329				

Note. SE= Standard error of coefficient, β= standardized regression coefficient, R^2= proportion of variation in dependent variable explained by regression model, p= the level of statistical significance, * p < .05, ** p < .01, *** p < .001

The predictors that affect the spiritual health of nurses were found to be education level (β=0.253) and engaging in religious activities (β=0.181). The predictors that affect the spiritual care competence of nurses were found to be spiritual health level (β=0.478), age (β=0.583), education level (β=0.204), year of occupation (β=0.674) and engaging in religious activities (β=0.115).

Discussion

This study was conducted to reveal the relationship between nurses' spiritual health level and their spiritual care competencies. As a result of the study, a positive correlation was found between spiritual health level and spiritual care competencies. The spiritual health of the nurses in this study was determined to be at a moderate level. We could not come across any similar study that was conducted on nurses in Türkiye. Studies in which the same scale was used in different countries revealed that the spiritual health level of nurses was at a moderate level, similar to our findings (Chiang et al., 2021; Wang, et al, 2022; Zhao et al., 2022; Wang et al., 2021). These results reveal that spiritual health affects spiritual care competence. Since spiritually healthy nurses will increase their competency in providing spiritual care, the quality of care will also increase. Therefore, interventions that increase the spiritual health levels of nurses should be planned.

In our study, nurses' spiritual care competence levels were determined to be above a moderate level. Studies conducted in T**ürkiye** on the topic show that the spiritual care competence levels of nurses are generally moderate or above (Karaman, & Sagkal Midilli, 2022; Semerci et al., 2021; Irmak, & Midilli, 2021; **Özakar** Akça et al., 2022; Kalkim et al., 2018; Sezer, & Ozturk Eyimaya, 2022). Our findings and the literature indicate that especially nurses' spiritual care competence levels are not at the desired level and should be improved. In their study, Ross et al. (2018) revealed that students' perceptions of spiritual care competence increased with spiritual care training. Similarly, Hu et al. (2019) also noted that the spiritual care competence of nurses who received spiritual care training increased. The fact that nurses' spiritual care competencies are at a moderate level may be related to the fatigue and burnout caused by working in the profession for many years.

In our study, there was a positive significant relationship between spiritual health and spiritual care competence and spiritual health was determined to be an important predictor of spiritual care competence. In the study of Heidari et al. (2022) on the subject, a significant relationship was found between spiritual health and spiritual care competence. Also, the spiritual health-related performances of nurses have been determined to predict their spiritual care competence (Heidari et al., 2022). Furthermore, other studies have determined that there is a significant relationship between spiritual health and spiritual care competence (Jafari et al., 2021; Wang et al., 2022). Heidari et al. (2022) and Jafari et al. (2021) noted that nurses' own spiritual health might affect their awareness of the spiritual needs of their patients and their ability to provide spiritual care to them.

In this study, it is seen that female nurses have higher spiritual care competence levels than males. This result is largely similar to the findings in the literature (Jafari,

& Fallahi-Khoshknab, 2021; Melhem et al., 2016; Kaçmaz, & Çam, 2019). Kaçmaz and Çam (2019) states that female nurses practice skills such as establishing helpful relationships and expressing emotions more than male nurses. Similarly, in the study conducted by Heidari et al. (2022) and Melhem et al. (2016) the spiritual health and spiritual care competence of female nurses were found to be higher. The fact that the female gender has these characteristics can be associated with the fact that women's awareness levels are better than male nurses in the planning and implementation of spiritual care. It was emphasized in the literature that females are more successful in expressing their feelings, understanding the feelings of others, and are more compassionate and sensitive to the needs of others (Löffler, & Greitemeyer, 2021).

In the literature, increasing the education level of nurses and receiving courses/ training on spiritual care are important determinants of spiritual health and spiritual care adequacy (Green et al., 2020; Harrad et al., 2019; Ross et al., 2018). In a study conducted with nurses who care for psychiatric patients, it was determined that as the education level of nurses increased, nurses perceived themselves more competent in nursing care for dimensions such as hope, sensitivity, and spirituality and were able to apply care better (Kaçmaz, & Çam, 2019). In a study examining the spiritual care levels of Turkish nurses, it is stated that nurses with postgraduate education have a higher level of spiritual care than nurses with undergraduate education (Karaman et al., 2022). Many researchers state that there is a need for training in spiritual care to increase the spiritual care competence of nurses (Cooper, & Chang, 2016; Green et al., 2020; Ross et al., 2016). In one study, it was determined that nurses who received spiritual care education at the hospital had higher spiritual care competence than those who did not (Green et al., 2020). In addition, it was determined that nurses who received spiritual care education at the workplace and stated that they felt ready to provide spiritual care received higher scores in "evaluation of spiritual care, practice, professionalization and improving the quality of spiritual care. Wu et al. (2016) stated that nurses who attend spiritual care classes as a part of their nursing education are more willing to provide spiritual communication and spiritual care with their patients than those who do not attend such courses. In another similar study, it was determined that educating health professionals about spiritual care was effective in improving the competence of nurses to provide spiritual care to patients (Hu et al., 2019). These studies show the need for a structured and comprehensive education/course on spirituality and spiritual care both in the curriculum of nursing students and of nurses working in hospitals professionally. It is believed that incorporating nurses into spiritual care course programs could positively impact their capacity to deliver spiritual care.

Engaging in religious activities was one of the predictors affecting the spiritual health level of nurses in our study. Since religious commitment is one of the components of the concept of spiritual health, this might be an expected finding

(Jaberi et al., 2019). Similarly, in some studies, nurses participating in religious worship were found to have higher levels of spiritual well-being and spiritual care (Eskandari et al., 2019). In our study, the high level of spiritual health in nurses can be attributed to the fact that individuals in Turkish society are more inclined towards religious beliefs and spiritual values since believing in religious values and having religious beliefs are necessary characteristics for the formation of spiritual health in individuals (Eskandari et al., 2019). In the literature, it is stated that personal spirituality, religiosity, and religious activities lead to positive results on spiritual health and care (Akbari et al., 2022; Neathery et al. 2020). Neathery et al. (2020) in their study of psychiatric nurses stated that nurses who see themselves as "spiritual and religious" provide spiritual care more often than those who see themselves as "spiritual but non-religious" and have a higher level of spiritual perspective. In their study, Deluga et al. (2020) states that nurses' personal spirituality has an impact on spiritual nursing care and shows that there is a strong relationship between nurses' 'Spiritual Activities' and their religious commitment. In other studies, it is stated that the personal spirituality or religiosity of nurses is directly related to their attitudes towards providing spiritual care (Ross et al., 2016). Similarly, in our study, it is seen that nurses' religious activities are an important predictor of spiritual health and spiritual care competence. This situation can be interpreted as nurses engaged in religious activities may have a better spiritual sensitivity and awareness in meeting the spiritual needs of the patients and responding to the patient's faith-based concerns.

Conclusion and Implications for Practice

As a result, the spiritual health and spiritual care competence levels of nurses are moderate. A relationship was found between spiritual health and spiritual care competencies in nurses. In other words, the spiritual health of nurses is effective on the level of spiritual care competence. The spiritual care competence of female nurses and the spiritual health level of nurses participating in religious activities are higher. In addition, the spiritual health and spiritual care competencies of the nurses who have a high level of education and who take courses/educations on spiritual care are at a better level. The relationship between spiritual health and spiritual care competence shows that competence includes various knowledge, attitudes, skills, and behaviours. The spiritual health of nurses is an important predictor affecting their competence in spiritual care. Based on these results, it can be said that supporting spiritual health can increase the quality of spiritual care in nursing and positively affect the competence of nurses.

As nurses, it is important to develop strategies and plan initiatives to increase the level of spiritual health of nurses to increase the adequacy and quality of spiritual care practices. According to the results of this study, it is necessary to include education

and consultancy services to increase/develop spiritual health (such as increasing the ability to evaluate spiritual needs and support spiritual needs) in the curriculum of nursing students and education seminars for nurses.

Limitations

An important limitation is that this study was conducted on nurses in one hospital. The fact that the data in the study was collected by the self-report method is a limitation as it may affect the results of the study. Another limitation is that causal conclusions cannot be reached in this study because the data were not collected by experimental or longitudinal method.

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Ethical approval. This study was conducted in accordance with the principles of the Declaration of Helsinki. Ethics committee approval for the research was received from the Pamukkale University Non-Interventional Clinical Research Ethics Committee (Date: 18.10.2022, Number: E-60116787-020-279030), informed consent was obtained from all nurses, and permission for use was received via e-mail from the owner of the scales used.

Authors' contribution. Study conception and design: E.K.İ, E.A., Data collection: E.K.İ, E.A. Literature Search: E.K.İ. Data analysis and interpretation: E.K.İ. Writing Manuscript: E.K.İ, E.A. Critical revision of the article: E.K.İ, E.A.

Peer-review. The research was evaluated by two or more field experts and the research was developed in line with their opinions.

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References

Adib-Hajbaghery, M., Zehtabchi, S., & Fini, I. A. (2017). Iranian nurses' professional competence in spiritual care in 2014. *Nursing Ethics*, *24*(4), 462-473. https://doi.org/10.1177/0969733015600910

Akbari, O., Dehghan, M., & Tirgari, B. (2022). Muslim nurse's spiritual sensitivity as a higher perception and reflection toward spiritual care: a qualitative study in southeast Iran. *BMC Nursing*, *21*(1), 270. https://doi.org/10.1186/s12912-022-01044-4

Alshehry, A. S. (2018). Spirituality and spiritual care competence among expatriate nurses working in Saudi Arabia. *Religions*, *9*(12), 384. https://doi.org/10.3390/rel9120384

Chiang, Y. C., Lee, H. C., Chu, T. L., Wu, C. L., & Hsiao, Y. C. (2021). The relationship between spiritual health, health-promoting behaviors, depression and resilience: A longitudinal study of new nurses. *Nurse Education in Practice*, *56*, 103219. https://doi.org/10.1016/j.nepr.2021.103219

Cone, P., & Giske, T. (2022). Mental Health Staff Perspectives on Spiritual Care Competencies in Norway: A Pilot Study. *Frontiers in Psychology*, *12*, 5865. https://doi.org/10.3389/fpsyg.2021.794165

Cooper, K. L., & Chang, E. (2016). Undergraduate nurse students' perspectives of spiritual care education in an Australian context. *Nurse Education Today*, *44*, 74–78. https://doi.org/10.1016/j.nedt.2016.05.020

Daghan, S., Kalkim, A., & Sağkal Midilli, T. (2019). Psychometric evaluation of the Turkish form of the spiritual care competence scale. *Journal of Religion and Health*, 58, 14-27. https://doi.org/10.1007/s10943-018-0594-2

Deluga, A., Dobrowolska, B., Jurek, K., Ślusarska, B., Nowicki, G., & Palese, A. (2020). Nurses' spiritual attitudes and involvement-validation of the polish version of the spiritual attitude and involvement list. *PloS One*, *15*(9). https://doi.org/10.1371/journal.pone.0239068

Eskandari, N., Golaghaie, F., Aghabarary, M., Dinmohammadi, M., Koohestani, H., Didehdar, M., ... & Abbasi, M. (2019). Explaining the relationship between moral intelligence and professional self-concept with the competency of nursing students in providing spiritual care to promote nursing education. *Journal of Education and Health Promotion*, *8*, 230. https://doi.org/10.4103/jehp.jehp_105_19

Ghorbani, M., Mohammadi, E., Aghabozorgi, R., & Ramezani, M. (2021). Spiritual care interventions in nursing: An integrative literature review. *Supportive Care in Cancer*, *29*, 1165-1181. https://doi.org/10.1007/s00520-020-05747-9

Green, A., Kim-Godwin, Y. S., & Jones, C. W. (2020). Perceptions of spiritual care education, competence, and barriers in providing spiritual care among registered nurses. *Journal of Holistic Nursing, 38*(1), 41–51. https://doi.org/10.1177/0898010119885266

Han, K. H., Hung, K. C., Cheng, Y. S., Chung, W., Sun, C. K., & Kao, C. C. (2023). Factors affecting spiritual care competency of mental health nurses: a questionnaire-based cross-sectional study. *BMC Nursing*, *22*(1), 202.

Harrad, R., Cosentino, C., Keasley, R., & Sulla, F. (2019). Spiritual care in nursing: an overview of the measures used to assess spiritual care provision and related factors amongst nurses. *Acta bio-medica: Atenei Parmensis, 90*(4-S), 44–55. https://doi.org/10.23750/abm.v90i4-S.8300

Heidari, A., Afzoon, Z., & Heidari, M. (2022). The correlation between spiritual care competence and spiritual health among Iranian nurses. *BMC Nursing*, *21*(1), 277. https://doi.org/10.1186/s12912-022-01056-0

Hsiao, Y. C., Chiang, Y. C., Lee, H. C., & Han, C. Y. (2013). Psychometric testing of the properties of the spiritual health scale short form. *Journal of Clinical Nursing*, *22*(21-22), 2981-2990. https://doi.org/10.1111/jocn.12410

Hu, Y., Jiao, M., & Li, F. (2019). Effectiveness of spiritual care training to enhance spiritual health and spiritual care competency among oncology nurses. *BMC Palliative Care*, *18*(1), 104. https://doi.org/10.1186/s12904-019-0489-3

International Council of Nurses (ICN). (2012). *The ICN Code of Ethics for Nurses. Switzerland: Geneva.* Available at: https://www.icn.ch/sites/default/files/inline-files/2012_ICN_Codeofethicsfornurses_%20eng.pdf

Irmak, H., & Midilli, T. S. (2021). The relationship between psychiatric nurses' spiritual care practices, perceptions and their competency. *Archives of Psychiatric Nursing*, *35*(5), 511-518. https://doi.org/10.1016/j.apnu.2021.07.006

Jaberi, A., Momennasab, M., Yektatalab, S., Ebadi, A., & Cheraghi, M. A. (2019). Spiritual health: A concept analysis. *Journal of Religion and Health*, *58*(5), 1537–1560. https://doi.org/10.1007/s10943-017-0379-z

Jafari, M., & Fallahi-Khoshknab, M. (2021). Competence in providing spiritual care and its relationship with spiritual well-being among Iranian nurses. *Journal of Education and Health Promotion*, *10*, 388. https://doi.org/10.4103/jehp.jehp_203_21

Kaçmaz, E. D., & Çam, O. (2019). Investigation of care-oriented nurse-patient interaction levels of nurses who care for psychiatric patients. *Journal of Psychiatric Nursing*, *10*(1), 65-74. https://doi.org/10.14744/phd.2018.83702

Kalkim, A., Midilli, T. S., & Baysal, E. (2016). An investigation of the perceptions and practices of nursing students regarding spirituality and spiritual care. *Religions*, *7*(8), 101. https://doi.org/10.3390/rel7080101

Kalkim, A., Midilli, T. S., & Daghan, S. (2018). Nursing students' perceptions of spirituality and spiritual care and their spiritual care competencies: A correlational research study. *Journal of Hospice & Palliative Nursing*, *20*(3), 286-295. https://doi.org/10.1097/NJH.0000000000000446

Karaman, A., & Sagkal Midilli, T. (2022). The relationship between nurses' perceptions and competency about spiritual care and influencing factors. *Perspectives in Psychiatric Care*, *58*(3), 1021-1028. https://doi.org/10.1111/ppc.12894

Karaman, E., Erkin, Ö., & Göl, İ. (2022). The relationship between spiritual care levels of Turkish nurses with the spiritual well-being of their patients: An exploratory study. *Journal of Religion and Health*, *61*(3), 1882–1893. https://doi.org/10.1007/s10943-021-01194-w

Kurtgöz, A., Keten Edis, E., & Erarslan, R. (2023). Spiritual care competencies and the frequency of spiritual care practices of nurses in Turkey. *Journal of Religion and Health*, 1-14.

Kartal, A., Korkmaz Aslan, G., & Kılınç, E. (2022). Validity and reliability of the Spiritual Health Scale-Short Form for Turkish nursing students. *Palliative & Supportive Care*, 1–9. Advance online publication. https://doi.org/10.1017/S1478951521001978

Löffler, C. S., & Greitemeyer, T. (2021). Are women the more empathetic gender? The effects of gender role expectations. *Current Psychology*, 1-12. https://doi.org/10.1007/s12144-020-01260-8

Melhem, G. A., Zeilani, R. S., Zaqqout, O. A., Aljwad, A. I., Shawagfeh, M. Q., & Al-Rahim, M. A. (2016). Nurses' perceptions of spirituality and spiritual care giving: A comparison study among all health care sectors in Jordan. *Indian journal of Palliative Care*, *22*(1), 42–49. https://doi.org/10.4103/0973-1075.173949

Manookian, A., Nadali, J., Ghiyasvandian, S., Weaver, K., Haghani, S., & Divani, A. (2023). Spiritual care competence, moral distress and job satisfaction among Iranian oncology nurses. *International Journal of Palliative Nursing, 29*(10), 487-497.

Neathery, M., He, Z., Taylor, E. J., & Deal, B. (2020). Spiritual perspectives, spiritual care, and knowledge of recovery among psychiatric mental health nurses. *Journal of the American Psychiatric Nurses Association, 26*(4), 364–372. https://doi.org/10.1177/1078390319846548

Özakar Akça, S., Gülnar, E., & Özveren, H. (2022). Spiritual care competence of nurses. The *Journal of Continuing Education in Nursing*, *53*(5), 225-231. https://doi.org/10.3928/00220124-20220407-05

Ross, L., McSherry, W., Giske, T., van Leeuwen, R., Schep-Akkerman, A., Koslander, T., ... & Jarvis, P. (2018). Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: A prospective, longitudinal, correlational European study. *Nurse Education Today*, *67*, 64-71. https://doi.org/10.1016/j.nedt.2018.05.002

Sadat Hoseini, A. S., Razaghi, N., Khosro Panah, A. H., & Dehghan Nayeri, N. (2019). A concept analysis of spiritual health. *Journal of Religion and Health*, *58*, 1025-1046. https://doi.org/10.1007/s10943-017-0522-x

Semerci, R., Uysal, N., Bağçivan, G., Doğan, N., Kostak, M. A., Tayaz, E., ... & Kunter, N. (2021). Oncology nurses' spiritual care competence and perspective about spiritual care services. *Turkish Journal of Oncology*, *36*(2), 222-30. https://doi.org/10.5505/tjo.2021.2682

Sezer, T. A., & Ozturk Eyimaya, A. (2022). Competencies of nursing students in the provision of spiritual care and the factors affecting spiritual caregiving. *Perspectives in Psychiatric Care*, *58*(2), 549-559. https://doi.org/10.1111/ppc.13014

Van Leeuwen R., Tiesinga L. J., Middel B., Post D., & Jochemsen H. (2009). The validity and reliability of an instrument to assess nursing competencies in spiritual care. *Journal of Clinical Nursing*, *18*(20), 2857–2869. https://doi.org/10.1111/j.1365-2702.2008.02594.x PMID:19220618

Wang, Z. Y., Wang, Z., Wang, Y., Han, G. H., & Pang, X. L. (2021). Spiritual care perceptions, spiritual health and their relationships with spiritual care competence among clinical nurses in China: A cross-sectional quantitative study. *TMR Integr Nurs*, *5*(4), 145. https://doi.org/10.53388/TMRIN2021082505

Wang, Z., Zhao, H., Zhang, S., Wang, Y., Zhang, Y., Wang, Z., ... & Pang, X. (2022). Correlations among spiritual care competence, spiritual care perceptions and spiritual health of Chinese nurses: A cross-sectional correlational study. *Palliative & Supportive Care*, *20*(2), 243-254. https://doi.org/10.1017/S1478951521001966

Willemse, S., Smeets, W., Van Leeuwen, E., Nielen-Rosier, T., Janssen, L., & Foudraine, N. (2020). Spiritual care in the intensive care unit: An integrative literature research. *Journal of Critical Care*, *57*, 55-78. https://doi.org/10.1016/j.jcrc.2020.01.026

Wu, L. F., Koo, M., Tseng, H. C., Liao, Y. C., & Chen, Y. M. (2015). Concordance between nurses' perception of their ability to provide spiritual care and the identified spiritual needs of hospitalized patients: A cross-sectional observational study. *Nursing & Health Sciences, 17*(4), 426-433. https://doi.org/10.1111/nhs.12210

Zhao, H. M., Wang, Z. Y., Yan, W., Piao, J. J., & Ye, J. Y. (2022). Spiritual health, empathy ability and their relationships with spiritual care perceptions among nursing students in China: A cross-sectional correlational study. *Nursing Communications*, *6*. https://doi.org/10.53388/IN2022003

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Research Article

The Intersection of Faith and Pornography: A Turkish Moral Disapproval of Pornography Scale*

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* The present study is partly based on Eren Murat Dinçer's doctoral thesis.

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Abstract

The development process and validity and reliability studies of the "Moral Disapproval of Pornography Scale" (MDSS) are described in this study. Moral disapproval of pornography use, one of the three components of the Anti-Pornography Problems Associated with Moral Inconsistency (APPM) model, refers to the psychological difficulties created by individuals' pornography use that contradicts their moral beliefs about pornography. This incongruence is shown to have a moderating role between individual's self-perception of addiction and their psychological well-being. In studies conducted abroad, it is seen that the phenomenon in question is examined with instruments consisting of moral and religious oriented items. These items were culturally adapted and turned into a scale that people with different religious beliefs and practices can easily answer. The exploratory factor analysis of the obtained scale was conducted with 634 participants. Subsequently, a confirmatory factor analysis of the scale was performed with a second sample of 580 individuals. The Cronbach's alpha coefficient for internal consistency was calculated as .862, and McDonald's Omega coefficient of .85, indicating good reliability. The exploratory factor analysis revealed that 71% of the total variance was explained and the items were loaded onto a single factor. In the confirmatory factor analysis, acceptable fit indices [$\chi 2$ / df = 1.81, RMSEA = .005, AGFI = 0.97, CFI = 0.99, GFI = 0.98, RMR = 0.02] were obtained. Any criterion scale for moral disapproval of Pornography was not used to determine the concurrent validity due to lacking a previously developed scale in Turkish. In conclusion, the Pornography Moral Disapproval Scale (PMDS) was found to be a valid and reliable measure.

Keywords:
Religiousness • Pornography use • Moral disapproval • Moral incongruence

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Introduction

The use of pornography has become very common in the world nowadays, especially in Western countries, turning into a normalized phenomenon (Grubbs et al., 2019). The debate continues about whether pornography use leads to addiction (Alarcón et al., 2019; Ley et al., 2014; Prause et al., 2017); however, there is also the issue of 'problematic use,' described as persistent and repetitive use of pornography causing disruption in one's life, accompanied by unsuccessful attempts to reduce or stop it (Bőthe et al., 2021; Kraus et al., 2016). Initially, the excessive frequency and duration of problematic pornography use were thought to be the factors making its use problematic (Cooper et al., 1999). However, later on, it has been observed that individuals perceiving themselves as addicted, regardless of their usage habits, contribute to perceiving their own usage as problematic (Grubbs, Exline, et al., 2015; Grubbs, Stauner, et al., 2015; Hook et al., 2014; Wilt et al., 2016).

Recent studies emphasize the interplay between religiosity and perceived pornography addiction, noting that higher levels of religiosity are correlated with increased self-perceived addiction (Abell et al., 2006; Grubbs et al., 2010). This is further supported by a large-scale study indicating that religiosity moderates the relationship between pornography use and self-perceived addiction (Grubbs et al., 2020). Moreover, religious individuals tend to experience greater psychological and spiritual distress when consuming pornography compared to their non-religious counterparts (Grubbs et al., 2010; Patterson & Price, 2012), often viewing their usage as a moral transgression and a loss of sexual innocence (Grubbs et al., 2015).

The concept of 'Pornography Problems Due to Moral Incongruence' has been proposed to better understand this phenomenon, highlighting the role of moral incongruence—discrepancies between one's attitudes towards pornography and their actual usage patterns (Brand et al., 2019; Burke & Miller MacPhee, 2020; Grubbs, Perry, et al., 2019a; Grubbs, Perry, et al., 2019b). This model suggests that individual differences in usage habits, emotional regulation, and moral incongruence significantly impact perceptions of addiction (Gola et al., 2022). Despite the model's insights, there is a notable gap remaining in literature concerning its applicability in Muslim countries, underscoring the need for culturally sensitive research to understand the unique moral frameworks within these contexts (Lewczuk et al., 2020).

Methodological limitations in pornography research, such as issues with operational definitions, sampling, and inference limits, highlight the need for more rigorous methodologies to enhance understanding and validity (Fisher & Kohut, 2020; Short et al., 2012). This need of rigor especially obvious when considering the moral disapproval of pornography could stem from various moral sources such as socio-political views (Lewczuk et al., 2020). And a relationship was observed between moral attitudes and religious beliefs (Grubbs, Exline, et al., 2015). This

intertwined relationships between religiosity and morality underscores the importance of developing new scales that are neutral concerning religiosity to accurately capture the essence of moral incongruence without mixing it with religious guilt (Štulhofer et al., 2022; Grubbs et al., 2019).

In response to these gaps, this study aims to develop a Moral Disapproval of Pornography Scale that is suitable for a Turkish context, considering the diverse religious beliefs and practices in the country. This scale will facilitate a deeper understanding of moral incongruence in perceived problematic pornography use and associated distress, contributing valuable insights into the broader discourse on pornography consumption (Grubbs et al., 2020a). Additionally, clinicians can then make more accurate diagnoses of Compulsive Sexual Behavior Disorder (CSBD) when they are aware of the intensity of the inconsistency experienced by individuals using pornography, steering clear of unwarranted diagnoses that might be influenced by religious and moral judgments (Grubbs et al. 2020a).

Method

The study was a scale development study in which the items were developed to assess moral disapproval of pornography followed by the reliability and validity analysis.

Study Group

A purposive and convenience sampling method was used for choosing the study group. Social media platforms, online groups including online self-help groups and email groups were used to invite participants. The only prerequisites were to be a volunteer, be at least 18 years old, and have consumed pornography during the previous six months. Since the study was not a psychiatric research, no diagnostic information was asked.

While determining the size of the study group, it was tried to reach the number of people recommended by Tabachnick et al. (2019) and Byrne (2016) for validity and reliability studies. Therefore, the size of the study group for the exploratory factor analysis of the scale was 634 people. The average age of the group ranged between 18 and 42 years, the mean age was 27 years and 40.3% were women, 57.8% were men and 1.9% were those who did not want to specify their gender and those who indicated their gender as other. 8% of the group have undergone or are undergoing high school education, while 57% have completed or are currently pursuing university education. The remaining 35% have undergone or are undergoing postgraduate education.

Confirmatory factor analysis was performed with a group of 580 people. The average age of the group ranged between 18 and 59, with an average age of 28. 41.4% women, 56.7% men and 2.3% people who did not want to specify their gender

and those who indicated their gender as other. Those who have received and are receiving high school education constitute 9%; those who have received and are receiving university education constitute 58%; those who have received and are receiving postgraduate education constitute 33% of the group. Prior to collect data in 2022, ethics committee approval was acquired by Marmara University Institute of Educational Sciences. A voluntary consent form was obtained from the participants.

Item Writing Process and Content Validity

The phenomenon of moral disapproval of pornography is generally asked using four items that capture both moral and religious dimensions, such as ‘’Viewing pornography online troubles my conscience’’, ‘’Viewing pornography online violates my religious beliefs’’, ‘’I believe that viewing pornography online is morally wrong,’’ and ‘’I believe that viewing pornography online is a sin.’’ The cumulative score from these items reflects the moral stance of individuals regarding this issue. However, research has identified a high correlation between items specifically tied to religious beliefs—namely, the second and fourth items—and those related to broader moral beliefs (Grubbs, Exline, et al., 2015). In light of this, a more religiously neutral version of the scale was developed by Volk et al. (2016) which omits direct references to religion; instead focuses on personal and moral values as well as an individual’s conscience, with items like “viewing pornography violates my personal values,” or “viewing pornography is inappropriate”. This adaptation has led to the development of different versions of the scale that are neutral in terms of religiosity, allowing for the assessment of moral incongruence without the confounding effects of religious guilt.

Recognizing that religious individuals might shape their responses to conform with socially acceptable standards (Rasmussen et al., 2018), the adaptation of the scale for the Turkish context was approached with an emphasis on minimizing the religious aspect of disapproval. This was done to reduce the potential for social desirability bias among research participants. Thus, in developing the scale of moral disapproval of pornography, general moral values were foregrounded through items that did not directly denounce pornography on religious grounds, avoiding statements like “I think porn use is a sin”. This approach reflects a broader trend in research aimed at exploring moral concerns to pornography beyond just religious regrets, building on earlier studies on moral disapproval (Grubbs et al., 2019; Lewczuk et al., 2020; Volk et al., 2016). Furthermore, the observed high correlation between religious and non-religious items underscores the complex interplay between these dimensions. Consequently, the morality-focused items were translated into Turkish and two reverse-scored items were added, which stated that pornography is an acceptable medium for individuals to experience human sexuality and recommendable practice. This strategy seeks to clearly explain why people may disapprove of pornography,

taking into account a wide range of moral and religious reasons related to this topic. The items derived from the literature, along with those newly introduced, were submitted to a linguistic expert and a psychologist specializing in this domain for review. Following their revisions and approval, the items were then implemented. The final version of the scale is as follows: "I think watching pornography is an acceptable way for a person to experience their sexuality", "I would recommend watching pornography to people I care about", "Watching pornography causes me to feel guilty", "I believe that watching pornography is morally wrong".

Data Collection and Analysis

All data was collected through an online form on google forms website. As recommended for online research and researching pornography (British Psychological Society, 2021; Buchanan & Zimmer, 2018; Rasmussen et al., 2018) data was collected via online forms in which no personal information was asked to keep participants anonymous For scoring the scale a sophisticated five-level Likert scale was employed, extending from a low to a high spectrum. Initially, the collected dataset was meticulously reviewed to identify and exclude any missing data. The dataset's normal distribution was then verified to ensure its suitability for advanced statistical procedures. Upon confirming the data's adherence to a normal distribution, exploratory factor analysis (EFA) was first conducted to identify the underlying structure of the scale. This was followed by confirmatory factor analysis (CFA) to validate the scale's structure as indicated by the EFA results. Furthermore, the reliability of the scale was assessed through the calculation of Cronbach's alpha coefficient, which surpassed the threshold required to establish acceptable internal consistency (Cronbach Alpha=0.862). All analyses were executed using SPSS version 26, AMOS 26 and Jamovi 22.

Results

Validity and Reliability

Exploratory Factor Analysis: Exploratory factor analysis method was applied to reveal the construct validity of the Moral Disapproval of Pornography Scale. As a result of the Barlett test ($p=0.000<0.05$), it was determined that there was a relationship between the variables included in the factor analysis. As a result of the test (KMO=0.774>0.60; $\chi 2=836{,}225$; df=6), it was determined that the sample size was sufficient for factor analysis. In the factor analysis application, the Varimax method was selected to ensure that the structure of the relationship between the factors remained the same (DeVellis & Thorpe, 2022) . As a result of the factor analysis, the variables were grouped under a single factor with a total explained variance of

70.926%. The factor structure of the scale is shown below.

Table 1.
Moral Disapproval of Porn Scale Factor Structure

	Factor Load
Item 1	,762
Item 2	,812
Item 3	,883
Item 4	,904
Total variance=%70,926; Eigenvalue=2,837; Cronbach Alpha=0.862	

The factor analysis determined the eigenvalue of the factor to be 2.837, with factor loadings exceeding 0.4. The Scree plot related to the factor analysis is provided below. The Cronbach's alpha coefficient for internal consistency was calculated as .862, indicating good reliability (DeVellis & Thorpe, 2022). And as recommended, McDonald's Omega was calculated, yielding an omega coefficient of .85, further supporting the scale's internal consistency and reliability (McDonald, 2013).

Table 2.
Pearson Correlation Coefficients Among Items

	Item 1	**Item 2**	**Item 3**	**Item 4**
Item 1	1	.488**	.510**	.524**
Item 2	.488**	1	.519**	.558**
Item 3	.510**	.519**	1	.824**
Item 4	.524**	.558**	.824**	1

**Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficients presented in Table 2 reveal the degree of linear association between items of the scale. Significant correlations were observed among all items at the 0.01 level (2-tailed). Notably, Item 3 and Item 4 exhibited the highest correlation coefficient (.824**), suggesting a particularly strong association between these two items. The correlation coefficients among the other items ranged from .488** to .558**, indicating moderate to strong associations. These results underscore the internal consistency of the scale, as evidenced by the significant and positive correlations among its items. The sample size of N=580 provides a robust basis for the reliability of these correlation estimates. The observed correlations are critical for the scale's validation process, supporting the construct validity of the scale by demonstrating that its items are related as expected. Item Reliability Statistics are also calculated and presented below:

Table 3.
Item Reliability Statistics

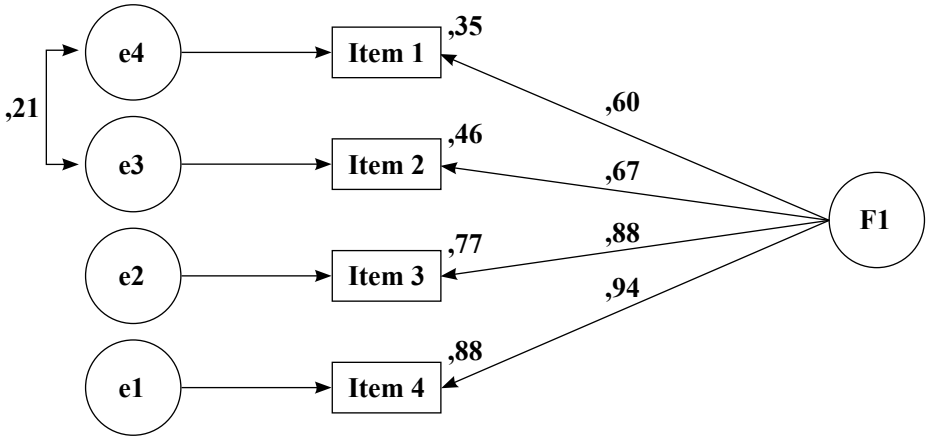
				if item dropped	
	Mean	**sd**	**item-rest correlation**	**Cronbach's α**	**McDonald's ω**
Item 1	2.82	1.43	0.581	0.841	0.854
Item 2	3.95	1.35	0.603	0.834	0.847
Item 3	2.74	1.68	0.765	0.762	0.768
Item 4	2.77	1.74	0.789	0.750	0.755

These findings suggest that all items contribute positively to the scale's internal consistency, as evidenced by the substantial item-rest correlations. The Cronbach's α and McDonald's ω values are above the commonly accepted threshold for reliability (0.7), affirming the scale's reliability. However, the slight decrease in reliability metrics upon the potential removal of Item 3 or Item 4 highlights the importance of these items to the scale's coherence and internal consistency.

The scree plot supports the one-factor structure of the scale. The results of the confirmatory factor analysis are provided below:

Figure 1.
Diagram of Confirmatory Factor Analysis

Figure 2.
Diagram of Confirmatory Factor Analysis



The commonly used goodness-of-fit indices in the literature were utilized in the study. The goodness-of-fit criteria for confirmatory factor analysis and the obtained values are presented below.

Table 4.
Goodness of Fit Statistics

Index	Normal Value*	Acceptable Value**	Value
χ^2	-	-	1.81
df	-	-	1
$\chi 2$/sd	<2	<5	1.81
GFI	>0.95	>0.90	0.98
AGFI	>0.95	>0.90	0.97
CFI	>0.95	>0.90	0.99
RMSEA	<0.05	<0.08	0.05
RMR	<0.05	<0.08	0.02

*, ** (Schumacker & Lomax, 2004; Tabachnick et al., 2019; Wang & Wang, 2019)

The analysis results from the confirmatory factor analysis indicated that the goodness-of-fit statistics align closely with the previously established factor structure of the scale. This alignment suggests that the model fits the data in a manner that is compatible with the theoretical expectations and empirical findings documented in the relevant literature (Hu & Bentler, 1999), who advocate for specific thresholds to ascertain an acceptable fit (e.g., CFI > 0.95, RMSEA < 0.06). The standardized factor loadings and their corresponding t-values, detailed below exhibiting significant associations consistent with the hypothesized model structure.

Tablo 5.
Confirmatory Factor Analysis Factor Loadings

Items and Factors			β	Std. β	S.Error	t	p
Item4	<---	F1	1,000	,936			
Item3	<---	F1	,890	,876	,041	21,875	p<0,001
Item2	<---	F1	,562	,675	,036	15,404	p<0,001
Item1	<---	F1	,525	,595	,041	12,970	p<0,001

The examination of standardized coefficients reveals high factor loadings, low standard error values, and significant t-values. These results confirm the construct validity concerning the pre-defined factor structure.

Discussion

The development of the Moral Disapproval of Pornography Scale (MDPS) provides crucial insights into the complex interplay between pornography consumption and moral disapproval within the Turkish context. The rigorous statistical validation through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) demonstrates the MDPS's unidimensional nature and its high internal consistency, reflected in a Cronbach's alpha coefficient of .862 and McDonald's Omega of .85

(DeVellis & Thorpe, 2022; McDonald, 2013). These results, supported by the Barlett test and KMO values, confirm the adequacy of the sample size and the relevance of the scale's items in capturing the construct it is designed to measure.

The strong correlations among the scale's items, as highlighted in the Pearson Correlation Coefficients, further validate the internal consistency of the MDPS. Particularly, the substantial correlations between Item 3 and Item 4 underscore the interconnectedness of these items, suggesting they play a crucial role in the conceptual coherence of moral disapproval towards pornography. These findings are consistent with the existing literature and emphasise the need to examine the constructs of moral disapproval and problematic pornography consumption together (Grubbs, Perry, et al., 2019a; Grubbs, Stauner, et al., 2015; Rasmussen et al., 2018). A recent study by Dinçer (2022) reinforces this connection, indicating that the dynamics of moral incongruence and perceived addiction are similarly present in the Turkish context.

The confirmatory factor analysis, showcasing fit indices well within acceptable ranges (Hu & Bentler, 1999; Schumacker & Lomax, 2004; Tabachnick et al., 2019; Wang & Wang, 2019), reinforces the scale's structural validity. This robust statistical grounding provides a strong foundation for the MDPS as a reliable measure to explore the nuances of moral disapproval of pornography within different cultural contexts.

The Moral Disapproval of Pornography Scale (MDPS) offers a unique perspective by separating moral disapproval from religiosity. This is a crucial step in creating culturally sensitive research methods for non-Western societies. Unlike existing scales that mix moral views with religion, the MDPS focuses on personal values and conscience, as proposed by Volk et al. (2016). This distinction opens the door for future research to compare scales including religious factors and validate the MDPS itself, ultimately leading to broader cross-cultural studies on pornography consumption.

The MDPS benefits both clinicians and researchers by allowing a more detailed look at the moral aspects of pornography use. It aims to bridge the gap in culturally sensitive methods for assessing attitudes towards pornography. This advancement paves the way for comparative studies across cultures, enriching our understanding of pornography consumption with a culturally aware perspective.

The study has some limitations. Despite the scale's design, social desirability bias (Rasmussen et al., 2018) might influence responses. Future research should explore the complex interplay of moral disapproval, cultural norms, and religious beliefs using qualitative methods to gain deeper insights into how these factors shape attitudes towards pornography. Overall, the MDPS makes a significant contribution to understanding pornography consumption by highlighting the importance of cultural and moral variations. By confirming its reliability and applicability, this study

strengthens academic discussions and emphasizes the need for culturally sensitive tools in pornography research. In this study, it was not possible to conduct a measurement invariance analysis of the developed scale. This situation should be considered a potential limitation of the study. This limitation has led to an inability to fully assess the validity and reliability of the scale across different demographic or cultural subgroups. In this context, it is recommended that future research be conducted to extend the generalizability and applicability of the scale to a wider population and different groups.

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Authors' contribution. Prof. Ekşi and Dr. Dinçer conceptualized this study, engaged in data collection, and reviewed the final manuscript. Dr. Dinçer wrote a majority of the manuscript.

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Peer-review. Externally peer reviewed.

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References

Abell, J. W., Steenbergh, T. A., & Boivin, M. J. (2006). Cyberporn use in the context of religiosity. *Journal of Psychology and Theology*, *34*(2), 165–171.

Alarcón, R. de, La Iglesia, J. de, Casado, N., & Montejo, A. (2019). Online Porn Addiction: What we know and what we don't—A Systematic Review. *Journal of Clinical Medicine*, *8*(1), 91. https://doi.org/10.3390/jcm8010091

Bőthe, B., Tóth-Király, I., Demetrovics, Z., & Orosz, G. (2021). The Short Version of the Problematic Pornography Consumption Scale (PPCS-6): A reliable and valid measure in general and treatment seeking populations. *The Journal of Sex Research*, *58*(3), 342–352. https://doi.org/10.1080/00224499.2020.1716205

British Psychological Society. (2021). *Ethics guidelines for internet-mediated research*. British Psychological Society. https://doi.org/10.53841/bpsrep.2021.rep155

Brand, M., Antons, S., Wegmann, E., & Potenza, M. N. (2019). Theoretical assumptions on pornography problems due to moral incongruence and mechanisms of addictive or compulsive use of pornography: Are the two "conditions" as theoretically distinct as suggested? *Archives of Sexual Behavior*, *48*(2), 417–423. https://doi.org/10.1007/s10508-018-1293-5

Buchanan, E. A., & Zimmer, M. (2018). *Internet Research Ethics*. https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=ethics-internet-research&archive=win2023

Burke, K., & MillerMacPhee, A. (2020). Constructing pornography addiction's harms in science, news media, and politics. *Social Forces*, Article soaa035. Advance online publication. https://doi.org/10.1093/sf/soaa035

Byrne, B. M. (2016). *Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming, Third Edition*. Routledge.

Cooper, A., Putnam, D. E., Planchon, L. A., & Boies, S. C. (1999). Online sexual compulsivity: Getting tangled in the net. *Sexual Addiction & Compulsivity*, *6*(2), 79–104. https://doi.org/10.1080/10720169908400182

DeVellis, R. F., & Thorpe, C. T. (2022). *Scale development: Theory and applications* (Fifth edition). SAGE Publications Inc.

Fisher, W. A., & Kohut, T. (2020). Reading pornography: Methodological considerations in evaluating pornography research. *The Journal of Sexual Medicine, 17*(2), 195-212.

Grubbs, J. B., Exline, J. J., Pargament, K. I., Hook, J. N., & Carlisle, R. D. (2015). Transgression as addiction: Religiosity and moral disapproval as predictors of perceived addiction to pornography. *Archives of Sexual Behavior*, *44*(1), 125–136. https://doi.org/10.1007/s10508-013-0257-z

Grubbs, J. B., Kraus, S. W., & Perry, S. L. (2019). Self-reported addiction to pornography in a nationally representative sample: The roles of use habits, religiousness, and moral incongruence. *Journal of Behavioral Addictions*, *8*(1), 88–93. https://doi.org/10.1556/2006.7.2018.134

Grubbs, J. B., Lee, B. N., Hoagland, K. C., Kraus, S. W., & Perry, S. L. (2020). Addiction or transgression? Moral incongruence and self-reported problematic pornography use in a nationally representative sample. *Clinical Psychological Science*, *8*(5), 936–946. https://doi.org/10.1177/2167702620922966

Grubbs, J. B., Perry, S. L., Wilt, J. A., & Reid, R. C. (2019a). Pornography problems due to moral incongruence: An integrative model with a systematic review and meta-analysis. *Archives of Sexual Behavior*, *48*(2), 397–415. https://doi.org/10.1007/s10508-018-1248-x

Grubbs, J. B., Perry, S., Wilt, J. A., & Reid, R. C. (2019b). Response to commentaries. *Archives of Sexual Behavior*, *48*(2), 461–468. https://doi.org/10.1007/s10508-019-1406-9

Grubbs, J. B., Sessoms, J., Wheeler, D. M., & Volk, F. (2010). The Cyber-Pornography Use Inventory: The development of a new assessment instrument. *Sexual Addiction & Compulsivity*, *17*(2), 106–126. https://doi.org/10.1080/10720161003776166

Grubbs, J. B., Stauner, N., Exline, J. J., Pargament, K. I., & Lindberg, M. J. (2015). Perceived addiction to Internet pornography and psychological distress: Examining relationships concurrently and over time. *Psychology of Addictive Behaviors*, *29*(4), 1056–1067. https://doi.org/10.1037/adb0000114

Guidry, R., Floyd, C. G., Volk, F., & Moen, C. E. (2020). The exacerbating impact of moral disapproval on the relationship between pornography use and depression, anxiety, and relationship satisfaction. *Journal of Sex & Marital Therapy*, *46*(2), 103–121. https://doi.org/10.1080/0092623X.2019.1654579

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Kraus, S. W., Martino, S., & Potenza, M. N. (2016). Clinical characteristics of men interested in seeking treatment for use of pornography. *Journal of Behavioral Addictions*, *5*(2), 169–178. https://doi.org/10.1556/2006.5.2016.036

Lewczuk, K., Glica, A., Nowakowska, I., Gola, M., & Grubbs, J. B. (2020). Evaluating pornography problems due to moral incongruence model. *The Journal of Sexual Medicine*, *17*(2), 300–311. https://doi.org/10.1016/j.jsxm.2019.11.259

Ley, D., Prause, N., & Finn, P. (2014). The Emperor Has No Clothes: A review of the 'Pornography addiction' model. *Current Sexual Health Reports*, *6*(2), 94–105. https://doi.org/10.1007/s11930-014-0016-8

McDonald, R. P. (2013). *Test Theory: A Unified Treatment* (1st ed.). Taylor and Francis. https://doi.org/10.4324/9781410601087

Prause, N., Janssen, E., Georgiadis, J., Finn, P., & Pfaus, J. (2017). Data do not support sex as addictive. *The Lancet Psychiatry*, *4*(12), 899. https://doi.org/10.1016/S2215-0366(17)30441-8

Rasmussen, K. R., Grubbs, J. B., Pargament, K. I., & Exline, J. J. (2018). Social desirability bias in pornography-related self-reports: The role of religion. *The Journal of Sex Research*, *55*(3), 381–394. https://doi.org/10.1080/00224499.2017.1399196

Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation monitoring* (2nd ed.). Lawrence Erlbaum.

Short, M. B., Black, L., Smith, A. H., Wetterneck, C. T., & Wells, D. E. (2012). A review of internet pornography use research: Methodology and content from the past 10 years. *Cyberpsychology, Behavior, and Social Networking, 15*(1), 13-23.

Štulhofer, A., Wiessner, C., Koletić, G., Pietras, L., & Briken, P. (2022). Religiosity, perceived effects of pornography use on personal sex life, and moral incongruence: Insights from the German Health and Sexuality Survey (GeSiD). *The Journal of Sex Research*, *59*(6), 720-730.

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2019). *Using multivariate statistics* (Seventh edition). Pearson.

Volk, F., Thomas, J., Sosin, L., Jacob, V., & Moen, C. (2016). Religiosity, developmental context, and sexual shame in pornography users: A serial mediation model. *Sexual Addiction & Compulsivity*, *23*(2-3), 244–259. https://doi.org/10.1080/10720162.2016.1151391

Wang, J., & Wang, X. (2019). *Structural Equation Modeling: Applications Using Mplus / Jichuan Wang, Xiaoqian Wang* (2nd). *Wiley Series in Probability and Statistics.*

Wilt, J. A., Cooper, E. B., Grubbs, J. B., Exline, J. J., & Pargament, K. I. (2016). Associations of perceived addiction to internet pornography with religious/spiritual and psychological functioning. *Sexual Addiction & Compulsivity*, *23*(2-3), 260–278. https://doi.org/10.1080/10720162.2016.1140604