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Invited Article

From Research to Practice: Three Waves in the Evolution of the Psychology of Religion and Spirituality

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Abstract
This paper examines three broad waves in the evolution of the psychology of religion and spirituality over the past 50 years toward a field that integrates theory, research, and practice.In the first wave, researchers attempted to demonstrate the interconnectedness of religion with various aspects of human functioning.However, this research was largely correlational, relied on global measures of religiousness, and failed to identify what it is about religious life than may affect behavior.In the second wave, researchers began to integrate religious research into mainstream psychological theories and examine religious life in more of its richness and complexity.The field experienced a dramatic upsurge in study in part due the rise of interest in the construct of spirituality. The second wave produced findings that were ripe for application.In the third wave, researchers and practitioners are currently designing and evaluating ways religious and spiritual resources, problems, and struggles can be integrated into clinical practice.The paper concludes by considering some of the challenges that will need to be addressed as the psychology of religion and spirituality evolves further toward an empirically-based applied field.

Keywords:
History • religion • spirituality • spiritually integrated psychotherapy • evidence-based practice

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Over the last 50 years, the psychology of religion and spirituality has been evolving as a field from one that focuses on theory and research to one that integrates theory, research, and practice. Taking a "birds-eye" view of the field over this period of time, this paper describes three broad waves that have marked this important transformation.The last 50 years also coincide with the span of my own career in the field as a clinical psychologist of religion and spirituality.In this paper I will take advantage of this coincidence by not only describing the three broad waves of change, but also by sharing some of my own reflections and experiences as someone involved in this evolution over almost fifty years. The paper will conclude by considering some of the challenges and possibilities for the psychology of religion and spirituality as it continues to evolve.From the outset, I must acknowledge the Western bias of this paper.Although I have tried to broaden my understanding by working with people from diverse faiths and cultures, I have remained embedded in Western culture over the course of my career. To what degree my perspective applies to other cultures and contexts is an open question.Fortunately, as you will see, the field has begun to expand to encompass religions and cultures across the globe.

Some History

To put this paper into a larger historical perspective, it's important to remember that the founding figures in the field of psychology in the late 19th and early 20th centuries, such as William James, G. Stanley Hall, and James Leuba, were fascinated by religious phenomena and their implications for human functioning.However, in its effort to establish itself as a scientific field, subsequent figures did all they could to distance themselves from anything hinting of religion, superstition, or magic. And several leaders were quite outspoken about their anti-religious views. Freud (1927/1961), for example, was clear in his belief that religion was delusional, developed to defend the individual against the terrors of living in the world. Freud instead argued for the head-on confrontation with reality.Similarly, B. F. Skinner (1971), the founder of behaviorism, saw God as an "explanatory fiction" (p. 201) and, in his fictional vision of a utopian community, *Walden Two* (1948), wrote that "Religious faith becomes irrelevant when the fears which nourish it are allayed and hopes fulfilled – here on earth" (p. 165).

In part, as a result of this anti-religious sentiment, the psychology of religion experienced a period of dormancy in the second quarter of the 20th century. However, some hints of change could be detected in the middle of the century. Some psychologists took issue with the field's antagonism and disregard of all things religious.For instance, ego psychologist, Erich Fromm (1950), distinguished a healthier humanistic form of religion from a destructive authoritarian religion. Gordon Allport (1950) contrasted an intrinsic religious orientation in which people

live by their religions from an extrinsic religious orientation in which people use (or misuse) their religion as instrumental tools to advance their own personal or social needs.And a positive mental health movement emerged in the 1950's that offered alternatives to dark conceptions of human nature rooted in psychodynamic and behavioral perspectives (e.g., Jahoda, 1958). These innovations set the stage for a first wave of religious study in the third quarter of the 20th century.

Wave I:Demonstrating a Connection between Religion and Human Functioning

In the first wave in the evolution of the field, researchers attempted to demonstrate empirically that there was a significant connection between religion and human functioning.This marked an important beginning, but the studies were limited in important ways.First, these studies were almost all correlational and, as a result, could not offer much insight into the potential impact of religion on aspects of human behavior, such as health and prejudice (Warren, 1977). Did religion have a direct effect on health?Was religion itself shaped by health?These significant questions could not be answered by this research.

Second, with some important exceptions, such as work on religious orientations (e.g., Allport & Ross, 1967), the research in Wave 1 relied on global measures of religiousness, such as religious denomination, frequency of congregational attendance, and frequency of prayer.Knowing that a general measure of religiousness was tied to mental health did not tell us what it is about religion that may make a difference. After all, people can pray in many ways; they can attend a congregation for many reasons; and they can affiliate with a religious group as the result of any number of factors.By relying on global measures of religiousness, it seemed as though researchers were tip-toeing around religion, as if they did not want to get too caught up in it.

The question remained then how can we explain the religion and health connection?What is it about religion that makes a difference? Theories that dealt with the question were largely reductionistic.It really wasn't about religion at all, they suggested. Instead, religion's effects were explained in terms of presumably more basic psychological and social functions. The three major explanations were the view of Freud (1930/1961) that religion serves the purposes of anxiety reduction and impulse control; the perspective of Durkheim (1915) that religion is largely a source of social connectedness and identity; and the argument of Geertz (1966) that religion at its core is designed to make meaning of what may seem incomprehensible.

As valuable as each of these explanations was, none fully considered the possibility that religion might serve a distinctive function in people's lives; these explanations seemed to be more a way of explaining religion away than accounting for its potentially special role in human affairs (see Pargament, 2002).

A final limitation of Wave 1 research was that it had little to say to practitioners. For instance, early in my career, I experienced a disconnect between my research and my practice as a clinical psychologist.Four days a week I worked at my university as an academic clinical psychologist, and one day a week I saw clients in a practice. But my academic researcher colleagues didn't know anything about my clinical side (at conferences they told me that they assumed I was a social or personality psychologist). And my practitioner colleagues had no knowledge of my research in the psychology of religion.

The reality was that my clinical work had little to do with my research. This disconnect was in part due to the fact that I was doing Wave 1 level research in the 1970's.For example, one of my studies examined the relationship between general measures of religiousness and measures of mental health (e.g., Pargament, Steele, & Tyler, 1979).In fact, my findings did not have direct relevance to clinical work with specific clients facing specific problems.

In spite of the limitations of Wave 1 research, it did serve a valuable purpose. It demonstrated that religion, even measured globally, was indeed connected with different aspects of human functioning. Harold Koenig documented these links in his *Handbook of Religion and Health*, first published in 2001 (Koenig, McCullough, & Larson, 2001).In over 1200 studies, he found that religious measures, largely global, were tied to many dimensions of health and well-being.

This fundamental fact was surprising to many people, but difficult to refute, and helped to convince some formerly skeptical scientists and practitioners of the importance of religion to health and well-being.These findings helped set the stage for a second wave of research starting in the 1970's as researchers began to move closer to religious life and consider what its key ingredients might be.

Wave II: Examining the Key Ingredients of Religious and Spiritual Life

I experienced this second wave myself. In 1975, when I first began my work in this area, I could stay current in the field by going to the library once a semester for a day and leisurely reviewing journal articles.That's all it took.But in the fourth quarter of the century, research in the area of religion increased.One indication was the increase in the number of PsychInfo searches under the keyword "religion" from 1960 to 2000 (Weaver et al., 2006).Thisfigure was not fully informative, however; what was driving the increase in empirical study was attention to a newer concept in the field "spirituality".PsychInfo searches for research that made use of this term increased at an even more rapid rate than did research on religion. I will have more to say more about the introduction of spirituality into the psychology of religion shortly.

Here I want to stress that in this second wave of study researchers began to get off their tiptoes and take a closer look at religious life.And as researchers moved closer, religion came into sharper focus as a rich, complex, multidimensional process. Here's how Ralph Hood and his colleagues put it (2009).“Religion may encompass the supernatural, the non-natural, theism, deism, atheism, monotheism, polytheism, and both finite and infinite deities: it may also include practices, beliefs, and rituals that almost defy circumscription and definition” (Hood, Hill, & Spilka, 2009, p. 7).

To understand a phenomenon as rich and complex as religion, we needed to broaden and deepen the way religion was conceptualized.In the second wave studies of the latter part of the 20th century, we saw efforts to bring and integrate mainstream theory into the psychology of religion. Religious values, beliefs, practices, and experiences were examined and interwoven within the context of theories of attachment, emotions, coping, motivation, cognition, evolution, and terror management (e.g., Emmons, 1999; Kirkpatrick, 2005; Pargament, 1997).

New measures were also needed to tap into the varieties of religious experience and expression.And so, measures of religiousness dramatically expanded as illustrated by the very full volume edited by Hill and Hood (1999) on *Measures of Religiosity*. These included measures of religious attitudes, faith development, religious beliefs, mystical experience, and religious coping to name a few.

In getting closer to religious life and, in keeping with Allport and Fromm, researchers also generally rejected the anti-religious perspectives that had been commonplace in the first half of the 20th century.Instead, religion was seen as double-sided -- it could serve as a valuable resource, but it could also be harmful at times. This closer-up analysis of religious life was proving fruitful.One example comes from my own Wave 2 research. Over the years, my colleagues and I identified a variety of ways people facing major life crises drew on their religion to cope (Pargament et al., 1998). These included appraising life stressors from a benevolent religious framework, looking to God for connection and support, involvement in transition rituals. We also identified negative religious coping methods (what we now call religious and spiritual struggles) including struggles with the divine, with the demonic, with moral issues, with religious doubts, and with other people over spiritual matters.These religious coping methods often predicted adjustment to stressors more strongly than Wave 1 global religious measures, such as how often you go to church and whether you believe in God.And positive and negative ways of religious coping had very different implications for health and well-being (Pargament, 1997).

As researchers drew closer to religion, the research questions themselves began to get more complex. In a target article for *Psychological Inquiry* in 2002, I noted that the field had gone beyond simple questions of whether religion was good or bad

for you to a more complex (and admittedly dryer) question:"How helpful or harmful are particular religious (and spiritual) expressions for particular people dealing with particular situations in particular social contexts according to particular criteria of helpfulness and harmfulness" (Pargament, 2002, p. 178).

Wave 2 research looking into these more complex questions became more sophisticated and continues today.Newman and his colleagues offer a nice illustration in a recently published study (Newman, Nezlek, & Thrash, 2023).In three studies, 350 participants complete measures once a day for two weeks. The questions tapped into daily events, emotions, and well-being. They also measured four types of prayer:adoration, confession, thanksgiving, and supplication.They reported a rich set of findings, some understandable and some more surprising.For example, prayers of thanksgiving and adoration were more common on days with more positive events. Prayers of supplication were more common on days with more negative events and lower well-being.Using lagged analyses, they found complex relationships between the types of prayer and well-being the next day.For instance, prayers of thanksgiving and adoration were tied to reports of lower well-being the next day.Furthermore, each type of prayer was predicted by different nonreligious emotional states.For instance, supplication was predicted by envy, confession by guilt, and adoration by awe.By taking a closer look at the way different types of prayer operate in the day-to-day lives of people, the researchers contributed important knowledge about the dynamic interplay between prayer, life events and well-being.

The Emergence of Spirituality

Perhaps, the most striking development in the latter part of the 20th century, one that stimulated second wave research, was the emergence of the term "spirituality." To understand how this took place, it is important to take a bit of a tangent here and talk about how the terms religiousness and spirituality themselves evolved (for more complete discussion see Zinnbauer & Pargament, 1999; Pargament et al., 2013).

Traditionally or classically, scholars in the field focused largely on the term religion or religiousness.Religiousness was used to refer to a variety of beliefs, practices, and experiences that had some connection to the superhuman or divine and religious institutions. Spirituality was not often discussed in the field until the latter part of the twentieth century.Instead, phenomenon that were spiritual in nature, such as mysticism, were considered within the broader concept of religion.When the term spirituality was used prior to 50 years ago, it had a very different connotation than today. It referred to spiritualism, séances, the occult, and something a bit off center.

However, by virtue of its focus on traditional beliefs, practices, and institutions, some people in the field began to express the feeling that something seemed to be missing in

the ways religion was conceptualized and experienced. There was a sense that religion, as traditionally understood and practiced (e.g., congregational attendance, prayer, ritual practice, doctrinal beliefs), was not capturing the heart and soul of what religion is about.Where were the virtues?Where was the mysterium tremendum?Where were the feelings of uplift, and awe?Where was the yearning for something sacred, transcendent, or greater than ourselves?Not only that, how could we acknowledge and appreciate all of the alternate ways religion was expressing itself**:** Eastern and other non-Western, indigenous, feminist, earth-based, ecological, nontraditional practices (e.g., meditation, yoga, astrology, 12-step programs), and broader understandings of what people hold sacred – from the environment, work, and the arts to loving relationships, the virtues, and our ultimate purposes in living.These new expressions reflected a deep hunger for a revitalization, an injection of new spirit into our understanding of religious life. In some ways, the contemporary emphasis on spirituality could be understood as the latest in a historical set of religious revitalization movements.

At the same time, phenomenon that were once seen as religious in character began to be pulled out from beneath the traditional religious umbrella.This may have been a reflection at the time of the growing distrust of institutions of all kinds in the United States – military, family, educational, and religious.We were starting to go "*Bowling Alone*" as sociologist Robert Putnam (2000) put it in a popular book.In any case, as early as the 1960's, Abraham Maslow (1964) argued that there were many so-called religious phenomena that were not the exclusive property of religious institutions. He said that there is nothing inherently religious about: "the holy; humility; gratitude and oblation; thanksgiving; awe before the mysterium tremendum; the sense of the divine; the ineffable; the sense of littleness before mystery; the quality of exaltedness and sublimity; the awareness of the limitations of powerlessness; the impulse to surrender and to kneel; a sense of fusion with the whole of the universe; and even the experience of heaven and hell" (Maslow, 1964, p. 54).

The introduction of spirituality into the psychology of religion (now the psychology of religion and spirituality) in one sense broadened the field, opening it up to new phenomenon of interest – new groups, new practices, new beliefs.In another sense, it deepened the field by zeroing in on the heart and soul of spirituality, and what it means to be human.These included:

- The most basic motivation underlying spirituality, the yearning for a relationship with something sacred;
- Core emotions such as feelings of awe and uplift;
- Core experiences such as the sense of transcendence and sacred moments; and
- Core human capacities, such as the capacity for virtue and goodness.

The shift in the meanings of religion and spirituality was not without some problems though.Perhaps the biggest was the polarization of the terms. Within the field, spirituality was increasingly seen as individual, oriented to experience and emotion, broad in character, and basically, good.Religion, in contrast, was increasingly viewed as institutional, oriented to dogma and ritual, narrow in character, and, bad.

By detaching itself from its religious roots, spirituality broadened its appeal to more people.People who might have been afraid to learn more about new practices or explore spiritual alternatives were reminded that "you don't have to be religious to meditate" and "you don't have to be religious to be spiritual."However, the reality is that religion and spirituality are not totally independent phenomena.After all, spirituality is the most essential function of religious institutions.No other institution has as its most basic function helping people find and strengthen a connection with something sacred.And it is important to add, at least in the United States people have not necessarily disconnected religion and spirituality.In fact, in a survey administered in 1997, when given the forced choice question, most people saw themselves as both spiritual and religious rather than spiritual or religious alone (Zinnbauer et al., 1997). So the distinction between religion and spirituality can be overdrawn.

To take the point one step further, when spirituality disconnected itself from religion, it may have left something important behind.A study by Amy Wachholtz and I offers a clear illustration (Wachholtz & Pargament, 2005).Noting that writings on meditation by psychologists often stressed that practitioners do not have to be religious to gain benefits from meditation, we wondered whether, in disconnecting the practice from its religious roots, some of its power had been diminished.We proposed a simple but powerful study.We tested whether an explicitly spiritual mantra-based meditation might prove to be more helpful than secularized forms of meditation to people experiencing one form of pain, vascular headaches. Eighty-three college students suffering from chronic headaches were randomly assigned to one of four treatment groups: spiritual meditation to a phrase such as "God is peace, God is joy", an internal secular meditation to a phrase such as "(I am content, I am joyful"), an external secular meditation ((Sand is soft, Grass is green"), and progressive muscle relaxation.The participants were instructed in their meditative technique and practiced it 20 minutes per day for 4 weeks. They then completed measures of a number of outcomes, including frequency of headaches and pain tolerance.

Headache sufferers in the spiritual meditation group experienced a much sharper drop in the frequency of headaches over a one-month period than those in the other three groups.Those in the spiritual meditation group also became twice as tolerant of pain in the pain suppressor task in which we measured how long they could keep their hands in ice water. A later study showed that those in the spiritual meditation group

made less use of analgesics to control their pain (Wachholtz, Malone, & Pargament, 2017) – a noteworthy result given the problems of overmedication and drug addiction among those dealing with chronic pain.

It is important to remember that the only difference between the spiritual meditation and the other two meditation groups was the phrase they were meditating on.This was an important study.The findings suggested that the spiritual element of meditation magnifies the effects of the meditation.It also showed that a spiritual practice could be accessed in a comparatively simple and straightforward way in clinical contexts. The study also suggested a critical ingredient in the practice of meditation may be lost when it is disconnected from religion.

Overall, in spite of the problems of polarization, the second wave in the psychology of religion and spirituality has triggered a dramatic increase in research and knowledge about these topics.In fact, the publication outlets when I first started in the field – the *Journal for the Scientific Study of Religion* and the *Review of Religious Research* – were insufficient to disseminate all of this emerging information.In the response to the rise of empirical study, a number of new journals started up in the second wave:*Psychology of Religion and Spirituality; Archive for the Psychology of Religion;* and two journals with an international, multicultural focus, *The International Journal for the Psychology of Religion; Mental Health, Religion, and Culture*.The latter two journals signaled an expansion of the field to encompass non-Western cultures and contexts.For example, researchers began to study religious and spiritual coping among people from non-Christian faiths, including Buddhism (Falb & Pargament, 2013), Islam (Abu Raiya et al., 2015); Judaism (Rosmarin et al., 2009), and Hinduism (Tarakeshwar et al., 2003).And studies of religious and spiritual coping emerged in non-Western countries, such as Iran (Mohammadzadah & Najafi, 2018), India (Grover & Dua, 2019), Brazil (Esperandio et al., 2018), and Turkey, Morocco, and Surinam (Braam et al., 2010).Gone was the possibility of staying current with the field by visiting the library and reviewing the literature one day a semester.

The second wave of work did more than increase our understanding of religion and spirituality and its key ingredients. The findings had implications for practice – for helping people in trouble and for improving peoples' lives. If, for example, turning to religion and spirituality as resources was helpful to many people in times of crisis, why not encourage people to draw on their religious and spiritual resources?If spiritual struggles increase the risk for psychological problems, why not address these struggles in psychotherapy?If experiences of transcendence foster greater wellbeing, why not explore ways to foster transcendence among those interested?If the virtues such as gratitude and forgiveness are linked to a more satisfying and meaningful life, why not try to promote them?Personally, I found that as my own research became

more practically relevant, I became more able to talk about it with my clients in clinical practice, and more able to share stories drawn from my clinical practice in my publications and presentations. Today, we're seeing the emergence of a third wave, one in which research and practice are integrated in the field.

Wave III: The Integration of Research and Practice

The idea of addressing religion and spirituality in psychological treatment is relatively new. We have already spoken about one reason why this might be the case -- the anti-religious bias that marked leading figures in the field.Another reason was the lack of an empirically-based and practically relevant body of knowledge that could guide effective psychological practice.

The findings from Wave 2 research began to fill this gap in knowledge.They pointed to specific resources that could be cultivated in peoples' lives.They also suggested ways that religion and spirituality might make matters worse.But more generally, they made the point that religion and spirituality are vital parts of being human and contribute to health and well-being in a variety of ways.In short, this wave produced a body of knowledge that was ripe for application.

By the later part of the 20th century, we began to see signs of movement toward integration. Bergin's seminal article in 1980 in the premier journal of clinical psychology, *Journal of Consulting and Clinical Psychology*, challenged the anti-religious bias in the field by introducing many readers to the empirical literature that showed how religion often had positive implications for mental health (Bergin, 1980).Propst conducted perhaps the first clinical trial on the effectiveness of religiously integrated psychotherapy leading to her 1988 book, *Psychotherapy in a Religious Framework* (Propst, 1988).In 1996, Shafranske edited an evidence-based volume pulling together the initial efforts to bring religion into the clinical practice of psychology (Shafranske, 1996).

Today, there is a compelling evidence-based rationale for integrating religion and spirituality into psychological practice.Consider the following streams of evidence. Most clients have religious and spiritual resources and/or experience spiritual struggles (Pargament & Exline, 2022).Surveys show most clients would like to be able to talk about religious and spiritual issues in therapy (e.g., Rose, Westefeld, & Ansley, 2001).Meta-analytic research has shown that therapies that integrate religion and spirituality are at least as effective as non-integrated treatments in reducing distress (Captari et al., 2018).In some cases, religiously and spiritually integrated therapies have outperformed their counterparts, such as when religious and spiritual outcomes of therapy are considered.For example, Richards et al., (2006) studied women with eating disorders in an inpatient setting and compared the effectiveness

of a spirituality group with a cognitive behavioral group and emotional support group.While all three groups showed positive changes over the course of treatment, the spiritual group manifested significantly more improvement in eating attitudes and spiritual well-being, and significant greater reductions in symptom distress, social role conflict, and relational distress.

This evidence has fueled a third wave of the psychology of religion and spirituality and an expansion of the field from a basic discipline to one that brings together theory, research, and application.There are a number of indicators of this exciting transformation. In the first decade of the new millennium I was approached by the American Psychological Association and asked to contribute an edited handbook on the psychology of religion and spirituality to their larger series of handbooks in psychology. My co-editors, Julie Exline, Annette Mahoney, Ed Shafranske, and James Jones, and I believed that we could not do justice to the field in only one volume, so the American Psychological Association agreed to let us publish two volumes with the overarching theme of integration of theory, research, and practice. The first volume focused on empirical research with an eye toward the practical implications of these studies (Pargament, Exline, & Jones, 2013). The second volume focused on evidence-based applications in the field (Pargament, Mahoney, & Shafranske, 2013). Several chapters in the second volume documented the progress of evidence-based care with a full range of problems, including anxiety, depression, addictions, several mental disorder, acute and chronic illness, eating disorders, and sexual trauma. Other chapters dealt with positive psychology interventions involving gratitude, forgiveness, and hope.Still other chapters went beyond the traditional clinical context to consider the place of religion and spirituality in educational settings, the workplace, the military, and the larger community.

The third wave in the evolution of the psychology of religion and spirituality is continuing to build.A number of recent books have offered evidence-based approaches to religion and spirituality for practitioners, such as the *Handbook on Spiritually Integrated Psychotherapy* (Richards, Allen, & Judd, 2023). New journals that address the integration of research and practice have also emerged in the United States, *Spirituality in Clinical Practice* and in other countries such as Turkey, *Spiritual Psychology and Counseling Journal*.More specifically, several exciting practice directions that build on an empirical base deserve highlighting:

The integration of religion and spirituality into clinical assessment.A variety of religious and spiritual tools have been developed that can be a part of clinical practice (see Pargament, 2007).For example, Exline and her colleagues (2014) developed and validated a 26-item measure that assesses six types of religious and spiritual struggle:struggles with the divine, with the demonic, with religious doubts, with

other people, with moral issues, and with questions of ultimate meaning.

Accessing religious and spiritual resources in therapy.As with other resources, people who experience mental health problems may lose touch with their religious and spiritual resources that have proven helpful to them in the past.With the encouragement of practitioners, clients may be able to enhance their mental health by tapping into any number of spiritual resources:prayer, meditation, bibliotherapy community services and rituals, volunteerism and charity, and the practice of virtues and ethics, social justice efforts, and learning from spiritual models (Plante, 2009).

*Spiritually integrated interventions for people facing religious and spiritual struggles.*Building on the growing number of studies on religious and spiritual struggles and their links to health and well-being, spiritually sensitive interventions have been developed to help people dealing with struggles (Pargament & Exline, 2022).For example, "Winding Road". is a six-week group-based counseling program designed to help spiritual strugglers find support for and work through their struggles. The program involves activities such as sharing spiritual struggles with each other, writing and sharing a spiritual autobiography, writing a group lament to God, and visualizing and received counsel from one's ideal older spiritual self (Dworsky et al., 2013). The program was effective in reducing spiritual struggles, alleviating distress from these struggles, developing better self-control, and feeling less stigma as a result of the struggles.

Tailoring spiritually integrated therapies to particular therapeutic modalities and religious traditions.Efforts are underway to integrate religious and spiritual resources and issues into established therapeutic orientations, such as CBT, ACT, RET, and psychodynamically oriented therapies. Likewise, practitioners have extended spiritually integrated therapies to reach diverse religious communities, including members of African American, Latino/Latina, Asian American, and Native American churches and spiritual traditions (Richards & Bergin, 2000). Researchers are testing the effectiveness of these approaches.Pearce et al. (2015), for example, has tailored a religious-CBT program for work with Muslim, Buddhist, Hindu, and Jewish clients. In one study of chronically ill patients dealing with major depression, religious-CBT proved to be equally effective to conventional CBT (Koenig et al., 2015).

Spiritually integrated therapies for individuals facing intractable conditions. Spiritually integrated therapies may of special value to those who confront intractable conditions that point to their frailty and finitude.One example comes from Spiritual Self-Schema Therapy (3-S). This approach is based on cognitive psychology and Buddhist principles and is designed to help treatment resistant heroin users de-activate their addict self-schema and activate their spiritual self-schema. In a set of controlled trials, Margolin et al. (2007) demonstrated the effectiveness of 3-S therapy

by declines in the frequency of their use of illegal drugs, improvements in reaction times to spiritual self-schema terms, and by significant and sustained reductions in drug use as measured by drug-free urine tests.

*Spiritually integrated therapies outside of traditional clinical contexts.*Evolutions are also taking place in clinical treatment and, in line with these developments, a few researchers have begun to test non-traditional approaches to spiritually integrated treatments.For instance, Rosmarin et al. (2010) implemented a novel, spiritually integrated internet-based treatment for subclinical anxiety among individuals in the Jewish community. The entire program as well as the completion of the pre, post, and follow-up measures was conducted online.The two-week program drew on classic Jewish sources to facilitate trust in God among participants.Participants in the spiritually integrated treatment showed greater improvements overall than those in the progressive muscle relaxation and waiting list control groups in their levels of stress, worry, and spiritual well-being.This kind of program and research method seems particularly well-suited to people who may be unable to access outpatient mental health services.

Spiritually integrated therapies for the religiously disengaged. Within Western cultures, the percentage of people who are not religiously affiliated has increased over the past few decades (Woodhead, 2017).Some of these individualw, however, may see themselves as "spiritual but not religious," and spiritually sensitive interventions can prove beneficial to them.For example, Murray-Swank (2003) developed a spiritually integrated approach to treating women who had experienced sexual abuse and, in some cases, clergy sexual abuse.Even though these women came from a variety of religious backgrounds, many of them could no longer count on support from their religious institutions or from their former beliefs in a protective male divine figure. Murray-Swank addressed their spiritual injuries in part by drawing on non-gender based and non-threatening ways of envisioning God. In this vein, she developed a reflective spiritual meditation for clients: "Picture God as a waterfall within you. . . pouring down cool, refreshing water. . . the waters of love, healing, restoration throughout your body. . . renewing, refreshing, restoring" (2003, p. 232). Over the course of the program, women reported significant improvements in their mental health (Murray-Swank & Pargament, 2005).

Future Directions and Challenges

We are just entering this third wave of integration, and certainly, questions far outnumber answers. As we move further toward the integration of science and practice in the field, we will need to make progress in several areas.

First, more randomized clinical trials are needed to test the effectiveness of spiritually integrated treatments. Of special importance will be tests of the value-

added benefit of religious and spiritually integrated treatments over traditional secular treatments and whether these effects vary as a function of the religious and spiritual orientations of clients.

Second, we need to design and evaluate treatments adapted to specific religious groups, specific psychological problems, and people from diverse cultures. Of special importance will be studies of individuals who represent non-Western religions and cultures.Although promising starts have been made in this direction, considerably more research is needed (e.g., Chida et al., 2016; Kurum-Yildirim, 2023; Yilmazturk, 2023).

Third, focused studies are needed to pinpoint and test the impact of specific religious and spiritual resources on clients in treatment.Particular attention will be necessary to learn more about how these resources vary across religious traditions and culture as well as their distinctive effects. How, for example, does the practice of Ramadan impact the mental health and well-being of Muslims?What effect does the observance of the Sabbath have on groups that regular practice this day of rest (e.g., 7th Day Adventist, Orthodox Jews)?

Fourth, given the prevalence and power of religious and spiritual struggles, researchers and practitioners should join forces in developing and evaluating interventions that can foster the mental health of strugglers.Intervention studies that focus on other religious and spiritual problems, such as spiritual bypass (Cashwell et al., 2007), religiously-based abuse, and religious extremism are also needed.

Finally, moving further beyond the focus on traditional mental health care, studies are needed that examine how religion and spirituality might be accessed to enhance the effectiveness of prevention-oriented programs, the health and well-being of couples and families (e.g., Fincham et al., 2010), and communities as a whole.

The future of the field is bright, but it is also challenging. Consider a few of these challenges.As the evolve continues to evolve from basic research to applied research, practitioners will have to grapple with the complexities of religion and spirituality. An ability to tolerate ambiguity may be a prerequisite for people entering the psychology of religion and spirituality, for the central questions in the field continue to shift beyond the simple to the more complex and challenging.

Because this area of work is likely to be so complex, researchers and practitioners in this field should challenge themselves to collaborate with others in pluralistic, multi-disciplinary teams.Few, if any, among us have all of the tools and resources that are needed to be effective in this area of research and application.However, through respectful collaboration with others inside and outside of our own disciplines, including clerics and religious leaders, we can address our own biases and limitations, multiply our own resources, and support each other in the process.

Finally, there is a clear and compelling need for more training of researchers and practitioners.Most mental health professionals lack knowledge about religion and spirituality. This should not be surprising given that only a small minority of graduate students in the mental health fields have ever taken a course in the area of religion and spirituality (e.g., Saunders et al., 2014).Unsure how to address this topic, many mental health professionals may simply avoid religious and spiritual issues altogether in treatment. Vieten and Scammell (2015) describe important work on delineating evidence-based religious and spiritual competencies for training in spiritually integrated practice.They distinguish among attitudinal competencies (e.g., "Can demonstrate empathy, respect and appreciation for clients from diverse spiritual, religious, or secular backgrounds."), knowledge competencies (e.g., "Can identify religious and spiritual experiences, practices, and beliefs that may positively or negatively affect mental health"), and skill-based competencies ("Can identify and address spiritual and/or religious problems in practice and make referrals when necessary").Even though training mental health professionals in these religious and spiritual competencies is a challenging task, initial studies show it is possible.Pearce et al. (2020) developed and evaluated an online training program to foster spiritual competencies among mental health professionals and were able to demonstrate significant improvements in knowledge, skills, and attitudes among program participants.

Conclusions

An evidence-based approach to religion and spirituality has a vital role in efforts to illuminate, broaden and deepen our efforts to understand and enhance the human condition. I would say that the growth in the psychology of religion and spirituality over the past 50 years can be attributable in no small part to its evolution toward an empirically-based applied discipline.As we continue to move forward we will undoubtedly face significant challenges.None of these challenges, however, is insurmountable.I suspect our field will continue to grow and transform itself into one that gains wider and wider acceptance within the larger discipline of psychology and contributes in more and more ways to the health and well-being of individuals, families, and communities. I feel tremendously fortunate to have witnessed and been a part of this evolutionary process.

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Research Article

The Mediating Role of The Meaning of Life in the Effect of Spiritual Well-Being on Post-Traumatic Growth During the Covid-19 Pandemic Process

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Abstract

Considering the effects of the COVID-19 epidemic on mental health, it has been determined that there is a need to focus on the positive parts of the post-traumatic results of the pandemic together with spiritual concepts. For this purpose, the mediating role of the meaning of life in the effect of spiritual well-being on post-traumatic growth during the Covid-19 pandemic process was examined. Within the scope of this general purpose: (a) the moderator role of fear of COVID in the mediating role of the meaning of life in the effect of mental well-being on post-traumatic growth, (b) the mediator role of the meaning of life in the effect of existential regret on post-traumatic growth were examined. The participants in the study consisted of 398 people, 263 women and 135 men, between the ages of 18-62. Data analysis includes correlation and regression analysis. As a result of the analyzes, it was observed that spiritual well-being had a statistically significant and positive effect on post-traumatic growth and the meaning of life had a partial mediating role in this relationship. While the effect of spiritual well-being on the meaning of life is at a significant level, it is observed that the fear of covid has a regulatory role in this effect. In addition, while the meaning of life has a significant effect on post-traumatic growth, it is also seen that existential regret has a regulatory role in this effect. It is thought that this study will provide functional evidence for the post-traumatic growth effects of the COVID-19 outbreak and for possible subsequent outbreaks.

Keywords:
Covid-19 • Post Traumatic Growth • Spiritual Well-Being• Meaning of Life

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Covid-19 was defined as a global epidemic (pandemic) that started in Wuhan, China on December 31, 2019 (WHO). COVID-19 was heard in Turkey at the beginning of March and as of 18.11.2022, the total number of deaths was reported as 101,307 and the number of cases as 16,976,729 (Sağlık Bakanlığı, 2022). The experience of disease is a natural fact of life that can happen to any individual. In today's conditions, the diagnosis of covid-19 for ourselves or a loved one has become one of these inevitable realities of life. While even the most superficial level of disease can cause adverse effects on individuals, an experience such as Covid-19, where the process cannot be fully predicted, can have many different meanings besides the adverse effects of physical illness.

The COVID-19 pandemic process is considered to be a severely traumatic experience individually and globally (Pietrzak et al., 2021; Yu et al., 2022). When the relevant literature is examined, depression, anxiety, and post-traumatic stress disorder have been reported (Bryant-Genevier et al., 2021). In addition, many psychiatric and psychological-social problems such as feeling of loneliness, fear, social and economic) have been reported (Lo Coco et al., 2021; Jaspal & Breakwell, 2022). In addition to these, it is possible to mention many developmental effects of trauma. When the effects of the pandemic on people are noticed, it makes us think that it is necessary to focus on the strengths that traumatic results will create in people later on, together with spiritual concepts. Because of this, the restorative aspects of this major trauma need to be examined in detail in order to resolve and regulate its effects on people.

Answers were sought to questions such as: Does spiritual well-being provide a basis for continuing the search for meaning in life despite this challenging pandemic? Does questioning and reproducing the meaning in life affect post-traumatic strength? Does existential regret have an impact on the relationship between the meaning in life and post-traumatic growth? How effect does fear of Covid have on these concepts? The events that happen to people have a visible and known dimension, as well as a spiritual dimension. Therefore, approaching the Covid-19 epidemic in terms of spiritual questions can provide an opportunity to be protected from the apparent psycho-social negative effects of the event and to gain positive aspects to be learned from the event. It is important to consider what may be the internal and external protective factors against the risk factors created by the disease. The evidence of this study is also important in terms of reconsidering one's life and giving meaning to trauma through these factors and providing treatment.

Introduction

In addition to the adverse effects that may arise due to the Covid-19 pandemic, there are increasing numbers of studies showing that individuals also show positive changes due to combating such traumatic experiences. This phenomenon, which

is considered posttraumatic growth (PTG), is a term used to describe the positive changes experienced by individuals due to struggling with life crises involving high levels of stress (Tedeschi & Calhoun, 2004). There are different areas where posttraumatic growth is experienced, and the growth experienced in these areas can occur in different ways in different individuals. In other words, an individual may express a positive change in one area but not in other areas. The growth experienced after trauma is gathered into three main groups: the individual's self-perception, relationships, and philosophy of life (Tedeschi & Calhoun 1995).

The covid-19 pandemic process, has affected all humanity in different countries such as China (Yu et al., 2022), Turkey (İkizer et al., 2021), Italy (Livingston & Bucher, 2020). Spain (Rodríguez-Rey et al., 2020), Canada and America (Detsky & Bogoch, 2020); women (Van den Eynde et al., 2020), men (Sharma et al., 2020) individuals in different developmental stages (Ermiş & Bayraktar, 2021), healthcare workers (Benfante et al., 2020) were studied in different sample groups.

In these studies, some socio-economic variables were found to be associated with or predictive of posttraumatic growth. Among these studies, İkizer et al. 2021 reported that lower education levels predicted PTG and found that economic hardships were also associated with PTG. (İkizer et al., 2021), Posttraumatic growth due to Covid-19 sex, marriage status, professional titles associated with PTG in nurses (Li et al., 2022) Santos et al. (2021) revealed that older men who are functional in terms of working life and who do not work remotely have high levels of psychological well-being. Apart from socio-economic variables, many studies have also addressed different variables such as stress level, ruminative thoughts, coping ways, and psychiatric problems. İkizer et al. (2021), reported that PTG was predicted by deliberate rumination; Post-traumatic stress, PTG and post-traumatic depreciation correlated with each other. Li et al. (2022), found that the total score of Posttraumatic Growth Scale (PTGI) and 3 dimensions (new possibilities, personal strength, spiritual change) differed between nurses-general population and frontline nurses-non frontline nurses. Ways of coping and anxiety were associated with PTG in nurses. According to some studies on the psychological well-being of men during the pandemic, findings on inverse relationships were found between concepts such as anxiety, depression, traumatic stress and emotional representations. It is known that post-traumatic growth plays a moderating role between traumatic stress and distress and psychological well-being and contributes to increasing the level of psychological well-being (Li et al., 2022).In another study; it is stated that young adults have low PTG scores during the pandemic, resilience, family commitment and distress tolerance predict improvement, PTSD symptoms and covid-19 anxiety predict PTG, those with depression symptoms predict lower PTG levels, and Asians report lower PTG compared to Westerners (Hyun et al., 2021). Zhang et al. (2021) argues that the meaning of life facilitates religious

coping. They talk about the necessity of using this evidence as a basic mechanism for how it contributes to mental health problems. Another study examined the mental health consequences of covid-19 in terms of resilience and meaning in life variables. Resilience and meaning in life mediated the relationship between the perceived impact of illness and mental health outcomes (Yu, Yu, & Hu, 2022)

From a positive psychological perspective, negative experiences related to the Covid process, subjective well-being, life satisfaction, meaning of life (Arslan & Yıldırım, 2021), existential emptiness (Sami et al., 2020), and existential anxiety (Tomaszek & Muchacka-Cymerman, 2020) are found in studies.

Recent studies have shown the mediating role of resilience between self-regulation ability and Covid-related post-traumatic growth (Wang, Zhao & Li, 2023); spiritual belief and gratitude and post-traumatic stress disorder are positively related to higher levels of post-traumatic growth (El Khoury-Malhame et al., 2023). In addition, according to a recent study, the relationships between the traumatic effects of the pandemic, which arouses existential anxiety in travelers, and post-traumatic growth were examined. There has been a strong correlation between post-traumatic growth and transformative travel experiences (Liu et al., 2023). Covid-19 stressors, spiritual belief violation, reduced capacity to form meaning from life, and more intense perceived vulnerability have been associated with worsening mental health outcomes (Negri et al., 2023). Considering all these studies, this research has combined the post-traumatic growth caused by Covid-19, the meaning of life and spiritual well-being concepts, which have been discussed separately in the literature, in a single model. It also aims to make important contributions as it tests together a rarely studied concept such as existential regret.

It aims to deal with spiritual well-being, meaning of life, existential regret, fear of Covid, and posttraumatic growth in people who experience the Covid-19 pandemic as a traumatic event that affects people negatively in many dimensions and pushes them to existential inquiries.

Method

Research Design

The general purpose of this study and hypothesis 1 is to examine the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth during the Covid-19 pandemic process. Within the scope of this general purpose: (Hypothesis 2) the moderator role of fear of Covid in the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth, (Hypothesis 3) the moderator role of existential regret in the mediating role of the

meaning of life in the impact of spiritual well-being on posttraumatic growth. Figure 1 illustrates the conceptual model. Hayes' 3 different models as shown in figure 2 were applied.

Figure 1.

The tested moderated mediation model

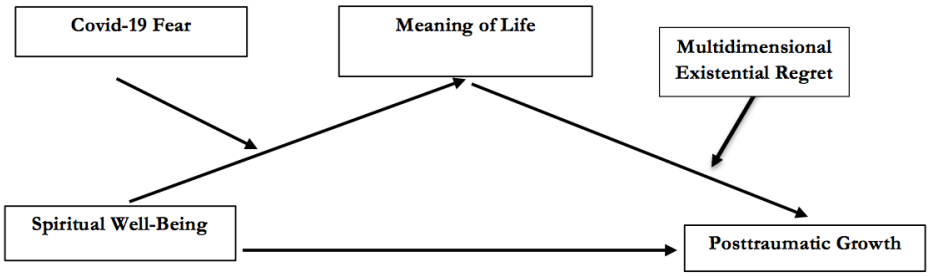
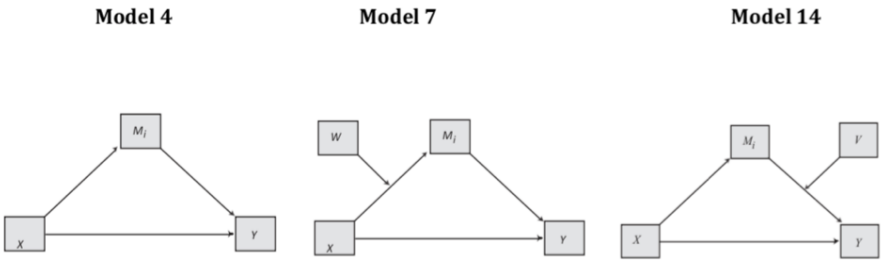


Figure 2.

Models of Hayes (Hayes, 2018)



Study Group

The age of the research participants was between 18 and 62 (Mean= 38.52; SD= 6.64). 263 of 398 people are women and 135 are men. Participants were included in the sample with the conditions of being able to read and write and being of age in accordance with the principle of volunteering. These three conditions were also determined as exclusion criteria.Convenience sampling method was used and consent form was given before the scales. Questionnaires were applied to the research participants via google form and the study took approximately 20 minutes.

Data collection tools

Demographic information form (age, gender) and the scales listed below were used. The scales were determined a good reliability scores. A Cronbach Alpha value greater than 0.60 indicates reliability of the scales. This shows that the internal consistency of the scales in this study has a good score (Özdamar, 2015).

The Multidimensional Existential Regret Scale: The scale was created by Reker and Truckle (2009) and adapted into Turkish by Ermiş and Bayraktar (2021). The scale includes 34 items. It is divided into 5 sub-factors. It is a 7-point Likert type scale and the overall internal consistency coefficient is .94. The overall scale reliability coefficient for this study was .94. Having a higher score on the scale represents an excess of existential regret.

Meaning of Life Scale: This scale, which is the work of Steger, Frazier, Oishi, and Kaler (2006), was adapted into Turkish by Akın and Taş (2011). It has 10 items and 2 sub-dimensions. Getting more points as a result of the evaluation means that life has a lot of meaning. The meaning sub-dimension of the 7-point Likert-type scale is .82, and the reliability coefficient for the sought meaning sub-dimension is .87 (Steger et al., 2006). The overall reliability coefficient found in this study was .71.

Spiritual Well-Being Scale: The scale created by Ekşi and Kardeş (2017) has 29 items. The overall reliability coefficient of the scale, which has a 5-point Likert rating, is .88. In this study, it was determined as .92. Getting a high score from the scale represents an excess of spiritual well-being.

Posttraumatic Growth Scale: Tedeschi and Calhoun (1996) own the original scale. The scale was translated into Turkish by Aydın and Kabukçuoğlu (2020). Higher scores on the scale represent a higher rate of mental development after major traumatic events. The scale, which has a 6-point Likert scale, has 23 items and 5 sub-factors. The reliability coefficient of the scale is .93. The calculated for this study is .94.

Covid-19 Fear Scale: The scale, which was created as 7 items in 2020 by Ahorsu et al., was translated into Turkish by Artan, Meydan and Irmak (2021). The reliability coefficient for the 5-point Likert scale was calculated as .82. For this study, it was determined as .85. A high score in the assessment of the scale represents a high fear of the disease.

Data Analysis

SPSS program was preferred for the analysis of the data and outliers were scanned and removed from the data before the analysis. "Reliability Analysis" was performed an applied to the scales. In line with the proposed model, its role as a mediator and moderator was investigated. The Mahalanobis method determined the outlier value, and multiple normality criterion was met.

The normality of the data can be tested depending on whether the skewness and kurtosis values are between ±3 regarding the Q-Q plot (Chan, 2003) and its distribution (Shao, 2002). Independent sample t-test, one-way analysis of variance and Bonferroni were used to determine the difference between groups in comparing the data. Regression analysis and Pearson correlation analysis were performed with Process Macro for SPSS developed by Hayes (2018).

Results

According to dealing with spiritual well-being, meaning of life, existential regret, fear of Covid, and posttraumatic growth in the individual who experience the Covid-19 pandemic our results are shown at below.

Table 1
Descriptive statistics of socio-demographic variables

	Variables	N	%
Gender	Female	263	66.1
	Male	135	33.9
Age	Under 20 years old	30	7.5
	20-29	168	42.2
	30-39	67	16.8
	40-49	37	9.3
	50-59	36	9.0
	60 +	60	15.2
Educational Status	High school and below	48	12.1
	University and above	350	87.9
Marital status	The married	150	37.7
	Single	248	62.3
Working Status	Employment	172	43.2
	Unemployment	226	56.8
Economical Status	Low	25	6.2
	Middle	226	56.8
	Good	134	33.7
	High	13	3.3
Status of Being in the Risk Group for Covid	Yes	107	26.9
	No	291	73.1
Knowledge Level About Covid	Totally enough	262	65.8
	Partly insufficient	136	34.2
Perception of covid Severity	Not serious	7	1.8
	A little serious	19	4.7
	Serious	84	21.1
	Quite serious	158	39.7
	So serious	130	32.7
Total		398	100.0

The sociodemographic characteristics of the participants are given in Table 1. Independent t-test and one-way analysis of variance were used to compare post-traumatic growth scores. There was a difference between the post-traumatic growth scores in terms of gender ($p<0.05$). Posttraumatic growth scores of women were higher than men. According to the different age groups, there is an intentional difference between the post-traumatic growth scores as expected ($p<0.05$). Bonferroni was applied to find the group that made the difference. It was determined that the post-traumatic growth scores of adults aged 40-49 were higher than adults aged 20-29 ($p<0.05$). It was found that there was no significant difference between the post-traumatic growth scores related to Covid and other socio-demographic characteristics asked to the participants ($p>0.05$).

Table 2.
Correlation between meaning of life scale, spiritual well-being scale, posttraumatic growth scale, covid fear scale and multidimensional existential regret scale

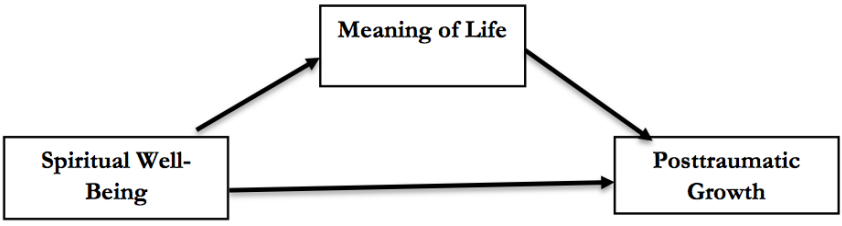
	1	2	3	4	5
1- Meaning of Life Scale		0.165**	0.342**	0.113**	-0.107**
2- Spiritual Well-Being Scale			0.222**	0.025**	-0.092**
3- Posttraumatic Growth Scale				0.121**	-0.048**
4- Covid-19 Fear Scale					-0.124**
5- Multidimensional Existential Regret Scale					

*p<0.05, **p<.01

Pearson correlation analysis was applied to test the relationship between the scales. As a result, between the meaning of life scale, spiritual well-being scale (r=0.165, p<0.05), posttraumatic growth inventory (r=0.342, p<0.05), fear of covid scale (r=0.113, p<0.05) has shown a statistically significant and positive relationship and, multidimensional existential regret scale (r=-0.107, p<0.05) has a statistically significant and negative relationship.

It is seen that there is a statistically significant and positive correlation between spiritual well-being scale and posttraumatic growth inventory (r=0.222, p<0.05). It is seen that there is a statistically significant and positive relationship between the posttraumatic growth scale and fear of covid scale (r=0.121, p<0.05). It is seen that there is a statistically significant and negative relationship between fear of covid scale and multidimensional existential regret scale (r=-0.124, p<0.05).

Figure 3.
The mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth (Analysis of hypothesis 1)



We aimed to examine the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth during the Covid-19 pandemic process as a main hypothesis. Table 3 illustrates the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth.

Table 3.
The mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth

Effect	*B*	Std. Error of the Estimate	T	p	Result
Spiritual Well-being → Posttraumatic Growth	0.2607	0.0574	4.5383	0.0000*	Accepted
Direct Effect	B	Std. Error of the Estimate	T	P	Result
Spiritual Well-being →Meaning of Life → Post-traumatic Growth	0.1999	0.0553	3.6151	0.0003*	Accepted
Indirect Effect		B	CI		Result
Spiritual Well-being →Meaning of Life → Post-traumatic Growth		0.0608	(0.0226, 0.1052)		Signifi-cant

*p<0.05

In the analysis, 5000 resampling options were preferred with the Bootstrap technique. It is suggested that the Bootstrap method produces more reliable results than the traditional mediation analysis method. In the impact analyzes made with Bootstrap, the values in the 95% confidence interval (CI) obtained as a result of the analysis should not contain zero in order to support the research hypothesis (Hayes, 2018).

In the proposed design, the effect of spiritual well-being on post-traumatic growth was examined before the mediation role test, and a statistically significant and positive effect was found (β=0.2607, $p<0.05$). Afterwards, an analysis of the mediating role of the meaning of life was made and it was determined that the values in the 95% confidence interval did not contain 0, and that it had a mediating role in the model (0.0226, 0.1052).

The direct effect is at the level of .1999 and the indirect effect is at the level of .0608. The total effect is at the level of .2607. It is concluded that the mediation effect is statistically significant as the Bootstrap lower and upper bound confidence interval values (CI) do not include zero at the 95% confidence interval.

The significance of the direct effect was examined to determine whether the mediating role was partial or complete. It was observed that the direct effect was significant even when the meaning of life variable was present, but the effect coefficient decreased. Thus, it was observed that it is a partial mediator of the meaning of life (β=0.1999, $p<0.05$). The relevant hypothesis (1) has been accepted.

Hayes's PROCESS macro Model 7 (figure 4) and Model 14 (figure 5) were used to perform the mediation analysis within the scope of the research. There are some presumptions in the use of models. In Table 4, the moderator role of fear of Covid in the effect of spiritual well-being on the meaning of life, and in Table 5, the moderator role of existential regret in the impact of the meaning of life on posttraumatic growth is discussed.

Table 4.
The moderator role of fear of covid in the effect of spiritual well-being on meaning of life

	β	Standart Error	t	p	CI
Spiritual well-being(X)	0.0584	0.0188	3.1025	0.0021*	(0.0214, 0.0955)
Fear of covid (W)	0.1349	0.0623	2.1675	0.0308*	(0.0125, 0.2573)
Interaction(X*W)	-0.0066	0.0033	-2.0084	0.0453*	(-0.0230, -0.0001)
R^2 =0.049					

*p<0.05

The effects of the independent variable (X), moderator (W), and interaction (X*W), which is the model of the research, on the dependent variable (Y), which is the outcome variable, are given. This effect is significant because the p-value in the table is less than 0.05 and also the confidence interval values do not contain 0 (zero). While the effect of spiritual well-being on the meaning of life was statistically significant, it was determined that fear of covid had a moderator role in this effect (p<0.05). The percentage of explanation of this model was found to be 4.9% (R^2=0.049).

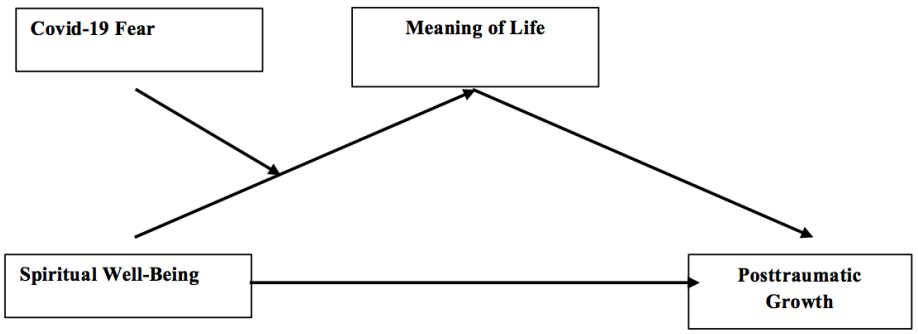
Table 5.
The moderator role of existential regret in the effect of meaning of life on posttraumatic growth

	β	Standart Error	t	p	CI
Meaning of life (X)	0.9950	0.1462	6.8043	0.000*	(0.7075, 1.2825)
Existential regret (W)	-0.0145	0.0283	-0.5102	0.6102	(-0.0702, 0.0413)
Interaction (X*W)	-0.0105	0.0039	-2.7018	0.0072*	(-0.0181, -0.0029)
R^2=0.133					

*p<0.05

The effects of the independent variable (X), moderator (W), and interaction (X*W), which is the model of the research, on the dependent variable (Y), which is the outcome variable, are given. This effect is significant because the p-value in the table

Figure 4.
The moderator role of fear of covid in the mediating role of meaning of life in the effect of spiritual well-being on posttraumatic growth (Analysis of hypothesis 2).



is less than 0.05 and also the confidence interval values do not contain 0 (zero). While the effect of meaning of life on post-traumatic growth was found to be significant, existential regret was found to have a moderator role in this effect ($p<0.05$). The percentage of disclosure of this model was found to be 13.3% ($R^2=0.133$).

Table 6.
The moderator role of fear of covid in the mediating role of meaning of life in the effect of spiritual well-being on posttraumatic growth

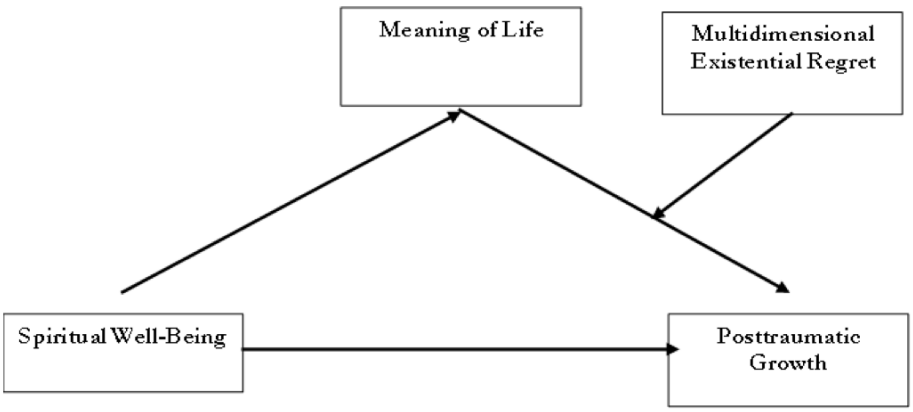
		B	Standard Error	t	p	CI
Spiritual Well-Being (X)		0.0584	0.0188	3.1025	0.0021*	(0.0214, 0.0955)
Covid-19 Fear (W)		0.1349	0.0623	2.1675	0.0308*	(0.0125, 0.2573)
Interaction (X*W)		-0.0066	0.0033	-2.0084	0.0453*	(-0.0230, -0.0001)
		B			CI	
Mediator	Low	0.0933			(0.0280, 0.1682)	
	Middle	0.0552			(0.0159, 0.0976)	
	High	0.0224			(-0.0385, 0.0788)	

*p<0.05

The effects of the independent variable (X), moderator (W), and interaction (X*W), which is the model of the research, on the dependent variable (Y), which is the outcome variable, are given. This effect is significant because the p-value in the table is less than 0.05 and also the confidence interval values do not contain 0 (zero).

While the effect of mental well-being on post-traumatic growth is statistically significant, it is seen that fear of covid has a moderator role in this effect ($p<0.05$).

Figure 5.
The moderator role of multidimensional existential regret in the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth (Analysis of hypothesis 3)



The mediating role of the meaning of life in the effect of mental well-being on post-traumatic growth has been examined, and according to the data in the 95% confidence interval of this model, the meaning of life plays a mediating role. It is seen that the mediating role is significant when the fear of Covid is low and moderate, and there is no mediation role when the fear is high. According to this result, the relevant hypothesis (2) has been accepted.

Table 7.
The moderator role of multidimensional existential regret in the mediating role of the meaning of life in the effect of spiritual well-being on posttraumatic growth

	B	Standard Error	t	p	CI
Meaning of Life (X)	0.9272	0.1459	6.3562	0.0000*	(0.6404, 1.2139)
Multidimensional Existential Regret (W)	-0.0063	0.0281	-0.2249	0.8221	(-0.0616, 0.0489)
Interaction (X*W)	-0.0089	0.0039	-2.3057	0.0216	(-0.0165, -0.0013)

		B	CI
Mediator	Low	0.0814	(0.0302, 0.1396)
	Middle	0.0569	(0.0202, 0.1007)
	High	0.0376	(0.0041, 0.0860)

*p<0.05

The effects of the independent variable (X), moderator (W), and interaction (X*W), which is the model of the research, on the dependent variable (Y), which is the outcome variable, are given. This effect is significant because the p-value in the table is less than 0.05 and also the confidence interval values do not contain 0 (zero).

While the effect of mental well-being on post-traumatic growth was found to be statistically significant, existential regret was found to have a moderator role in this effect ($p<0.05$). While the effect of mental well-being on post-traumatic growth was found to be significant, the mediating role of existential regret in this effect was also tested. According to the confidence interval of the model, existential regret played a mediating role. Accordingly, existential regret is statistically significant, albeit at low, medium and high levels. In this case, the relevant hypothesis (3) has been accepted.

Discussion

The epidemic period, which negatively affects the biological and psychological dynamics of individuals, is a process dominated by uncertainty and fear worldwide due to the unpredictability of the physical consequences of the pandemic and long-term quarantines. The process of combating Covid-19, a continuous life event involving high levels of stress, has affected adverse reactions and/or positive development, along with questioning the meaning of life, spiritual well-being, and existential regret in individuals. Studies examining the concepts of the Covid-19 pandemic process and

post-traumatic growth seem to have various and specific research patterns. In this context, it is aimed to deal with the post-traumatic growth related to the Covid-19 pandemic process holistically in the context of spiritual well-being, the meaning of life, existential regret, and fear of covid. The main hypothesis of the study is that the meaning of life has a mediating role between spiritual well-being and post-traumatic growth. The hypothesis has been confirmed. In the same model, it has been revealed that the fear of Covid-19 has a moderating effect between spiritual well-being and the meaning of life. Finally, it has been determined that existential regret has a moderating role in the mediating role of the meaning of life in the effect of spiritual well-being on post-traumatic growth.

As a result of the analysis performed to compare the post-traumatic growth scores of the participants according to their socio-demographic characteristics, it was seen that the post-traumatic growth scores of the female participants were higher than the male participants. In a study conducted with adults, it was found that women have higher levels of post-traumatic growth compared to men (Gokmen & Deniz, 2020). This finding seems to be compatible with studies in the literature reporting improvement in favor of women (Linley & Joseph, 2004; Vishnevsky et al., 2010; Sebutekin, 2018; Karatas, 2020). In addition to studies that found that women are more likely to increase post-traumatic growth, there are also studies where the gender difference is not significant (Polantinsky & Esprey, 2000; Vishnevsky et al., 2010).

Post-traumatic growth scores were compared according to the age of the participants. Adults aged 40-49 have higher post-traumatic growth scores than younger adults aged 20-29. In another study conducted with adolescents and advanced adults, it was found that the elderly were less affected by traumatic events. Among the possible reasons for this, the functioning of defense mechanisms, coping mechanisms, and increased mental development levels with age can be counted (Bulut et a., 2005). This is consistent with the study findings. As the age increases, the capacity to mentally and spiritually process the negative situations experienced increases, it can be thought that the post-traumatic growth level of the adults between the ages of 40- and 49 is higher compared to the young adults between the ages of 20-29.

According to a study, as the age level increases, post-traumatic growth also increases, and people can react more calmly to traumatic situations at a younger age. It has been said that this is because they can cope better with stressful situations (Park et al., 2005). Contrary to these findings, there are studies in the literature showing that there is no difference between the post-traumatic growth levels of adults between the ages of 18-60 (Gökmen and Deniz, 2020; Bilge & Bilge, 2021). Findings about age cancer patients between 40-79 ages have higher PTG scores then younger patients; in breast cancer survivors, leukemia survivors has no significant difference between

ages (Danhauer et al., 2013). Findings about ages are not consistent in traumatic experience (cancer, earthquake, traffic accident, etc.) survivors (Seo & Lee, 2020; Cha & Bang, 2019).

It has been confirmed that the meaning of life has a mediating role in the effect of spiritual well-being on post-traumatic growth during the Covid-19 pandemic, which is the main hypothesis of the study. The relationship of the concept of spirituality with personality (MacDonald, 2000), seeking the meaning of life (Park, 2005), coping (Parkgament, 1997; Shah et al., 2011), well-being (Emmons, 1999), and mental health (Koenig, 2011). In the study, it has been concluded that spiritual beliefs are an important variable in reducing the compelling aspects of traumatic events. Variables associated with spiritual beliefs have been found to be protective factors in crisis situations such as Covid-19, especially in relation to the idea of going to another realm after death, performing funeral rites and mourning. For this reason, It is recommended to encourage and support individual belief, which can be a useful resource in order to process the traumatic experience and show post-traumatic growth (Biancalani et al., 2022). Santos et al. (2021) indicated that distress and emotional designs were inversely related to spiritual well-being. Post-traumatic growth has a moderated role between traumatic stress and psychological well-being.

In a study conducted with cancer patients, it has been shown that there are positive relationships between post-traumatic growth and the existence of meaning in life, search for meaning, and life satisfaction (Mostarac & Brajković, 2022). Yu et al. (2022), who also revealed that there is a positive relationship between the search for meaning in life and post-traumatic growth, showed that the participants showed a strong willingness to make sense of and approve of the depression caused by the epidemic, but still lack the idea and sense of an important goal in their life. Having a lot of meaning in life has a positive effect on the increase in negative effects against stress and trauma and on mental balance (Nowicki et al., 2020; Ran et al., 2020); therefore, the meaning of life has been positively possessed by post-traumatic growth. In another study explanations between meaning of life, mental distress and post-traumatic growth were investigated in first aid volunteers operating in Covid-19 Italy. The meaning of life, the thing between psychological distress and post-traumatic growth is a mediating variable (Pino, Cunegatti, & D'Angelo, 2022). Without further concluding, the concept of meaning of life in the results of the Covid-19 process is transportation as well as repetition mediating groups in the relationship between positive coping methods and post-traumatic growth. It has existed to support the phenomenon of post-traumatic growth, in which the methods of achieving positive effects in people strengthen their sense of control and to practice life (Xin & Ting, 2022).

Various study findings show that people with a high need for meaning and sense of meaning have lower levels of stress and anxiety and have more mature coping

methods. Having a sense of meaning in life plays a key role in coping with stressful life events and traumatic situations. This result also supports a healthier mental functioning and less mental confusion (Halama, 2014).

The second hypothesis of the study, spiritual well-being, has been shown to have a moderating role in the mediating role of the meaning of life on post-traumatic growth. As the level of fear of Covid in adults decreases, the relationship between the meaning of life and spiritual well-being becomes stronger. The relationship between spiritual well-being and post-traumatic growth is mediated by the meaning of life, but this mediating effect is significant only when the fear of Covid is low to moderate. Accordingly, when the fear of Covid is at a high level, it has been seen that the meaning of life does not mediate spiritual well-being and post-traumatic growth. In this relationship, the fear of Covid creates a disruptive effect when it rises above a certain level. In the evaluation of the findings, it was seen that the concept of fear of Covid was also evaluated with different negative mood measurement tools within the scope of the relevant literature.

In a study on Covid-19, subjective well-being and post-traumatic growth mediated between Covid stress and psychological trauma and were found to be protective factors for trauma symptoms (Veronese, Mahamid & Bdier, 2022). Another study of mothers with young children found a negative relationship between fear of Covid-19 and spiritual well-being and devotion to God. During the COVID-19 epidemic, the relationship between the spiritual well-being of individuals over the age of 65 and their fear of coronavirus was investigated, and it was observed that as their spiritual well-being levels increased, their fear of coronavirus decreased (Durmuş & Durar, 2022). In another study with Iranian students, it was found that spiritual beliefs caused a reduction in Covid-19 fear level (Ariapooran et al., 2022) and the overall effects of spiritual and existential well-being were associated with a reduction in students' perceived fear of Covid-19 (Nooripour et al., 2022). In a study conducted on caregivers of patients with chronic diseases, it was determined that mental well-being predicted Covid-19 anxiety and fear (Akkuş et al. 2022).

In the study conducted by Arslan and Yıldırım (2020), it was found that coronavirus stress and fear are associated with a decrease in meaningful life and optimism and an increase in depressive symptoms. Another study revealed that coronavirus fear and stress affect meaningful coping levels, mental and subjective well-being. At the same time, it creates a mediating effect in the relationship between the level of meaning-based coping and the concepts of spirituality, Covid anxiety and subjective well-being and it was found that spirituality also played an important role in the relationship between meaning-based coping and coronavirus anxiety (Arslan & Yıldırım, 2021).

In the study, the hypothesis that existential regret has a moderator role in the mediating role of the meaning of life in the effect of spiritual well-being on post-

traumatic growth was supported. When existential regret diminishes, the link between the meaning of life and post-traumatic growth becomes stronger. In all three cases, where existential regret is both low, moderate, and high, the mediating effect of the meaning of life between spiritual well-being and post-traumatic growth continues. In a study, people who stated that there were negative changes in their lives during the Covid-19 pandemic stated that life became meaningless in this process. Their fear of death and anxiety levels increased to a level that would affect their lives. Participants with an increased level of anxiety mainly reported a negative change in the meaning of life and a sense of existential emptiness (Sami et al., 2020). It was thought that high level of anxiety in the Covid-19 process could increase feelings of existential emptiness, so it could bring up feelings of existential regret, and the increase in the level of existential regret in the findings of this study is consistent with the fact that the relationship between the meaning of life and post-traumatic growth has decreased.

In some studies, in which the Covid process is evaluated from an existential perspective, it is claimed that there is an increase in the meaningfulness of life. One study investigated the experiences of family members grieving due to COVID-19. The findings revealed that those who lost their loved ones due to illness experience this experience as an existential one. Participants stated that this experience led to creating new meanings for life and loss. In addition, the experience of grief helped people develop some post-traumatic experience (Abdekhodaie, 2022). According to another study, significant results were observed between seeds of meaning-making and post-traumatic growth in some clinical cases. Therapists reported that in this clinical sample, they experienced their clients' existential problems as an opportunity to explore more deeply than before. It was revealed that the clients stated that the COVID-19 process, although frightening, experienced unexpectedly positive changes in their lives, and that they reconsidered the purpose in their lives together with existential questions, and that therapy contributed to them thinking about how they could continue to transform and develop a power in the context of their medical condition in the context of their lives as a whole (Gordon et al., 2021). A study of cancer patients found that the disease increased existential fears and anxieties and triggered thoughts about the meaning of life. It has also shown that meaning-centered interventions are effective in supporting personal development as a result of important life events related to the cancer experience (Carreno & Eisenbeck, 2022). In a study on transformative life experiences, it was studied with the recognition of emotions such as existential anxiety, fear and regret by people. The study revealed that those who are willing to engage with their existential concerns are more likely to rediscover their reality and make room for potential growth and development. Existential anxieties and fears can cause destruction after ignoring behaviors, but if confronted, it can help to take charge of one's own existence (Davidov & Russo-Netzer, 2022). According to a study, existential fear and anxiety caused by COVID-19

decreased life satisfaction and this mediation relationship was also detected after post-traumatic growth. According to the structure of the study, the past trauma of the person is associated with the intense existential anxiety felt with the pandemic and the existential crises that occur. Guiding explanations have been identified between the symptoms of post-traumatic stress and the existential fear that is felt from time to time. After such traumatic effects, the idea of fate and the fears that arise with death will come to the surface. The necessity of methods that include such spiritual outcomes, intervention and care methods should be considered.

In order to cope with existential crises, it is recommended to think and work on concepts such as guilt, regret, embarrassment, unhappiness, meaninglessness and emptiness anxiety (Tomaszek & Muchacka-Cymerman, 2020).Chronic traumatic events have cumulative effects, either positive or negative, on exposed individuals. Understanding the factors that affect post-traumatic growth in a particular physical illness will also make it easier to understand the Covid-19 process. Although the Covid-19 pandemic is not yet completely over, even though this epidemic is over, the findings obtained on the subject can shed light on coping with many other physical diseases and epidemics that may occur in the future at the individual and social level.

The Covid-19 process, a traumatic experience for the whole world, includes negative consequences and positive changes, as in many traumatic experiences. It is seen that the meaning of life, spiritual well-being, existential regret, and fear of Covid have different effects on these positive changes, which are called post-traumatic growth. As a result, the Covid-19 epidemic, a physical health problem within the scope of the bio-psycho-social model, should be evaluated with a holistic perspective based on internal factors such as spiritual well-being and the meaning of life.

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Research Article

Effectiveness of an MPPI: Gratitude-Based Spiritual Group Guidance Program (GSGGP)

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Abstract
This study aims to investigate the effectiveness of the Gratitude-Based Spiritual Group Guidance Program (GSGGP), a spiritually oriented group guidance process, on gratitude expression, intrinsic spirituality, and sense of meaning and peace. Using a pre-test-post-test control group design among quasi-experimental designs, the study examined an experimental group that received GSGGP and a control group that did not receive any interventions. The experimental group consisted of 44 university students (5 male, 39 female), with participants' ages ranging from 18 to 30 ($\overline{X} = 21.55 \pm 2.16$). The study findings revealed subtle differences in post-test gratitude expression scores between the groups, suggesting a potential impact of the intervention. Intra-group analysis within the experimental group showed statistically significant increases in gratitude expression and intrinsic spiritual experiences. Moreover, the experimental group exhibited enhancements in dimensions of spiritual well-being, including peace-related experiences and the perception of meaning. Overall, the GSGGP demonstrates potential to influence various dimensions of gratitude expression, internal spirituality, and spiritual well-being, offering insights into its multifaceted impact and role in personal growth.

Keywords:
Group guidance • Gratitude intervention • Quasi-experimental design • Spiritual guidance

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Gratitude can be defined as expressing gratitude to God (Göcen, 2014), expressing thanks for perceived goodness (Kardaş & Yalçın, 2018), creating awareness of the value of a situation that is important and meaningful for oneself, and experiencing emotions of gratitude for a kindness received (Akın & Yalnız, 2015). Scientific studies and interventions related to gratitude are significantly influenced by the research conducted by Robert Emmons and his colleagues in the early 2000s, sponsored by the John Templeton Foundation. Emmons defines gratitude as a two-stage process: (1) recognizing the attainment of a positive outcome and (2) acknowledging an external source as the origin of this positive outcome. Moreover, Emmons has developed interventions to enhance gratitude, including maintaining a gratitude journal and conveying gratitude messages (as cited in Allen, 2018).

Gratitude contributes to emotional, physical (Uzun & Karataş, 2021), social, and psychological well-being. It brings about increased joy and vitality in individuals (Hefferon & Boniwell, 2018), fostering healthier individuals by enabling forgiveness, positive social behaviors, cultivating optimistic thoughts, and reducing depression risk over time through positive cognitive patterns. Moreover, it aids in diminishing narcissistic tendencies, enhancing problem-solving skills, and shaping positive perceptions of the world (Başerer, 2018). Consequently, gratitude facilitates awareness of the positive and beautiful aspects of life and nurtures the development of gratitude by allowing individuals to experience and appreciate such moments (Carr, 2016).

Spiritual Guidance and Gratitude

Spirituality is defined as an active and passive process that unveils the innate power within an individual's life and beyond existence, fostering inclinations toward intuition, knowledge, creativity, and understanding (Göka, 2021). This inclination in spirituality propels individuals towards intuition, knowledge, creativity, and understanding (Ekşi, 2022). The terms spiritual care, spiritual counseling, spiritual guidance and spiritually oriented counseling or psychotherapy can sometimes be used interchangeably and disambiguating them robustly is beyond the scope of this paper. We will prefer the term spiritual guidance as the broadly delineated area of practice that is primarily focused on the spiritual domain. Spiritual guidance is understood as a process that potentially assists individuals in their faith journeys, crisis scenarios, and significant transitions, potentially contributing to their exploration of existential inquiries and adaptive problem-solving (Toprak, 2022; Ağılkaya, 2020). This guidance centers on the potential clarification of values pertaining to one's worldview and ethical standpoints, potentially influencing choices and identity formation (Altaş & Köylü, 2017). The core intentions encompass facilitating the exploration of one's inherent divine potential, aiding individuals in self-discovery and self-awareness, accompanying them as they seek meaning in the face of life's challenges, promoting autonomy and accountability within counseling, and

reinforcing personal agency (Ekşi & Kaya, 2016). This approach's potential impact lies in its potential to encourage a more holistic understanding of self and worldview. This domain involves theological, psychological, psychiatric, and psychological counseling aspects, potentially aiming to address physical, cognitive, psychological, and spiritual dimensions to unearth intrinsic potential (Ceylan & Özaydın, 2020). Spiritual guidance might evoke a sense of shared humanity by fostering unity and cohesion across diverse interactions, possibly serving as a "navigational aid" within the realm of spiritual exploration (Yasa, 2017).

Gratitude holds a spiritual/religious foundation as well, as viewed through the lens of spirituality. It assesses the individual's relationship between themselves, gratitude, transcendent self, and divine power. Spiritual gratitude is examined in the transpersonal psychology literature, contributing meaningfully to an individual's life (Kaplaner & Ekşi, 2020). Consequently, it instills a lasting sense of gratitude within devout individuals who find a sacred presence in all aspects of life (Davis et al., 2023). The sentiment of gratitude in religious contexts is a fundamental state that shapes the relationship between the individual and the Divine.

According to Krause et al. (2014), gratitude is associated with spirituality, along with various character strengths. For those who believe that God created both them and this unique life, expressing gratitude for everything seen becomes an embodiment of their faith. Gratitude often operates as a discipline with supernatural connotations. For instance, in theistic religions, where God is perceived to have created everything for humanity's benefit, gratitude is closely intertwined with spirituality. Expressing gratitude to God has been identified as linked to an individual's religiosity and has been found to enhance psychological benefits, contributing to well-being among religious individuals. Gratitude positively impacts life satisfaction, well-being, and happiness levels, emphasizing the significance of valuing the present moment and even improving life satisfaction during challenging times. The emotion of gratitude influences happiness and well-being positively by encouraging individuals to make positive appraisals of themselves and value their life experiences (Ayten, 2022).

Positive Psychology Interventions

Positive psychology is a discipline that contributes to individuals' connection with life and their advancement from their current position to a better one by focusing on their strengths (Demir & Türk, 2020). One of the most significant contributions of positive psychology lies in its interventions. Positive psychology interventions aim to cultivate positive emotions, enhance well-being, foster meaningful relationships, and develop strengths (Carr, 2016). These interventions encompass three crucial dimensions: (1) a focus on cultivating positive emotions, (2) shifting from weakness and vulnerability to a state of flourishing, and (3) structuring the intervention to yield

positive outcomes (Eryılmaz, 2017). Positive psychology interventions serve five fundamental functions: (1) displaying acts of kindness, (2) expressing gratitude, (3) savoring positive experiences, (4) endorsing the meaning and purpose of life, and (5) nurturing positive relationships (Schueller & Park, 2014).

Gratitude is closely tied to acts of kindness and is associated with an increased sense of well-being. Practicing gratitude involves expressing appreciation, focusing on fortunate circumstances, and fully enjoying experiences. These practices can help overcome barriers to accepting things as they are, fostering a positive outlook and embracing the present moment. Gratitude also serves as an effective coping strategy, allowing individuals to find positive meanings in challenging events. Positive psychology interventions play a crucial role in enhancing well-being, promoting positive emotions, and encouraging positive behaviors (Sin & Lyubomirsky, 2009).

In the realm of positive psychology, a new strand of multi-component interventions is designed to enhance the positive aspects of two or more relevant components, with the aim of reducing negative thought patterns rather than the one-component classical interventions (Gallardo & Belled & Alsinet, 2022). It's important to distinguish multi-component positive psychology interventions from approaches that focus on a single intervention (Hendriks, 2019).

This study aims to investigate the effectiveness of a group-focused spiritually oriented guidance process called the Gratitude-Based Spiritual Group Guidance Program (GSGGP) on gratitude expression, intrinsic spirituality, and sense of meaning and peace. The GSGGP is not only spiritually guided but can also be viewed as a gratitude-focused multi-component positive psychology intervention due to the interaction between gratitude and the spiritual domain. This study will test the feasibility of implementing gratitude interventions in more comprehensive programs with a multi-component approach and a spiritual focus.

Method

Research Model

The present study aimed to test the effectiveness of the GSGGP. The experimental group and the control group were assessed in pre-tests and the experimental group received GSGGP and the control group did not receive any interventions. This study has the characteristics of a pre-test-post-test control group design among quasi-experimental experimental designs (Creswell, 2009). Table 1. summarizes the stages of the study. In the pre-test and post-tests the control and the experimental groups were both assessed on measures of gratitude expression, spiritual peace and meaning and intrinsic spirituality. The experimental group received GSGGP whereas there was no intervention in the control group.

Table 1.
Design of the study

Groups	Pre-test	Intervention	Post-test
Experimental	Gratitude Expression Scale Spiritual Well-Being Scale (meaning and peace subscales) Intrinsic Spirituality Scale	GSGGP	Gratitude Expression Scale Spiritual Well-Being Scale (meaning and peace subscales) Intrinsic Spirituality Scale
Control		No intervention	

Study Group

The study was conducted on university students. All participants were selected from undergraduate students from different departments at Ondokuz Mayıs University in the 2022-2023 Spring Term. These students were all staying in dormitories due to the fact that their education was switched to distance education due to the earthquake disaster in Kahramanmaraş on the 6th of February, 2023. The following inclusion and exclusion criteria for selecting participants are presented in Table 2. Adherence to the criteria was ensured through the application forms as well as in the informed consent interviews.

Table 2.
Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
• Being an undergraduate student	• Actively seeking psychological help for an important problem at the time of the research
• Volunteering to participate in research	• Having experienced a significant loss in the past 6 months
• Filling information form the scales	• Absence: In the experimental group, those who did not attend three or more sessions were excluded from the experimental review; in the control group, those who did not fill out the post-test form were excluded

The demographic characteristics of the students assigned to the experimental and control groups are given in Table 3. As seen in Table 3, the participants coded K16, and K17, dropped from the experimental group by not attending the sessions, and K29, K48, and K49 from the control group dropped out from the study for not completing the post-tests, following the exclusion criteria. Their data is excluded from the analyses, yet their demographics are presented in Table 3. There were 24 participants (4 females, 20 males) in the experimental group and 20 (1 male and 19 females) participants in the control group. Ages of the participants ranged from 18 to 30 ($\bar{X} = 21.55 \pm 2.16$). GPA intervals and perceived income levels of families were also presented for each participant in Table 3.

Table 3.
Demographic Characteristics of Participants

Experimental Group						Control Group					
ID	**Gender**	**Age**	**Program**	**GPA Interval**	**Perc. Income Level**	**ID**	**Gender**	**Age**	**Program**	**GPA Interval**	**Perc. Income Level**
K1	M	24	Medical Doc. and Secretariat	3.00 - 4.00	High	K10	F	23	Public Rel. and Promotion	3.00 - 4.00	Mid.-High
K11	M	18	First Aid and Emer. Care	2.00 - 2.99	High	K20	F	22	Law	3.00 - 4.00	Mid.-High
K12	M	20	English Lang. and Literature	1.00 - 1.99	Low-Mid.	K21	F	21	Nursing	3.00 - 4.00	Mid.-High
K13	M	20	Journalism	2.00 - 2.99	Mid.-High	K22	F	21	Medical Doc. and Secretariat	3.00 - 4.00	Low
K14	M	23	History	3.00 - 4.00	Low	K23	F	21	Nursing	2.00 - 2.99	Low-Mid.
K15	M	23	Public Rel. and Promotion	3.00 - 4.00	Mid.-High	K28	F	19	History	1.00 - 1.99	Mid.-High
K18	M	20	Call Center Services	2.00 - 2.99	Low-Mid.	K30	F	22	Journalism	3.00 - 4.00	Low
K19	M	23	Radio TV Cinema	3.00 - 4.00	Low-Mid.	K32	F	20	Medical Doc. and Secretariat	1.00 - 1.99	Mid.-High
K2	M	21	Computer Programming	2.00 - 2.99	Mid.-High	K33	F	21	Justice	2.00 - 2.99	Mid.-High
K24	M	18	Inf. Security Technology	3.00 - 4.00	Low-Mid.	K36	F	23	Journalism	2.00 - 2.99	Mid.-High
K25	M	22	History	2.00 - 2.99	Mid.-High	K37	F	23	Medical Laboratory	2.00 - 2.99	Low-Mid.
K26	M	27	History	2.00 - 2.99	High	K38	F	21	Medical Doc. and Secretariat	2.00 - 2.99	Low-Mid.
K27	M	21	Public Rel. and Promotion	2.00 - 2.99	Mid.-High	K40	F	22	Nursing	3.00 - 4.00	Mid.-High
K3	M	21	Communication and Design	2.00 - 2.99	Low-Mid.	K41	F	22	Elderly Care Technician	3.00 - 4.00	Mid.-High
K31	M	22	History	2.00 - 2.99	Mid.-High	K42	M	20	Mechatronics	2.00 - 2.99	Mid.-High
K34	M	20	Inf. Security Technology	2.00 - 2.99	Mid.-High	K43	F	20	Radio TV and Cinema	2.00 - 2.99	Mid.-High
K35	F	30	Nursing	3.00 - 4.00	High	K45	F	21	Public Rel. and Promotion	3.00 - 4.00	Mid.-High
K39	F	21	Medical Secretariat	1.00 - 1.99	Mid.-High	K7	F	18	History	2.00 - 2.99	Mid.-High
K4	M	21	History	3.00 - 4.00	Mid.-High	K8	F	21	Science Education	3.00 - 4.00	Mid.-High

Table 3.
Demographic Characteristics of Participants

Experimental Group						Control Group					
K44	M	19	Inf. Security Technology	2.00 - 2.99	High	K9	F	23	Public Rel. and Promotion	3.00 - 4.00	Low-Mid.
K46	M	22	Radio TV Cinema	3.00 - 4.00	Low-Mid.	K29*	F	22	Industrial Engineering	3.00 - 4.00	Mid.-High
K47	M	22	Journalism	2.00 - 2.99	Mid.-High	K48*	F	24	Food engineering	3.00 - 4.00	Mid.-High
K5	M	22	History	2.00 - 2.99	Low-Mid.	K49*	F	21	Nursing	3.00 - 4.00	Mid.-High
K6	M	24	Radio, TV and Cinema	3.00 - 4.00	Mid.-High						
K16*	F	21	Public Rel. and Promotion	3.00 - 4.00	Mid.-High						
K17*	F	21	Justice	2.00 - 3.00	Low-Mid.						

*Dropouts

Data Collection Tools

Information form. An information form accompanied by an informed consent form prepared by the researchers was used to collect data on the gender, age, grade level and GPA interval. Also, a preferred contact e-mail was collected in order to plan the sessions and measurements. The same forms were used for both control and the experimental group.

The spiritual well-being scale (FACIT-Sp). The Spiritual Well-being Scale, developed by Peterman et al. (2002), provides a measure of spiritual dimensions of "peace," "meaning," and "faith." Respondents rate 12 items on a 0 to 4 scale, with subscale scores ranging from 0 to 16 and a total score spanning 0 to 48, reflecting spiritual well-being. The original validation study by Peterman et al. established construct validity and acceptable levels of internal consistency, with Cronbach's alpha coefficients of 0.81 to 0.83. Aktürk et al. (2017) adapted the scale for Turkish use, validating the original factor structure through exploratory factor analysis. Their study reported Cronbach's alpha of .81 for the "peace" subscale and .78 for the "meaning" subscale. This study solely utilized the "peace" and "meaning" subscales since the faith subscale had items related to illness conditions, and the present study addressed an undergraduate sample.

The gratitude expression scale: The Gratitude Expression Scale developed by Araz and Erdugan (2017) evaluates gratitude expression across three subscales: Verbal Expression (5 items), nonverbal expression (3 items), and other-focused expression (3 items), constituting a total of 11 items. Respondents employ a four-category Likert scale (1 = never, 2 = sometimes, 3 = often, 4 = always) to rate items, where higher

scores reflect heightened frequency of gratitude expression. The findings reveal a three-component, single-factor structure. Confirmatory factor analysis confirmed model fit ($\chi 2 = 77.45$, $p < .001$, $\chi 2/df = 2.03$, CFI = .97, GFI = .96, AGFI = .94, RMSEA = .05, SRMR = .05). Each item exhibited significant factor loadings. The reliability analysis yielded consistent Cronbach's alpha values: .80 for the total scale, .74 for verbal expression, .72 for nonverbal expression, and .70 for other-focused expression.

Intrinsic spirituality scale. Intrinsic Spirituality Scale was originally developed by Hodge (2003) and subsequently adapted into the Turkish language by Ekşi et al. (2018). This scale encompasses a single factor and comprises 6 items, utilizing a rating scale from 0 to 10. The expressions corresponding to each value differ across the questions. To test its validity, confirmatory factor analysis was conducted, which affirmed the scale's preservation of its original factor structure within the context of Turkish adult respondents, demonstrating satisfactory validity, as indicated by favorable fit indices ($\chi^2/df = 2.285$, CFI = .994, NFI = .989, NNFI = .977, GFI = .979, IFI = .994, SRMR = .061, RMSEA = .075). A concurrent validity study revealed a significant correlation between the Intrinsic Spirituality Scale scores and the transcendence subdimension of the Spiritual Well-being Scale. Furthermore, an assessment of reliability using Cronbach's alpha coefficient yielded a robust value of .96 for the entire scale (Ekşi et al., 2018).

Data Collection

Firstly, official permissions were acquired through collaboration with university dormitory administrations. Announcements about employment opportunities within the dormitories were delivered through both in-building voice announcements and dedicated social media groups. Concise study details were provided along with the link to the Google Docs application. Upon receiving completed application forms, communication was initiated with prospective volunteers. The allocation process for the experimental and control groups was based on feedback obtained through phone calls and informed consent. Since there weren't enough participants for a randomized selection, a non-randomized allocation method was employed. A pre-defined timeline was developed to facilitate the implementation of scaling procedures and sessions for both the experimental and control groups. For the experimental group, pre-test assessments were integrated into the informed consent interviews, while post-test assessments were scheduled for the final session. For maximum flexibility and usability, all assessments in both groups were conducted using Google Docs. This approach was chosen to enhance the overall adaptability of the assessment process.

Data Analysis

Wilcoxon Signed Rank Test was utilized to assess the significance of variations between pairs of temporal measurements. Additionally, the Mann-Whitney U test was

employed to evaluate whether noteworthy disparities existed in pre-test and post-test scores when comparing the experimental and control groups. The effect size for notable disparities identified in the Mann-Whitney U Test and Wilcoxon Signed Rank Tests was computed using the formula $r =$, as outlined in Pallant (2011). The interpretation of effect sizes followed the categorization established by Cohen (1988). To conduct the analysis, the IBM SPSS 21 (IBM Corp., 2012) software package was employed.

Compliance with Ethical Standards

Participants voluntarily engaged in all the research processes, providing thorough informed consent. In the experimental group, clear verbal explanations about GSGGP were given, followed by detailed written consent. Privacy was maintained using a manual blinded coding technique to conceal participant identities. Data were exclusively employed for research purposes, with actual names removed from files. The review conducted prior to the implementation by the Kütahya Dumlupınar University Social and Human Ethics Board found no ethical concerns regarding the study's scientific research ethics. (Meeting Number: 2022/08, Date: 05.10.2022).

GSGGP Intervention

The Gratitude-Based Spiritual Group Guidance Program (GSGGP) can be classified both as a group spiritual guidance process and as a multi-component positive psychology intervention (MPPI). The program consisted of six sessions (each 60 min.) heavily relying on gratitude work but also exploring intersections with spirituality and personal growth. GSGGP's final protocol draft underwent meticulous analysis by a group of esteemed experts, each contributing insights from various disciplines. Notably, two experts specialized in Psychological Counseling and Guidance, both holding Ph.D.s. One of them is an Assistant Professor, and the other is an Associate Professor, both with expertise in Positive Psychology and practical experience in counseling. In addition to these experts, a Full Professor specialized in religious education provided invaluable faith-based insights. Another Full Professor, specialized in sociology of religion, enriched the analysis with a sociocultural context. Each expert engaged with the embedded structured evaluation form in the initial protocol, which was designed to gather targeted feedback on the protocol's content and structure. The interdisciplinary team's collaboration facilitated a thorough evaluation, encompassing psychological, educational, faith-related perspectives, and embedded protocol feedback. The authors carefully refined the GSGGP based on expert critiques and suggestions.

Outline of GSGGP

Session 1: Orientation to Spiritual Guidance Group. The initial session aimed to cultivate a comprehensive understanding among group members, establish group

norms, provide insights into the group dynamics, and share essential details about the group. Through an ice-breaking activity (Voltan, 2021), participants were introduced to one another and encouraged to interact. Moreover, participants were prompted to reflect on the multifaceted concept of "gratitude" and its connections. The session concluded with participants being invited to share their contemplations about "gratitude," paving the way for a feedback evaluation process.

Session 2: Concept of Gratitude. The second session revolved around grasping the intrinsic essence of gratitude. Participants explored the intricate components of gratitude, including thankfulness, recognizing blessings, setting intentions, and expressing gratitude. Diverse forms of expressing gratitude were discussed to foster a multifunctional perspective. The session incorporated materials such as social media thank-you expressions and the story "Dervish's Remedy" (as retold by Şenyıldız, 1998) to provide depth. Engaging in group discussions enabled participants to share their insights and experiences related to gratitude and its influence on their functioning.

Session 3: Relationship between Spirituality and Gratitude. The third session aimed to illuminate the symbiotic relationship between spirituality and gratitude, encompassing defining spiritual guidance, examining both its affirmative and challenging dimensions, and addressing the limits of its application. Participants were encouraged to recognize spiritual encounters in their daily lives and to recall moments of engagement in gratitude. A thought-provoking material entitled "What does an economist say about 300 hamburgers?" (Schwartz, 2019) is used to stimulate understanding of the labor and resources spent on things that seem as ordinary on a superficial look. A "backward calendar page activity" (Voltan-Acar, 1986) initiated discussions that underscored the functional aspects of spirituality and gratitude integration.

Session 4: Self-Transcendence, Self-Awareness. The fourth session transitioned towards exploring self-transcendence and self-awareness as catalysts for holistic positive functioning. Participants delved into the multifaceted nature of these concepts, developing the ability for enriched interpersonal interactions, future-oriented thinking, and spiritual reflection. Activities and discussions facilitated the expansion of self-perception boundaries, ensuring a broader and more adaptive self-awareness. Furthermore, participants engaged in the documentary "Beating Cancer" and shared reflections. Before closure next session was introduced with reference to two Hadiths that highlighted the importance of showing gratitude to God and others.

Session 5: Gratitude and Spirituality. This session encouraged the cultivation of gratitude as a catalyst for enriched functional capacities. Concepts such as loyalty, appreciation, and attachment were explored through discussions, aiming to foster an enriched functional landscape. Activities like the "Love Bombing" (Voltan, 1980) exercise were implemented to amplify the functional aspects of gratitude. Participants

watched the documentary "Guardian of Angels" (Altay, 2018) and subsequently participated in the Gratitude Letter activity, emphasizing gratitude's contribution to holistic positive functioning.

Session 6: Conclusion with Focus on Putting Gratitude Skills into Practice. The final session focused on the practical application of gratitude skills to enhance holistic positive functioning in daily life. Participants were encouraged to reflect on the comprehensive impact of interventions and to share their experiences in terms of enhanced functional capacities. By maintaining Gratitude Journals and writing Gratitude Letters, participants were equipped with tools to augment their functional experiences, promote positive functioning, and nurture gratitude and thankfulness towards diverse aspects of life. The session marked the conclusion of the program, signaling the integration of functional gratitude into participants' ongoing journeys.

Results

The Wilcoxon Signed Ranks Test was utilized to test intra-group differences in pre-test and post-test scores. The results, as presented in Table 5, provide valuable insights into the impact of the intervention across the pret-test and post-test interval.

Table 4.
*Intra-group differences: Wilcoxon Signed Ranks Test Result*s

Measure	Group			$\underline{M} \pm SD$		Wilcoxon Signed Ranks Tests		
						T1-T2		
		n	Pre-test	Post-test		*Z*	*p*	
Gratitude Expression	Verbal expression	Exp.	24	16.67 ± 2.65	17.96 ± 2.99		-2.071	**.038***
		Cont.	20	17.65 ± 2.00	18.05 ± 2.21		-1.044	.296
	Nonverbal expression	Exp.	24	9.13 ± 2.15	10.58 ± 2.15		-3.117	**.002****
		Cont.	20	10.25 ± .45	10.40 ± 1.70		-.360	.719
	Other-focused expression	Exp.	24	8.25 ± 2.47	9.88 ± 2.58		-2.901	**.004****
		Cont.	20	8.55 ± 1.54	8.90 ± 2.02		-.992	.321
	Gratitude Total	Exp.	24	34.04 ± 6.48	38.41 ± 7.22		-2.665	**.008***
		Cont.	20	36.45± 4.00	37.35 ± 5.09		-1.038	.299
Intrinsic Spirituality Cont.		Exp.	24	30.09 ± 7.67	36.67 ± 13.51		-1.993	**.046***
		20	34.86 ± 5.49	37.25 ± 13.30		-.498	.619	
Spiritual Well-Being	Peace	Exp.	24	9.33 ± 3.33	11.75 ± 2.74		-2.904	**.004****
		Cont.	20	8.60 ± 3.02	9.60 ± 3.37		-1.865	.062
	Meaning	Exp.	24	9.25 ± 2.81	12.54 ± 2.81		-3.125	**.002****
		Cont.	20	9.05 ± 2.84	9.70 ± 3.21		-.950	.342

* p<.05, ** p< .005

When Table 4 is examined, it is seen that in the context of gratitude expression, the analysis revealed noteworthy findings across different subcategories. In the experimental group, verbal expression demonstrated a significant difference between

pre-test and post-test scores (Z = -2.071, p = .038, r = .375), indicating an increase in verbal gratitude expression. Conversely, no significant difference was observed in the control group (Z = -1.044, p = .296, r = -0.23). Similarly, nonverbal expression exhibited significant changes in the experimental group (Z = -3.117, p = .002, r = -0.57), reflecting an elevation in nonverbal gratitude expression, while no significant difference emerged in the control group (Z = -0.360, p = .719, r = .15). For other-focused expression, the experimental group displayed a significant difference (Z = -2.901, p = .004, r = .53), while the control group exhibited no significant change (Z = -0.992, p = .321, r = -0.231). Moreover, the gratitude total revealed a significant difference in the experimental group (Z = -2.665, p = .008, r = .45), indicative of an overall increase in gratitude, with no significant variation in the control group (Z = -1.038, p = .299, r = .20).

Turning to intrinsic spirituality, the experimental group showed a significant difference (Z = -1.993, p = .046, r = -0.362) in pre-test and post-test scores, reflecting heightened intrinsic spiritual experiences. In contrast, the control group did not display a significant change (Z = -0.498, p = .619, r = -0.090). Regarding spiritual well-being dimensions, the peace scores exhibited a significant difference in the experimental group (Z = -2.904, p = .004, r = -0.530), signifying enhanced peace-related experiences, whereas no significant change was observed in the control group (Z = -1.865, p = .062, r = -0.341). For the meaning dimension, the experimental group demonstrated a significant difference (Z = -3.125, p = .002, r = -0.571), indicating an elevated sense of meaning, while the control group did not exhibit significant variation (Z = -0.950, p = .342, r = -0.173).

The Mann-Whitney U Test was employed to systematically investigate potential inter-group discrepancies in pre-test and post-test scores, serving as the focal point of comparison between the experimental and control groups. The results, as presented in Table 5, provide valuable insights into the impact of the intervention across various dimensions.

Table 5.
Inter-group differences: Mann Whitney U Test Results

	Measure	Pre-test						Post-test			
		Group	n	$\underline{M} \pm SD$	U	Z	p	$\underline{M} \pm SD$	U	Z	p
Gratitude Expression	Verbal Expression	Exp.	24	16.67 ± 2.65	185.50	-1.301	.193	17.96 ± 2.99	208.00	-.783	.434
		Cont.	20	17.65 ± 2.00				18.05 ± 2.21			
	Nonverbal Expression	Exp.	24	9.13 ± 2.15	170.00	-1.686	.092	10.58 ± 2.15	204.50	-.878	.380
		Cont.	20	10.25 ± 1.45				10.40 ± 1.70			
	Other-focused expression	Exp.	24	8.25 ± 2.47	215.50	-.587	.557	9.88 ± 2.58	174.50	-1.577	.115
		Cont.	20	8.55 ± 1.54				8.90 ± 2.02			
	Gratitude Total	Exp.	24	34.04 ± 6.48	183.50	-1.335	.182	38.41 ± 7.22	175.00	-1.545	.122
		Cont.	20	36.45 ± 4.00				37.35 ± 5.09			
Internal Spirituality		Exp.	24	30.08 ± 10.36	159.50	-1.900	.057	36.67 ± 13.51	239.50	-.012	.991
		Cont.	20	34.85 ± 1.90				37.25 ± 13.30			
Spiritual Well-Being	Peace	Exp.	24	9.33 ± 3.33	232.50	-.178	.858	11.75 ± 2.74	122.50	-2.802	**.005***
		Cont.	20	8.60 ± 3.02				9.60 ± 3.37			
	Meaning	Exp.	24	9.25 ± 2.81	217.50	-.534	.594	12.54 ± 2.81	144.50	-2.275	**.023***
		Cont.	20	09.05 ± 2.84				9.70 ± 3.21			

* $p < .05$

Notably, the initial pre-test comparisons did not reveal statistically significant differences between the two groups (all $p > .05$). It is worth noting that the control group exhibited marginally higher pre-test scores across dimensions, although these variations did not achieve statistical significance. This aspect may have influenced the non-significant findings observed in some dimensions during the post-test phase. As the study progressed, the post-test evaluations began to unveil distinctive trends. Particularly, the experimental group showcased notable enhancements in dimensions of "peace" and "meaning." In these dimensions, the experimental group's post-test means exceeded those of the control group. For instance, the experimental group's post-test mean of 11.75 (± 2.74) in "peace" was higher than the control group's mean of 9.60 (± 3.37; $U = 122.50$, $Z = -2.802$, $p = .005$). Similarly, in the "meaning" dimension, the experimental group's post-test mean of 12.54 ± 2.81 surpassed the control group's mean of 9.70 (± 3.21; $U = 144.50$, $Z = -2.275$, $p = .023$). Other scores of "verbal expression," "nonverbal expression," "other-focused expression,"

and "gratitude total" exhibited non-significant post-test differences, potentially influenced by the control group's slightly higher pre-test scores.

Discussion

The objective of the study was to investigate the potential impact of GSGGP on gratitude expression, internal spirituality, and spiritual well-being within two distinct groups: an experimental group and a control group. The analytical approach encompassed both inter-group and intra-group comparisons to elucidate the potential effects of the intervention. With regard to gratitude expression, the inter-group analysis revealed indications of subtle differences in post-test scores between the experimental and control groups. Although statistical significance was not strongly observed, a slight elevation in verbal and nonverbal gratitude expression was apparent within the experimental group. Meanwhile, the control group exhibited relatively less pronounced changes. Conversely, the intra-group analysis disclosed more prominent shifts within the experimental group. Specifically, statistically significant increments were detected in verbal and nonverbal gratitude expressions, as well as other-focused expressions. This lends credence to the notion that the intervention could conceivably influence various dimensions of gratitude expression.

As for internal spirituality, the inter-group analysis suggested marginal differences in the impact of the intervention on intrinsic spiritual experiences when comparing the two groups. In contrast, within the experimental group, the intra-group analysis unveiled a significant upswing in intrinsic spiritual experiences. For spiritual well-being dimensions, the inter-group analysis suggested significant differences in peace-related experiences and the perception of meaning between the experimental and control groups. The intra-group analysis conducted within the experimental group showed substantial enhancements in both dimensions of spiritual well-being. This suggests that the intervention might contribute to heightened feelings of tranquility and a deeper sense of significance in the lives of participants. It's relevant to acknowledge that the minor disparities observed in the initial scores of the control group might have exerted an influence on the inter-group findings. This underscores the significance of accounting for baseline characteristics.

To summarize, the inter-group analysis unveiled slight disparities, while the noteworthy intra-group findings provide tentative insights into the potential positive influence of the intervention on gratitude expression, internal spirituality, and spiritual well-being within the experimental group. This composite perspective accentuates the multifaceted nature of the intervention's impact and its potential role in nurturing personal growth in these dimensions.

Drawing from our findings, it's essential to contextualize our results within the existing body of research. The alignment between our study and prior investigations

underscores the intricate dynamics between gratitude, spirituality, and well-being. The study conducted by Geier and Morris (2021) strongly corresponds with the methodology and findings of our own study. They investigated the impact of gratitude interventions on the psychological well-being of university students during the COVID-19 pandemic. Their results confirm that gratitude interventions effectively improved the mental health of university students in this context. The group exposed to the gratitude intervention displayed significantly elevated levels of well-being after engaging in a 10-week gratitude journaling practice. When comparing the post-intervention outcomes of the treatment group to the control group, the effect of the gratitude intervention was statistically significant and of moderate magnitude. In the study by Kalamatianos et al. (2023), the focus was on understanding how the emotion of gratitude influences various aspects of positive psychology, such as positive and negative emotions, happiness, and optimism. They examined engineering undergraduate students as their study cohort. The findings indicate that the intervention notably increased the experience of gratitude among the experimental group, while there was no considerable change observed in the control group. Cunha et al. (2019) explored the effects of gratitude interventions on a sample of adults within a community context, investigating dimensions of well-being and mental health. Their study reveals that gratitude interventions can enhance positive emotions, subjective well-being, and life satisfaction while simultaneously decreasing negative emotions and depressive symptoms. These changes were more pronounced within the gratitude intervention group as compared to the control group. The results of Geier and Morris (2021) bear close resemblance to both the framework and outcomes of our own study. Similarly, the findings of Kalamatianos et al. (2023) and Cunha et al. (2019) align with our conclusions. Furthermore, a notable parallel across these studies and ours is the inclusion of experimental and control groups.

Perez's (2021) study aimed to unravel the intricate connections between gratitude, spirituality, and subjective well-being, with a focus on discerning how spirituality and gratitude contribute to the diverse dimensions of subjective well-being, encompassing both positive and negative aspects. The findings affirm a substantial direct relationship between gratitude and spirituality, along with a significant direct correlation between spirituality and positive affect. Moreover, the study provides evidence that gratitude acts as a mediator in the relationship between spirituality and positive affect. Gabana et al. (2019) examined the association between athletes' levels of gratitude and their religious and spiritual identities. The findings suggest that athletes with higher gratitude tendencies also demonstrate a heightened interest in religious practices. Komase et al. (2021) conducted a comprehensive exploration of gratitude interventions within the context of employee well-being. They implemented gratitude interventions among employees and observed noteworthy enhancements. Their study underscores the potential impact of workplace gratitude on overall well-being. Kirca et al.'s (2023)

study, involving a substantial participant cohort and multiple samples, investigated the effectiveness of gratitude interventions on psychological well-being indicators. The findings suggest that expressing gratitude towards others can significantly enhance psychological well-being, encompassing happiness, life satisfaction, and positive emotions. The studies by Perez (2021), Gabana et al. (2019), Kirca et al. (2023) and Komase et al. (2021) collectively reinforce our study's findings due to the similarity in their sample groups.

Uhder's (2016) study explored the effects of gratitude within a Christian faith community, offering unique insights that, while distinct from our study, contribute to the broader understanding of gratitude within a religious context. In the study by Mills et al. (2015), the investigation examined whether gratitude plays a role or functions as a mechanism in individuals with heart failure. According to the research findings, gratitude was found to fully mediate the positive effects of psychological well-being on sleep and depressive mood. Additionally, it was found to partially mediate the relationships between psychological well-being and fatigue, as well as psychological well-being and cardiac-specific self-efficacy.

In the research conducted by M. Loi and Ng (2021), they explored the roles of gratitude and spirituality in the relationship between various psychological and subjective well-being measures and meaningful work experiences. The study findings indicated that the use of gratitude and spirituality scales had a positive impact. Gratitude was associated with multiple indices of well-being, including positive effects, hope, and life satisfaction. The study also demonstrated that gratitude not only enhances well-being but can also transform the workplace. However, upon examining the results, the hypothesis was not supported. Both spirituality and gratitude showed a positive relationship with meaningful work experiences. Nonetheless, the relationship between spirituality and gratitude did not yield statistically significant results.

Limitations Suggestions and Conclusion

The study's quasi-experimental design lacks the randomization seen in controlled trials, introducing potential biases and confounders that limit the internal validity. Non-random assignment to groups raises concerns about establishing strong causal relationships and controlling for unaccounted variables. Additionally, the initial baseline differences in the control group could bias inter-group comparisons, impacting the accuracy of assessing intervention effects. The gender imbalance between groups, with more males in the experimental and more females in the control group, could introduce gender-related biases that may hinder generalizability. Despite a comprehensive analysis, marginal post-test differences between groups raise questions about the practical significance of the intervention's impact. Intra-group analysis helps mitigate limitations but doesn't fully counter inter-group disparities,

impacting result robustness. The study was conducted amidst unique environmental factors like seismic events and disrupted education, potentially affecting participant responses.

In summation, our study presents valuable insights into the potential impacts of gratitude interventions on internal spirituality and spiritual well-being. While the quasi-experimental design introduces limitations in terms of randomization and potential biases, and the gender imbalance between groups might affect generalizability, our findings contribute to the broader understanding of the intricate relationship between gratitude, spirituality, and well-being. The integration of our study with existing literature enhances the comprehensiveness of knowledge in this field. Acknowledging these limitations, our study encourages future research to address these challenges, fostering more robust and conclusive outcomes.

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Ethical Approval. All procedures were conducted in accordance with the ethical standards of Kütahya Dumlupınar University Social and Human Ethics Board (Meeting Number: 2022/08, Approval Date: 05.10.2022) and with the 1964 Declaration of Helsinki and its subsequent amendments.

Author Contributions. Both authors jointly determined the aims of the study and the research design. Şule Hatipoğlu did a literature review, wrote a literature section and wrote a discussion. Çınar Kaya wrote the method, analyzed the data, wrote the results and edited the discussion. Çınar Kaya proofread and finalized the manuscript.

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Research Article

Predictors of Fear of Childbirth in Late Pregnancy: Spiritual Well-Being, Religious Attitude and Religious Coping

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Abstract

Many studies have emphasized that birth and pregnancy are spiritual experiences, and spiritual and religious beliefs can help pregnant women prepare for childbirth and overcome the fear of the process. In this study, we investigated the effects of spiritual well-being, religious attitudes, and religious coping styles of pregnant women on fear of childbirth. We conducted this descriptive and cross-sectional study with 111 pregnant women in the last three months of pregnancy who applied to the gynecology and obstetrics outpatient clinic of a university hospital in Turkey. The data were collected using a personal information form, Wijma Delivery Expectancy/Experience Questionnaire-A, the Spiritual Well-Being Scale, the Religious Attitude Scale, and the Religious Coping Scale. We conducted ANOVA, t-tests, Pearson's correlation, and hierarchical linear regression analysis to analyze the data. We found that the level of fear related to childbirth among pregnant women differed based on some socio-demographic characteristics (including employment status, income level, gestational week, and number of pregnancies) ($p < 0.05$). We found that 54.1% of pregnant women had low fear of childbirth, but 1.8% had clinical fear of childbirth. The fear of childbirth was negatively correlated with spiritual well-being, religious attitude, and positive religious coping. The employment status, income level, gestational week, number of pregnancies, and spiritual well-being were significant predictors of fear of childbirth ($p < 0.05$). These variables explained 59% of the total variance in the data on the fear of childbirth. Understanding how spirituality, religious attitudes, and religious coping affect the fear of childbirth and planning care accordingly may help pregnant women experience a more positive pregnancy and birth process and guide interventions to reduce the fear of childbirth.

Keywords:
Spirituality • Religious Attitude • Religious Coping • Fear of Childbirth • Pregnancy

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Giving birth is an extremely stressful event for women (Abdollahpour & Khosravi, 2018; Aguilera-Martín, 2020; Jokić-Begić, Žigić, & Nakić Radoš, 2014), and it is considered to be an existential threshold to be crossed in reproductive age (Aguilera-Martín, 2020; Bilgiç & Çıtak Bilgin, 2021). The expectations and experiences of women related to pregnancy and childbirth are multidimensional; they might include various emotions, ranging from joy and satisfaction to anxiety and terror (Bilgiç & Çıtak Bilgin, 2021; Wigert et al., 2020). When the feeling of uncertainty and anxiety concerning the expected birth is combined with individual beliefs, experiences, and personality traits of the pregnant women, it results in fear of childbirth (Deliktas & Kukulu, 2019; Erdemoğlu, Altıparmak, & Özşahin, 2019; Wigert et al., 2020). Fear of childbirth is defined as a negative cognitive perception of birth and approach to birth with fear and anxiety (Wijma, Wijma, & Zar, 1998).

Fear of childbirth is a distressing emotion that increases the mental morbidity of pregnant women and negatively affects their daily lives (Deliktas & Kukulu, 2019; O'Connell, Khashan, & Leahy-Warren, 2021; Wigert et al., 2020). Approximately 80% of women (Jokić-Begić et al., 2014; O'Connell et al., 2021; Rondung, Thomtén, & Sundin, 2016) experience fear of childbirth during pregnancy, and includes worry, anxiety, and severe fear called tocophobia (O'Connell, Leahy-Warren, Khashan, Kenny, & O'Neill, 2017; Rondung et al., 2016). Some researchers conducted a meta-analysis and found that the prevalence of fear of childbirth in pregnant women globally was 14%. In comparison, 16% of women who had never given birth and 12% who had given birth at least once experienced fear of childbirth (O'Connell et al., 2017). A systematic meta-analysis conducted by a research group to determine the fear of childbirth in healthy pregnant women in Turkey reported that 21% of pregnant women experienced severe fear of childbirth (Deliktas & Kukulu, 2019).

In pregnant women, the fear of childbirth needs to be recognized and the coping mechanism needs to be activated (Abdollahpour & Khosravi, 2018; Deliktas & Kukulu, 2019; Lucero, Pargament, Mahoney, & DeMaris, 2013; O'Connell et al., 2021). Nilsson et al. (2018) reported that fear of childbirth leads to adverse birth outcomes, such as prolonged labor, use of painkillers during labor, intervention delivery, and complications threatening the lives of the mother and baby. Additionally, the fear of childbirth is a leading factor for an increase in the demand for cesarean section, especially in multiparous women (Abdollahpour & Khosravi, 2018; Aguilera-Martín, 2020; Deliktas & Kukulu, 2019; Elvander, Cnattingius, & Kjerulff, 2013; Jokić-Begić et al., 2014). Approximately 7–18.6% of women with tocophobia request an elective cesarean section without any medical indication (Kanellopoulos & Gourounti, 2022). Some studies have found that women with high fear of childbirth during pregnancy report a more negative birth experience (Aguilera-Martín, 2020; Bilgiç & Çıtak Bilgin, 2021; Elvander et al., 2013) and their postpartum mental health is adversely

affected (Deliktas & Kukulu, 2019; Elvander et al., 2013). These problems that might be experienced due to fear of childbirth during pregnancy may cause women to avoid subsequent pregnancies and refrain from having another child (Rondung et al., 2016).

Several studies have investigated the causes of fear of childbirth (Aguilera-Martín, 2020; Molgora et al., 2018; O'Connell et al., 2021; Rouhe, Salmela-Aro, Halmesmäki, & Saisto, 2009; Wigert et al., 2020). Some reasons include low birth self-efficacy, anxiety, history of depression, history of sexual abuse, lack of partner support, partner dissatisfaction, and a previous negative birth experience (O'Connell et al., 2021; Rouhe et al., 2009). Maternal age, income, employment and education status, and the presence of a social support system are the socio-demographic determinants of fear of childbirth (Abdollahpour & Khosravi, 2018; Aguilera-Martín et al., 2020; Rouhe et al., 2009). Women who have never given birth might experience fear of childbirth due to a lack of experience in infant care and related uncertainties (Aguilera-Martín, 2020), whereas women who have given birth at least once before might experience fear of childbirth due to previous negative experiences related to childbirth (Aguilera-Martín, 2020; Wigert et al., 2020).

Although it is known that the fear of childbirth adversely affects health and well-being, research on coping with this fear is limited (Abdollahpour & Khosravi, 2018; Aguilera-Martín, 2020; Molgora et al., 2018). Hence, the causes that may have a positive or negative effect on the fear of childbirth during pregnancy need to be identified, and the coping mechanisms for this fear need to be elucidated and implemented (Abdollahpour & Khosravi, 2018; Aguilera-Martín, 2020; Molgora et al., 2018; O'Connell et al., 2021). Several studies have emphasized that spiritual and religious beliefs might help pregnant women prepare for childbirth and overcome the fear of the process, as birth and pregnancy are considered to be spiritual experiences (Abdollahpour & Khosravi, 2018; Piccinini et al., 2021). Spirituality guides individuals in solving problems (Puchalski, 2010). Those with high levels of spirituality adapt better to the conditions and adversities of life (Abdollahpour & Khosravi, 2018; Bilgiç & Çıtak Bilgin, 2021; Durmuş, Öztürk, Şener, & Eren, 2022; Piccinini et al., 2021). Spirituality refers to the experiences of individuals in searching for the meaning and purpose of life, whereas religion is the practice that helps perceive closeness between individuals and a higher power (Chehrazi, Faramarzi, Abdollahi, Esfandiari, & Shafierizi, 2021; Puchalski, 2010). Although spirituality and religion are intertwined concepts, they are different. Religion is a dimension of spirituality, but spirituality cannot be limited to religious beliefs and practices (Vitorino et al., 2018). Spirituality and religious beliefs are associated with health outcomes in pregnant women (Chehrazi et al., 2021; Durmuş et al., 2022; Jabbari, Mirghafourvand, Sehhatie, & Mohammad-Alizadeh-Charandabi, 2020; Jesse, Schoneboom, & Blanchard, 2007). Pregnant women may use religious

coping, which includes religious motifs and practices, for coping when faced with difficult situations during pregnancy and childbirth (Jabbari et al., 2020; Jesse et al., 2007). Pregnant women with high religiosity and spirituality have lesser depressive (Chehrazi et al., 2021; Durmuş et al., 2022; Piccinini et al., 2021), anxiety-related, and stress symptoms (Chehrazi et al., 2021; Piccinini et al., 2021). They also have a better quality of life (Abdollahpour & Khosravi, 2018; Chehrazi et al., 2021; Piccinini et al., 2021) and psychological well-being (Bilgiç & Çıtak Bilgin, 2021).

Spirituality and religiosity are essential components of health and well-being. For thousands of years, women have practiced praying and other spiritual practices to resolve their health problems and those of others (Keegan, 2021; Piccinini et al., 2021). Although many studies have investigated the causes and consequences of fear of childbirth (Aguilera-Martín, 2020; Elvander et al., 2013; Molgora et al., 2018; Mortazavi & Agah, 2018; Nilsson et al., 2018; O'Connell et al., 2021; Rouhe et al., 2009), only a few studies have assessed ways to determine the effect of spirituality and religion on variables that can predict fear of childbirth and may help in coping (Abdollahpour & Khosravi, 2018; Bilgiç & Çıtak Bilgin, 2021; Mohamadirizi, Mohamadirizi, Mohamadirizi, & Mahmoodi, 2018). Understanding how spirituality and religion affect the fear of childbirth in pregnant women, especially in traditional countries such as Turkey, where religion and spirituality are closely associated with health, can significantly affect the prenatal care and care planning of these pregnant women. The results obtained from this study might provide greater insights into the relationship between health, spirituality, and religion in pregnant women, provide new information, allow health professionals to develop interventions to reduce the fear of childbirth among pregnant women and improve the quality of prenatal care services.

Purpose

In this study, we investigated the effect of the spiritual well-being, religious attitudes, and religious coping styles of pregnant women on the fear of childbirth.

Research Questions

To address the aim of the study, we answered the following questions.

In women in the last three months of pregnancy,

i. What are the socio-demographic characteristics that affect the fear of childbirth?

ii. What is the frequency and level of fear of childbirth?

iii. What is the level of fear of childbirth, spiritual well-being, religious attitude, and positive and negative religious coping?

iv. Is there a relationship between the fear of childbirth and spiritual well-being, religious attitude, and positive and negative religious coping levels?

v. What is the effect of spiritual well-being, religious attitude, and positive and negative religious coping levels on the fear of childbirth?

Method

Study Designs, Participants and Procedure

This descriptive cross-sectional study was conducted with patients who visited the obstetrics and gynecology outpatient clinic of the University Hospital in Turkey between September 2022 and January 2023. G*Power 3.1.7 (Institute of Experimental Psychology, Heinrich-Heine University, Düsseldorf, Germany) was used to calculate the magnitude of the required participants. We conducted multiple regression analysis with four predictors. We aimed to recruit 108 participants (pregnant women) with a medium effect level (0.15), a power level of 95%, and a significance level of 0.05. We finally included 111 pregnant women in the study. The inclusion criteria for the study were as follows: age between 18 and 45 years, pregnant with a singleton, at least a primary school graduate, in the gestation period of 28–42 weeks [The Wijma Delivery Expectancy/Experience Questionnaire-A can be used at and above 28 weeks of gestation (last three months) (Korukcu, Kukulu, & Firat, 2012)], with a healthy fetus, able to communicate verbally, and voluntary participation in the study. The exclusion criteria for the study were as follows: experienced multiple and risky pregnancies, previously had a cesarean section, suffering from a chronic disease, and diagnosed with a psychiatric disorder.

In total, 249 pregnant women were assessed for eligibility; however, 138 pregnant women were excluded because their gestation period was not in the range of 28–42 weeks (103), had multiple pregnancies (2), had a risky pregnancy (1), had a previous cesarean section (28), or declined to participate (4). Therefore, 111 pregnant women were included in the study based on convenience sampling.

Measurements

The data were collected using the Personal Information Form, the Wijma Delivery Expectancy/Experience Questionnaire-A (W-DEQ-A), the Spiritual Well-Being Scale (SWBS), the Religious Attitude Scale (RAS), and the Religious Coping Scale (RCOPE).

The participant information form. The researchers developed a participant information form based on related studies (Aguilera-Martín, 2020; Elvander et al., 2013; Molgora et al., 2018; Mortazavi & Agah, 2018; Nilsson et al., 2018; O'Connell

et al., 2021; Rouhe et al., 2009). It involved seven questions about age, education, employment status, income level, gestational week, number of pregnancies, and planning pregnancy status.

The wijma delivery expectancy/experience questionnaire-a (W-DEQ-A). Wijma et al. developed the W-DEQ-A in 1998 to measure the fear of childbirth (Wijma et al., 1998). Korukcu et al. (2012) conducted a study to determine the validity and reliability of the W-DEQ-A in Turkey. This five-point Likert-type scale included 33 items. W-DEQ-A scores range from 0 to 165, with higher scores indicating greater fear of childbirth. Wijma and Wijma defined WDEQ-A cutoffs as ≥85 points for severe fear of childbirth and ≥100 points for phobic fear of childbirth. In this study, according to Korukcu et al. (2018), the total scores for the WDEQ-A were categorized as low (≤37 points), moderate (38–65 points), high (66–84 points), and clinical level (≥85 points). In the Turkish version of W-DEQ-A, the value of Cronbach's alpha was 0.89, while it was 0.92 in this study.

The spiritual well-being scale (SWBS). Ekşi and Kardaş developed the SWBS in 2017 to measure spiritual well-being (Ekşi & Kargaş, 2017). This five-point Likert-type scale consisted of 29 items. The score that might be obtained on the scale ranges from 29 to 145. As the score obtained on the scale increases, the level of spiritual well-being increases. The value of Cronbach's alpha for the SWBS was 0.89 (Ekşi & Kargaş, 2017), while it was 0.86 in this study.

The religious attitude scale (RAS). Ok developed the RAS to assess the level of religious attitudes (Ok, 2016). This five-point Likert-type scale consists of eight items. The score that can be obtained on the scale ranges from 8 to 40. Higher scores indicate that the respondents are more religious. The value of Cronbach's alpha was 0.89 for the RAS (Ok, 2016), while it was 0.85 in this study.

The religious coping scale (**RCOPE).** Pargament et al. developed the RCOPE to measure the fear of childbirth (Pargament, Feuille, & Burdzy et al., 2001). Ekşi conducted a study to determine the validity and reliability of the RCOPE in Turkey (Eksi, 2001). This four-point Likert-type scale includes 14 items. It has two subscales consisting of positive religious coping (seven items) and negative religious coping (seven items). Positive religious coping involves having a close relationship with the sacred, believing that suffering has a spiritual meaning, and developing faith in God to solve problems. Negative religious coping involves several aspects, such as spiritual detachment, doubting God's power and love, or not believing that God can offer a solution. A total religious coping score cannot be obtained. The raw score that can be obtained on the positive and negative religious coping subscale varies between 7 and 28. A higher score on the positive religious coping subscale reflects more positive religious coping, whereas a negative score on the negative religious

coping subscale reflects more negative religious coping (Eksi, 2001). The value of Cronbach's alpha for the 'positive religious coping' subdimension of the RCOPE was 0.64, and the Cronbach's alpha reliability coefficient for the 'negative religious coping' subdimension of RCOPE was 0.63 (Eksi, 2001); their corresponding values in this study were 0.77 and 0.85, respectively.

Data Collection Procedure

The data were collected from pregnant women using structured questionnaires by CE. The pregnant women who met the inclusion criteria were informed about the study, and all participants signed an informed consent form. The data were collected through in-person interviews using the participant information forms W DEQ-A, SWBS, RAS, and RCOPE. Each interview lasted approximately 20 min, and the guidelines of the coronavirus pandemic were strictly followed during data collection. The respondents were assured that only researchers could access their data and their personal information would remain confidential.

Data analysis

The data was analyzed using SPSS version 20.0 (Chicago, IL, USA). We determined whether the continuous variables followed a normal distribution by conducting the Kolmogorov-Smirnov test. The descriptive characteristics, including fear of childbirth, spiritual well-being, religious attitude, and positive and negative religious coping styles, of all participants were analyzed by descriptive statistics, including percentage, frequency, mean, and standard deviation. The ANOVA and t-tests were conducted to analyze differences in fear of childbirth according to the participants' descriptive characteristics. The correlations between variables were determined by evaluating Pearson's correlation coefficients. Hierarchical linear regression analyses were conducted to assess whether having a fear of birth was associated with descriptive characteristics, spiritual well-being, religious attitude, and positive and negative religious coping. In the multivariate analysis, only variables statistically significant ($p < 0.05$) in the univariate analysis were included. For the analyses, the variables were divided into four models. The important descriptive characteristics, such as employment status, income level, gestational week, and number of pregnancies, were included in the first model; spiritual well-being was included in the second model, the religious attitude was included in the third model, and positive religious coping was included in the fourth model. Each model was examined using multiple linear regression assumptions, such as correlation coefficients between variables, variance inflation factor (VIF), Durbin-Watson statistics, and tolerance. All results were considered to be statistically significant at $p < 0.05$.

Results

Descriptive characteristics of pregnant women

The average age of the women was 28.96 years (min-max = 19–41 years). Among them, 71% of participants were between 18 and 25 years old, 38.7% were high school graduates, 65.8% were unemployed, and 58.6% perceived that their income was equal to their expenses. The mean gestational age of the pregnant women was 36.63 weeks (min-max = 20–64 weeks). Most participants had a gestational age of 28–32 weeks (53.2%), the number of pregnancies was one in 43.2% of participants, and pregnancy was planned in 73.9% of participants (Table 1).

Univariate analysis of the factors associated with fear of birth

The results of the univariate analyses of the factors associated with fear of childbirth are shown in Table 1. Fear of birth among pregnant women differed according to the descriptive demographic characteristics (including employment status, income level, gestational week, and number of pregnancies). The level of fear of childbirth was higher among unemployed pregnant women (p = 0.004), those women whose income was lesser than their expenses (p = 0.001), whose gestational period was 33–40 weeks (p = 0.002), and with one pregnancy (p = 0.001).

Table 1.

Univariate analysis of the fear of childbirth in the participants (n = 111)

Characteristics	n	%	Fear of childbirth			
			Mean	SD	t/F	p
Age						
Mean±SD (years): 28.96 ±4.96(min-max = 19–41)						
18–25	71	64.0	39.22	19.50	t = 0.783	0.435
25–41	40	36.0	36.11	21.09		
Educational Status						
Primary-secondary school	32	28.8	42.04	22.66		
High school	43	38.7	37.32	18.54	F = 0.949	0.390
University and above	36	32.4	35.52	19.33		
Employment Status						
Employed	38	34.2	30.53	17.87	t = –2.968	0.004
Unemployed	73	65.8	42.03	20.10		
Income level						
Income less than expenses[1]	23	20.7	56.26	24.45	F = 16.062 (1–2.3*)	0.001
Income equals expenses[2]	65	58.6	31.84	15.37		
Income more than expenses[3]	23	20.7	37.60	16.24		
Gestational week						
M±SD (years): 36.63 ±10.05(min–max = 20–64)						
28–32 week	59	53.2	32.68	16.81	t = –3.155	0.002
33–40 week	52	46.8	44.24	21.75		
Number of pregnancies*						
One [1]	48	43.2	43.89	23.75	F = 16.062 (1–3*)	0.001
Two [2]	30	27.0	37.59	13.45		
Three and above[3]	33	29.7	30.13	16.53		
Planning pregnancy						
Planned	82	73.9	37.17	18.34	t = –0.817	0.416
Unplanned	29	26.1	40.71	24.42		

p, level of significance; SD, standard deviation; t, Independent samples t-test; F, Analysis of variance

* Bonferroni test

[1],[2],[3]: Groups with different numbers for each variable in the same column are significant

Descriptive statistics and correlations between the fear of childbirth and spiritual well-being, religious attitude, and positive and negative religious coping

The mean scores of fear of childbirth, spiritual well-being, religious attitude, and positive and negative religious coping are presented in Table 2. The mean fear of childbirth score of the pregnant women was 38.09 ±20.05; 54.1% of participants had a low fear of childbirth, whereas 1.8% had clinical-level fear of childbirth. The mean spiritual well-being score was 123.81 ±12.07, the mean religious attitude score was 35.56 ±4.35, the mean positive religious coping score was 23.92 ±3.88, and the mean negative religious coping score was 11.27 ±4.14. Consequently, their spiritual well-being, religious attitude, and positive religious coping levels were high, and their negative religious coping was low.

The results of Pearson's correlation analysis (Table 2) showed that the level of fear of childbirth was negatively correlated with spiritual well-being (r = –0.695, p = 0.001), religious attitude (r = –0.417, p = 0.001), and positive religious coping (r = –0.409, p = 0.002). The relationship between the level of negative religious coping and fear of childbirth was not significant. Pregnant women with high levels of spiritual well-being, religious attitudes, and positive religious coping experienced lower levels of fear of childbirth.

Table 2.
Descriptive Statistics and Correlations between the Fear of Childbirth and Spiritual Well-Being, Religious Attitude, and Positive and Negative Religious Coping

Scales	**n**	**%**	**Min-Max**	**Low-High values**		
Fear of Childbirth						
Low	60	54.1	0–37	2–37		
Moderate	39	35.1	38–65	38–64		
High	10	9.0	66–84	66–84		
Clinical	2	1.8	85–165	86–118		
	Mean	**SD**	**Min-Max**	**Low-High values**	**r**	**p**
Fear of Childbirth	38.09	20.05	0–165	2–118		
Spiritual Well Being	123.81	12.07	29–145	88–143	-0.695	0.001
Religious Attitude	35.56	4.35	8–40	8–40	-0.417	0.001
Positive Religious Coping	23.92	3.88	7–28	7–28	-0.409	0.001
Negative Religious Coping	11.27	4.14	7–28	7–28	0.019	0.842

SD, standard deviation; r: Pearson's Correlation.

Multivariate analysis of the predictors of fear of childbirth

The results of the hierarchical regression analysis are presented in Table 3. In the regression, all VIF values were lower than 2.0, and tolerance values were lower than 0.1, indicating no problems of multicollinearity. The Durbin-Watson value was 1.210, which indicated that the regression model was valid. Similar to the results obtained from Model 1 in the hierarchical regression analysis for fear of childbirth, we found that the descriptive characteristics explained 34% of the variance in fear of childbirth

Table 3.
The results of hierarchical linear regression analysis regarding the determinants of the acceptance of illness

Variables[a]	Model 1				Model 2				Model 3				Model 4			
	B	SE	β	p	B	SE	β	p	B	SE	β	p	B	SE	β	p
Employment Status (1 = unemployed)	8.290	3.330	0.197	0.014	8.173	2.642	0.194	0.003	8.203	2.619	0.195	0.002	8.178	2.635	0.194	0.002
Income level (1 = income less than expenses)	20.035	3.889	0.407	0.000	10.077	3.329	0.205	0.003	9.666	3.309	0.196	0.004	9.700	3.330	0.197	0.004
Gestational week (1 =33–40 week)	9.027	3.136	0.226	0.005	5.633	2.524	0.141	0.028	5.202	2.515	0.130	0.041	5.162	2.537	0.129	0.044
Number of Pregnancy (1 =One)	8.743	3.159	0.217	0.007	5.224	2.545	0.130	0.043	5.067	2.525	0.126	0.047	5.117	2.552	0.127	0.048
Spiritual Well Being					-0.911	0.114	-0.549	0.000	-0.841	0.121	-0.506	0.000	-0.848	0.129	-0.511	0.000
Religious Attitude									-0.528	0.313	-0.115	0.094	-0.559	0.357	-0.121	0.121
Positive Religious Coping													0.077	0.426	0.015	0.858
F (p)	15.135 (0.001)				31.910 (0.001)				27.537 (0.001)				23.388 (0.001)			
R^2	0.36				0.60				0.61				0.61			
adjR^2	0.34				0.58				0.59				0.59			
R^2-change-					0.24				0.01				0.00			

Abbreviations: B, unstandardized coefficients; β, standardized coefficient; SE, standard error.
[a] Predictor(s) had a statistically significant association with the outcome variable in univariate analysis ($P < .05$).
Durbin-Watson: 1.210; Tolerance: 0.551~0.976; Variance inflation factor: 1.024~1.815

(F = 15.135; p = 0.001). In this model, being unemployed (β = 0.197, p = 0.014), having an income less than expenses (β = 0.407, p = 0.001), being in 33–40 weeks of gestation (β = 0.226, p = 0.005), and having one pregnancy (β = 0.217, p = 0.007) were significantly associated with the fear of childbirth. The significance of these variables was also found in Model 2 (β = 0.194, p = 0.003; β = 0.205, p = 0.003; β = 0.141, p = 0.028; β = 0.130, p = 0.043, respectively). In Model 2, spiritual well-being (β = –0.549, p = 0.001) explained about 24% of the variance in depression (F = 31.910; p = 0.001). In Model 3, religious attitude was not significantly associated with the fear of childbirth (β = –0.115, p = 0.094). Positive religious coping was used as a parameter in Model 4. In the last model, it was specified that being unemployed (β = 0. 194, p = 0.002), having an income less than expenses (β = 0.197, p = 0.004), being in 33–40 weeks of gestation (β = 0.129, p = 0.044), having one pregnancy (β = 0.127, p = 0.048), and spiritual well-being (β = –0.511, p = 0.001) were significantly associated with fear of childbirth. The model explained 59% of the variance in fear of childbirth (F = 23.388; p = 0.001). Religious attitude (β = –0.121, p = 0.121) and positive religious coping (β = 0.015, p = 0.858) were not significantly associated with the fear of childbirth.

Discussion

In this study, we investigated the effects of spiritual well-being, religious attitudes, and religious coping styles on the fear of childbirth in pregnant women in the last three months of pregnancy. The W-DEQ score of the pregnant women was 38.09 ±20.05. The W-DEQ score of pregnant women reported in this study was similar to the scores reported in some studies (Bilgiç & Çıtak Bilgin, 2021; Mohamamdirizi, Mohamadirizi, & Mohamadirizi, 2018; Phunyammalee, Buayaem, & Boriboonhirunsarn, 2019) but lower than those reported in other studies (Mortazavi & Agah, 2018; Serçekuş et al., 2020; Sharma et al., 2022). Mohamamdirizi et al. (2018b) found that the fear of childbirth in low-risk and high-risk pregnant women was 41.7 ±6.0, 42.2 ±6.0, and moderate, respectively. Phunyammalee et al. (2019) reported that the fear of childbirth in low-risk pregnant women was 51.9 ±14.3. The prevalence of high (9%) and severe (1.8%) fear of childbirth in this study was considerably lower than that reported in other studies. The prevalence of fear of childbirth in most studies was between 6.3% and 14.8%, although it varied across countries and cultures (Nilsson et al., 2018; O'Connell et al., 2021). The differences in the findings of the study might be related to how fear of childbirth is perceived in the culture in which the study was conducted. Birth is perceived not only as a physiological process but also as a culture-specific life event that strengthens bonds between families and communities; it is a spiritually rich experience (Keegan, 2021). Additionally, differences in the socio-demographic characteristics of pregnant women, the characteristics of the health institutions (such as a university hospital), and the quality of the service received might have led to this result. In the university hospital where the study was

conducted, prenatal care nurses provided group training to pregnant women in the last months of their pregnancy to prepare them for delivery as a part of routine care practice and conducted discussions where these women could ask questions after the group training. We could not evaluate the effects of receiving such prenatal education in this study, but this variable should be considered in future studies. Nilsson et al. (2018) emphasized in their systematic review that antenatal education is a relatively inexpensive intervention that can reduce the fear of childbirth.

Socio-demographic factors may strongly influence the fear of childbirth among women (Deliktas & Kukulu, 2019; Elvander et al., 2013; Sharma, Vyas, Gothwal, & Arumugam, 2022; Soltani, Eskandari, Khodakarami, Parsa, & Roshanaei, 2017). In this study, those women who were unemployed had lower incomes than expenses, were closer to delivery, or had a previous pregnancy experienced higher fear of childbirth. Additionally, a hierarchical regression analysis was performed to determine the relationship between socio-demographic characteristics and the fear of childbirth. In the first model, socio-demographic variables explained 34% of the variance in fear of childbirth. These variables maintained their significance in the fourth and final model. Similar to the findings of this study, other studies found that women who were unemployed and had low income (Bilgiç & Çıtak Bilgin, 2021; Elvander et al., 2013; Serçekuş, Vardar & Özkan, 2020; Phunyammalee et al., 2019), those who were experiencing their first pregnancy, and whose delivery was imminent (Phunyammalee et al., 2019; Rouhe et al., 2009; Serçekuş et al., 2020; Sharma et al., 2022) experienced high levels of fear of childbirth. Mortazavi and Agah (2018) emphasized that women who have not given birth before experience more intense anxiety related to childbirth, especially in the last months of pregnancy. Financial concerns might also contribute to the fear of childbirth. Soltani et al. (2017) reported that among demographic characteristics, pregnant women with a low household income had the highest fear of childbirth, and women with more than three pregnancies had the lowest fear of childbirth. O'Connell et al. (2021) conducted a meta-analysis and reported that women who had never given birth had higher levels of fear of childbirth than those who had given birth (16% vs. 12%). However, some studies reported that socio-demographic characteristics did not affect fear of childbirth (Jokić-Begić et al., 2014; Molgora et al., 2018). Our findings emphasized the importance of health professionals in reducing the level of fear related to childbirth in pregnant women from vulnerable groups.

Different cultures believe that pregnancy and childbirth enrich the spirituality of women (Abdollahpour & Khosravi, 2018; Bilgiç & Çıtak Bilgin, 2021; Chehrazi et al., 2021; Jesse et al., 2007; Mohamadirizi et al., 2018). Wojtkowiak (2020) emphasized that spirituality in pregnancy and childbirth is a fundamental aspect of humanity and care practice and should not be neglected. According to them, spiritual well-being needs to be focused on at the beginning of life and the end of life. Studies have reported

that women view pregnancy and childbirth as a spiritual experience that brings them closer to God (Abdollahpour & Khosravi, 2018; Chehrazi et al., 2021; Mohamadirizi et al., 2018). In this study, the level of spiritual well-being among pregnant women was high. Our findings were similar to those of other studies (Abdollahpour & Khosravi, 2018; Chehrazi et al., 2021; Durmuş et al., 2022), which reported the high spiritual well-being of pregnant women. In a study by Jesse et al. (2007), 47% of pregnant women stated that spirituality positively affected their pregnancy. Therefore, spiritual care during pregnancy might be a vital component of holistic health management in terms of coping with negative situations that might occur during pregnancy.

This study was conducted in Turkey, where people are mostly Muslim, and the level of religious attitudes of pregnant women assessed in the study matched those recorded in studies conducted with women from different religious and cultural backgrounds (Silva et al., 2010; Wilkinson & Callister, 2010). Piccinini et al. (2021) found that pregnant women in their study had a high level of religious affiliation. A study conducted in Brazil showed that most pregnant women had religious affiliations, and 60.8% of them followed the practices required by their religious beliefs (Silva, Ronzani, Furtado, Aliane, & Moreira-Almeida, 2010). Wilkinson and Callister (2010) showed that most women believed that God would aid them in the process of childbirth and could influence their outcomes of pregnancy and birth. Assessing the religious attitudes of women can help elucidate key information that might be used to provide culturally specific care.

Prayer makes women feel relaxed under stressful situations such as childbirth (Bilgiç & Çıtak Bilgin, 2021). Religious interventions such as prayer therapy, listening to holy books, and religious conversations positively affect anxiety and depression levels and help pregnant women cope with childbirth (Jabbari et al., 2020; Aguilera-Martín et al., 2021). In this study, we found that the positive religious coping level of pregnant women was above average, whereas their harmful religious coping level was low. Some studies have reported that by performing religious activities, people feel peaceful and happy and have a sense of connection with an omnipotent power (Abdollahpour & Khosravi, 2018; Jabbari et al., 2020; Silva et al., 2010). Piccinini et al. (2021) reported that negative religious coping is less common in pregnant women. In a study that compared high-risk and low-risk pregnancies, Vitorino et al. (2012) found that negative coping was associated with depressive symptoms in the high-risk group. Similar results were reported in a study in which women experiencing their first pregnancy were evaluated along with their spouses (Lucero et al., 2013). Lucero et al. (2013) found that negative coping was associated with more depressive and anxious symptoms and lower levels of satisfaction among pregnant women. In contrast, positive religious coping was essential to cope with stress. The findings of that study suggested that pregnant women make religious practices a part of their daily lives for a healthy pregnancy and birth process.

Our results indicated that pregnant women with higher spiritual well-being, religious attitudes, and positive religious coping had lower fear of childbirth. However, when spiritual well-being was added to the model in the second stage of regression analysis, the model explained 58% of the variance in fear of childbirth. Religious attitudes and positive religious cognition were added to the third and fourth models, respectively, but they did not significantly affect the fear of childbirth. Mohamadirizi et al. (2018) empirically evaluated the effect of religious and spiritual instruction on the fear of childbirth and found that the fear of childbirth significantly decreased in pregnant women who received religious and spiritual education. The findings of that study suggested that spiritual well-being strongly influences the fear of childbirth, and an increase in spiritual well-being in pregnant women can reduce the fear of childbirth. In the country where the study was conducted, religion and spirituality were not included in prenatal education within the scope of prenatal care services. However, considering the relationship between this variable and the fear of childbirth, spiritual well-being should be included in training programs, considering that women who fear childbirth are five times more likely to have a negative birth experience (Elvander et al., 2013). To increase the spiritual well-being of pregnant women, health professionals who provide prenatal care services should consider the level of religious attitudes of pregnant women and provide care by promoting positive religious coping mechanisms, which might reduce the fear of childbirth in some pregnant women.

Limitations

This study had some limitations. The design of the study prevented us from determining causality. Thus, longitudinal studies need to be conducted in the future. Another limitation is that the findings are based on the self-reports of pregnant women. The large number of items in the questionnaire and scales used for collecting the data is another limitation. In this study, the effects of receiving prenatal education could not be evaluated, but this variable should be assessed in future studies.

Conclusion

The findings of this study might provide greater insights into the effect of spiritual and religious beliefs on the fear of childbirth in pregnant women. The results showed that pregnant women experienced moderate fear of childbirth and that some socio-demographic characteristics (employment status, income level, gestational week, and number of pregnancies) affected their fear of childbirth. Pregnant women with high levels of spiritual well-being, religious attitude, and positive religious coping experienced lower levels of fear of childbirth; spiritual well-being was found to be an important determinant of the fear of childbirth.

Understanding how spiritual well-being, religious attitudes, and religious coping affect the fear of childbirth in pregnant women can help in designing interventions that

can more effectively reduce their fear of childbirth. Such interventions can significantly affect the prenatal care (depressive and anxiety-related symptoms) of pregnant women. If health professionals can address the fear of childbirth early in pregnancy and are aware of the relationship among health, spirituality, and religion in pregnant women, they might be able to provide a better quality of care. However, more effective interventions need to be developed, evaluated, and implemented to reduce the fear of childbirth.

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Ethical approval. The study protocol was approved by the Non-Interventional Clinical Research Ethics Committee of the University (Date: 06.09.2022; Decision No: GO 22/765). The study followed the relevant guidelines and regulations of the Declaration of Helsinki. All participants provided written consent after being informed of the risks and benefits of the study. They were also informed that they could leave the study without providing a reason.

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Research Article

Nurses' Hospital Work: Exploring The Influence of Spiritual Levels on Care Behaviours and Life Satisfaction*

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Abstract

Spirituality is an important factor in increasing the quality of nursing care, achieving optimal health outcomes and increasing their own life satisfaction. This study was carried out to evaluate the effect of nurses' spirituality levels on their care behaviours and life satisfaction and raise awareness about the issue. This descriptive and cross-sectional study was conducted with nurses working in a hospital between March and June 2022. The sample of the study consisted of 462 nurses. The data were collected through an online questionnaire using the "Personal Information Form", the "Spirituality Scale", the "Caring Behaviours Scale" and the "Life Satisfaction Scale". Nurses' Spirituality Scale mean score was 22.32+5.62, and it was determined that their spirituality level was high. It was determined that the mean of Care Behaviors-24 was 5.10±0.22, that their care behavior perception was at a high level, and that their Life Satisfaction Scale mean score was 13.42±2.45 and that they had a moderate level of life satisfaction. In addition, a significant positive correlation was found between their spirituality level and quality of caring behaviour (p=0.001; r: 0.512), their spirituality level and life satisfaction (p=0.000; r:0.608), and their care behaviour and life satisfaction (p=0.001; r: 0.510). Nurses' care behaviors and life satisfaction were found to be effective factors on their spirituality levels.

Keywords:
Spirituality • Nurse • Care behaviors • Life satisfaction • Hospital • Turkey

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Holistic care is the most comprehensive and recognised approach in health service delivery. Accordingly, the individual is a whole with physical, mental, emotional, socio-cultural and spiritual aspects (McSherry & Jamieson, 2011; Ramezani et al., 2014; Tjale & Bruce, 2007). Holistic care is necessary to protect and improve the health of patients (Gore, 2013). During illness, the balance of individuals in many psychological, emotional and social areas is disturbed. Daily life activities are negatively affected. Holistic care helps patients regain their balance, cope with the disease and improve their quality of life by addressing their physical, emotional, social and spiritual needs (Bullington & Fagerberg, 2013; Selimen & Andsoy, 2011). It increases the satisfaction of patients in the treatment process and accelerates their recovery process. In this way, positive results occur in health care systems (Jasemi et al., 2017).

In holistic care, meeting spiritual needs is also essential for the preservation of health (Tjale & Bruce, 2007). Spirituality refers to an individual's efforts to understand and accept their relationship with themselves, others, their place in the world, and the meaning of life (Azarsa et al., 2015). Spirituality plays a holistic and unifying role in healthcare, assisting the patient in their healing process, accepting their condition if recovery is not possible, and adapting to life (Ruefer, 2014). Holistic care is also crucial in nursing practice and forms the foundation of nursing care (Filej & Kaucic, 2013). In order to provide healthcare services to individuals with a holistic approach, the spiritual dimension of healthcare professionals is highly significant in terms of the quality of care provided (Doğan, 2017).

Since its inception, the nursing profession has never been defined as "a profession that only provides physical care to individuals" (Hosseini et al., 2019). Nurses should approach patients with a holistic perspective, and spirituality holds an important place in this approach (Gore, 2013). Spirituality is a relative concept as it constitutes an abstract part of nursing care and influences religious and conscientious values (Ramezani et al., 2014). Florence Nightingale, who made significant contributions to the recognition of nursing as a profession, stated, "The spiritual needs are as important as the physical organs that make up the body for health," highlighting the significance of spirituality in the nursing profession and caregiving behaviors. Spiritual care is one of the vital and fundamental roles of nursing (Q'Brien et al., 2019). Spiritual care is a subjective concept that demonstrates the uniqueness of nursing care (ICN Code of Ethics for Nurses, 2012). While spiritual care is an integral part of nursing care, its provision can be influenced by the nurse's personal, cultural, and educational background (Van Leeuwen et al., 2006). Factors such as the nurse's individual belief system, perception of spiritual needs and care, willingness and sensitivity to the subject, and the environment and working conditions in which nurses are situated have been found to be influential in the nurse's provision of spiritual care (Ergül & Bayık, 2004; Harrad et al., 2019).

Within the scope of the holistic nursing approach, spiritual care should be implemented through the nursing process, including the identification of the individual's spiritual needs, planning appropriate interventions, implementing the planned interventions, and evaluating their outcomes (Filej & Kaucic, 2013; Ruefer, 2014; Uğurlu, 2014). However, nurses may encounter challenges in providing spiritual care. Factors such as unsuitable work environments for spiritual care, lack of time, inappropriate professional relationships, insufficient resources, hesitancy due to inadequate knowledge and information, and lack of motivation are reported as barriers in the process of providing spiritual care by nurses (Cura & Ateş, 2020; Filej & Kaucic, 2013; Harrad et al., 2019; Jasemi et al., 2017). In a study conducted by Blaber et al. (2015), it was found that nurses fell short in providing spiritual care and lacked adequate education in this area (Blaber et al., 2015). In a study conducted with nurses in Turkey, it was revealed that nurses had unstable and inadequate perceptions of spiritual care, and their educational level, length of work experience, and the department they worked in had a determining influence on spiritual care (Özbaşaran et al., 2011). However, it has been determined that when nurses are supported in areas such as time management, education, and knowledge deficiencies, they perform spiritual assessments and interventions more frequently (Blaber et al., 2015; Danacı et al., 2022; Erişen & Sivrikaya, 2017; Ruefer, 2014). Providing nurses with sufficient preparation and education in delivering spiritual care, recognizing the importance of spiritual care as an integral part of patients' treatment process, and being aware of the contribution of spiritual care to patients' overall well-being can help enhance nurses' spiritual competence and make them more effective in the care services provided to patients.

Everyone needs care at some point in their lives. Care is not just an action that individuals apply to themselves, but also an action that can be provided to another person in need (Ayaz Alkaya & Birimoğlu Okuyan, 2015). Caring for others requires attention, effort, and responsibility. In society, the task of providing care has been distributed to certain individuals or groups, giving rise to certain professional groups. Nursing is one of these professions. It is human-centered, and care is at the core of the nursing profession (Altıok et al., 2011; Dinç, 2010; Harrad et al., 2019). The purpose of nursing is to identify and address individuals' needs in all dimensions and provide care behaviors accordingly. Nursing care behaviors consist of the physical dimension involving knowledge and skills and the spiritual dimension involving emotions that shape these practices (Gül & Dinç, 2018). Nurses should ensure the effective delivery of spiritual care by integrating the importance of spirituality with their care experiences, considering flexibility and awareness. Nurses should establish open communication with patients to understand their spiritual needs and provide appropriate interventions to meet those needs (Johnston Taylor, 2013; Kazer & Wallace, 2013; Swinton & Pattison, 2010). As a result, it is reported that patients' hopes regarding life increase, and both patients and nurses experience an increased sense of life satisfaction (McBrien, 2010; Nardi & Rooda, 2011; Ruefer, 2014;).

Life satisfaction refers to the emotional responses an individual has towards their own life, their satisfaction with their life, and their psychological well-being. Life satisfaction is also considered a significant milestone of mental well-being and an element that helps individuals attain what they need (Assar Roudi et al., 2012; Kasapoğu & Yabanigül, 2018). Life satisfaction and spiritual care concepts are defined as important factors in coping with stressful and challenging situations, improving health, and facilitating communication and interaction, highlighting the importance of focusing on these concepts in the nursing profession (Carranza-Esteban et al., 2021; Moreia-Almeida et al., 2014; Sönmez & Yıldırım, 2017;).

This study was carried out to evaluate the effect of nurses' spirituality levels on their care behaviours and life satisfaction and raise awareness about the issue. No similar qualitative or quantitative study has been found on this subject. Therefore, it is believed that this study will contribute to the literatüre.

Method

Study Model

This study is descriptive and cross-sectional.

Participants

The population of the study consisted of 558 nurses working in the hospital. Since it was aimed to reach the entire universe, the sampling method was not used in this study. The sample of the study was consisted of 462 nurses who met the inclusion criteria and volunteered to participate in the study. 96 nurses could not be reached because 56 of the nurses did not accept to participate in the study and 40 nurses were on leave or on a report at the time of the research. Approximately 82.8% of the entire universe has been reached.Inclusion criteria were determined as being 18 years of age or older, working as a nurse for at least 6 months, using social media tools (WhatsApp and E-mail), having no communication problem and agreeing to work cooperatively and volunteering to participate in the study.

Measurement Tools

Personal information form. This form, prepared by the researchers in line with the literature (Doğan, 2017; Ramezani et al., 2014; Q'Brien et al., 2019), consists of 8 questions about age of the nurse, gender, educational level, marital status, working years, relationship between spirituality and nursing care.

Spirituality scale (ss). The SS was developed by Demirci and Ekşi in 2017 to assess spirituality (Demirci & Ekşi, 2017)**.** The scale is in a 5-point Likert type and includes

6 items and has a single sub-dimension. The scoring is as follows:1=Not suitable for me at all and 5=Completely suitable for me. The item-total score correlations of the scale ranged from 0.56 to 0.77. The test-retest reliability coefficient was 0.60, and the Cronbach alpha internal consistency coefficient was 0.88. In this study, the internal consistency coefficient of the scale was determined as 0.89.

Caring behaviours scale-24 (CBS-24). The CBS-24 was developed by Wu et al.,(Wu et al., 2006). The short form of the Caring Behaviours Scale-42 was developed by Wolf et al.(Wolf et al., 1994). Turkish validity and reliability study was conducted by Kurşun and Kanan (Kurşun & Kanan, 2012). The scale is in a 6-point Likert type and consists of 24 items and has 4 sub-dimensions (Assurance, Knowledge-Skill, Respect and Commitment). The score to be obtained from the scale and its sub-dimensions ranges from 1 to 6. Content validity index of the scale was found to be 95%. The test-retest reliability coefficient was 0.82, and the Cronbach alpha internal consistency coefficient was 0.96 in nurses. In this study, Cronbach Alpha coefficient of the scale was determined as 0.95.

Life satisfaction scale (lss). The LSS was developed by Diener et al. in 1985 (Diener et al., 1985). It was adapted into Turkish by Köker in 1991 (Köker, 1991). The original scale, which was in a seven-point likert type, was adapted to a five-point likert type by Dağlı and Baysal in 2016 (Dağlı & Baysal, 2016). The responses to be given to each item areas follows: 1 = not appropriate at all and 5 = very appropriate. The scale scores range from 5 to 25. A low score indicates low life satisfaction. Cronbach Alpha coefficient for internal consistent was found as 0.88 and test-retest reliability as 0.97. In this study, Cronbach Alpha coefficient of the scale was determined as 0.89.

Data Collection

The data of the study were collected among nurses working at "Zonguldak Bülent Ecevit University Health Practice and Research Hospital" between March and June 2022. Data collection tools were prepared via Google Forms and sent to nurses via corporate e-mail or WhatsApp through the nursing services directorate. Information about the study was provided to the nurses through the online questionnaire link. After obtaining the consent from the nurses who wanted to participate in the study, the questionnaire form was completed. It took an average of 10-15 minutes to fill out the questionnaires. To ensure the reliability of the data, forms were restricted so that only one response could be received from each Google Forms session.

Data Analysis

Statistical analysis of the data was performed using SPSS 22.0 program (IBM Corporation, Armonk, NY, USA). The conformity of the data to the normal distribution

was assessed with "Kolmogorov-Smirnov and Shapiro-Wilk tests". "Percentage, mean±SD, t-test, ANOVA, Kruskall Wallis H Test, Tukey test and Pearson Correlation Coefficient were used in data analysis". Multiple regression analysis was conducted to determine the effects of independent variables on dependent variables. $p < 0.05$ value was considered to be significant. In the calculation of the correlation strength, the ranges specified in the study of Gürbüz and Şahin were used as a reference (Gürbüz & Şahin, 2014).

Results

Considering the distribution of the descriptive characteristics of the nurses, it was found in the study that the mean age of the nurses was 33.71±7.36, 60.6% were female, 66.6% were married, 74.0 % had an undergraduate degree, 31.0% had been nurse for 0-5 years. In addition, 74.5% and 76.2% of the nurses stated that nursing care was related to spirituality and nurses' spirituality affected their caring behaviors, respectively (Table 1).

Table 1.
Distribution of the descriptive characteristics of the nurses

Variables	**n(%)**
Age (years) Mean±SD	33.71±7.36
Gender	
Female	280 (60.6)
Male	182 (39.4)
Marital status	
Married	308 (66.6)
Single	154 (33.4)
Education status	
Health vocational high school	30 (6.5)
Associate degree	27 (5.9)
Undergraduate	342 (74.0)
Graduate	63 (13.6)
Working years	
0-5 years	143 (31.0)
6-10 years	114 (24.7)
11-15 years	142 (30.7)
16-20 years	38 (8.2)
21 years and above	25 (5.4)
Nursing care is about spirituality	
Yes	344 (74.5)
No	43 (9.3)
Partly	75 (16.2)
Nurse's spirituality affects caring behaviors	
Yes	352 (76.2)
No	32 (6.9)
Partly	78 (16.9)

The comparison of the mean scores of the scales according to demographic features of the nurses was given in Table 2. A statistically significant difference was found between the SS scores of the nurses in terms of age (p=0.030), gender (p=0.038) and working year (p=0.021). It was determined that the SS score was higher in female nurses, older nurses and longer working years. The SS score of the nurses who thought that nursing care was related to spirituality (p=0.042) and spirituality affected the care behaviours (p=0.038) was found to be higher and significant (Table 2).

When the CBS-24 score was examined according to the demographic features of the nurses, no statistically significant difference was found in terms of age (p=0.128), gender (p=0.751), marital status (p=0.392), education level (p=0.301) and working year (p=0.101). However, the CBS-24 score of the nurses who thought that nursing care was related to spirituality (p=0.030) and the spirituality level affected the care behaviours (p=0.022) was determined to be higher and significant (Table 2).

When considering the LSS score of the nurses, there was a significant difference in terms of age (p=0.001), gender (p=0.027), marital status (p=0.036) and working year (p=0.015). It was determined that the scale score was determined to be higher in nurses who were female, younger, married and with shorter working years. The LSS score of the nurses who thought that nursing care was related to spirituality (p=0.016) and spirituality affected the caring behaviours (p=0.039) was found to behigher and significant (Table 2).

Table 2.
Mean scores of scales according to descriptive characteristics of the nurses

	SS	**CBS-24**	**LSS**
Age (Mean±SD)	r=0.219 **p=0.030**	r=0.173 p=0.128	r=-0.412 **p=0.001**
Gender	**Mean±SD**	**Mean±SD**	**Mean±SD**
Female	23.78±5.76	5.12±0.28	13.78±3.29
Male	20.92±3.21	5.08±7.21	12.92±3.73
Statistics	**t=2.476; p=0.038**	t=1.574; p=0.751	**t=2.142; p=0.027**
Marital status			
Married	21.30±3.59	5.11±0.67	13.67±3.45
Single	20.98±7.24	5.09±0.28	12.92±4.28
Statistics	t=-1.807; p=0.078	t=3.127; p=0.392	**t=1.172; p=0.036**
Education status			
Health vocational high school	20.58±4.21	5.09±0.20	13.51±2.57
Associate degree	20.51±3.93	5.10±0.18	13.22±4.04
Undergraduate	21.36±5.28	5.11±1.02	13.79±2.60
Graduate	20.19±4.25	5.11±0.22	13.28±1.12
Statistics	F=4.509; p=0.276	F=7.412; p=0.301	F=4.589; p=0.461
Working years			
0-5 years[1]	19.31±4.12	5.09±1.12	14.38±4.30
6-10 years[2]	20.07±4.28	5.11±0.01	13.51±2.21

Table 2.
Mean scores of scales according to descriptive characteristics of the nurses

	SS	**CBS-24**	**LSS**
11-15 years[3]	21.47±5.21	5.11±0.28	12.53±3.27
16-20 years[4]	20.92±4.47	5.09±0.22	12.42±3.46
21 years and above[5]	23.32±3.23	5.10±0.07	11.68±2.93
Statistics	F=6.422; **p=0.021 *Differences=5>1,2**	F=9.228; p=0.101	**F=6.582;p=0.015 *Differences=1>5**
Nursing care is about spirituality			
Yes[1]	22.75±6.02	5.13±0.70	13.92±5.62
No[2]	19.01±2.03	5.07±0.18	11.78±2.02
Partly[3]	21.98±4.31	5.11±0.12	12.67±2.34
Statistics	**X^2=121.56; p=0.042 *Differences=1>2**	**X^2=98.83; p=0.030 *Differences=1>2**	**X^2=109.62;p=0.016 *Differences=1>2**
Nurse's spirituality affects caring behaviors			
Yes[1]	22.92±3.49	5.13±0.58	14.01±4.03
No[2]	19.20±1.92	5.06±0.70	12.24±2.58
Partly[3]	21.64±3.57	5.11±2.90	13.46±3.28
Statistics	***X^2=120.26; p=0.038 *Differences=1>2***	**X^2=96.68; p=0.022 *Differences=1>2**	**X^2=108.73;p=0.039 *Differences=1>2**

t=Independent Sample t test**;F:** ANOVA**;X^2:**Kruskal Wallis H test***:**Tukey test
SS: Spirituality Scale**; CBS-24:**Caring Behaviours Scale-24**; LSS:** Life Satisfaction Scale

The mean scores that the nurses obtained from the scales used in the study were given in Table 3. Accordingly, the mean score of the SS of the nurses was found to be 22.32+5.62.The spirituality level of the nurses was determined to be high in the evaluation of the scale. The mean score of the CBS-24 of the nurses was found to be 5.10±0.22. The quality of caring behaviours of the nurses was found to be high according to the mean scores of the scale and its sub-dimensions. It was determined that the mean score of the LSS of the nurses was 13.42±2.45 and that they had a moderate level of life satisfaction (Table 3).

Table 3.
Mean scores of scales

	Mean±SD	**Min-Max**
SS	22.32±5.62	6-30
CBS-24	5.10±0.22	1-6
Assurance sub-dimension	5.20±0.20	2.0-6
Knowledge Skill sub-dimension	5.01±0.50	2.4.-6
Respect sub-dimension	5.10±0.70	2.9.-6
Commitment sub-dimension	5.10±0.60	3-6
LSS	13.42±2.45	5-25

SS: Spirituality Scale**; CBS-24:**Caring Behaviours Scale-24**; LSS:** Life Satisfaction Scale

In Table 4, the relationship between the scale scores of the spirituality, caring behaviours and life satisfaction of the nurses was examined. Accordingly, a moderate and positive significant correlation was found between the spirituality and caring

behaviours of the nurses (p=0.001; r: 0.512), their spirituality and life satisfaction (p=0.000; r: 0.608), and their caring behaviours and life satisfaction (p=0.001; r: 0.510).

Table 4.
The relationship between spirituality, caring behaviours and life satisfaction of the nurses

	Spirituality	Caring behaviours	Life satisfaction
Spirituality	1.00		
Caring behaviours	0.512* p=0.001	1.00	
Life satisfaction	0.608* p=0.000	0.510* p=0.001	1.00

Pearson Moments Multiplication Correlation*r: correlation coefficient

The regression table was prepared to explain the effect of the caring behaviours and life satisfaction of the nurses on their spirituality levels. Accordingly, the caring behaviours and life satisfaction of the nurses were found to be effective factors on their spirituality levels. While their perception of caring behaviours explained 41.0% (R^2 = 0.410) of their spiritual level,their perception of life satisfaction explained 41.8% (R^2 = 0.418) of their spiritual level (Table 5).

Table 5.
The regression table of the effect of the caring behaviours and life satisfaction of the nurses on their spirituality levels

Dependent variable	**Independent variable**	**β**	**t**	**p**	**R^2**	**Adj. R^2**	**F**
Model	Constant		5.874	0.01*	0.410	0.512	168.345
Spirituality	**Caring behaviours**	**0.396**	34.492	0.00*			
	Constant		7.142	0.01*	0.418	0.475	141.158
Spirituality	**Life satisfaction**	**0.366**	7.321	0.00*			

***p:0.00;R= Regression coefficient**

Discussion

The spirituality level of the nurses is considered as an important component in the holistic evaluation and in the care of patients (Mamier et al., 2019). Global studies recommend that nurses be supported in terms of spirituality and spiritual care, and more research be carried out on the issue (Musa, 2017; Ødbehr et al., 2015). This study was conducted to evaluate the effect of nurses' spirituality on their care behaviours and life satisfaction. In this section, the results of the study were discussed with the relevant literature.

It was determined in this study that the mean score of the SS of the nurses was 22.32±5.62, and they gave importance to the issue of spirituality. In addition, it was found that the older the nurses grew, the higher their spirituality levels became. The spirituality levels of nurses were determined to be higher and more significant among nurses who were female and thought that nursing care was related to spirituality and spirituality affected their care

behaviors. In the thesis study of Dündar (2021), in which the spirituality scale we used was used in our study, which examined the effect of nurses' spirituality levels on spiritual care, it was found that there was a significant relationship between nurses' spirituality levels and their ages. In addition, in the same study, it was determined that the spirituality scale scores of female nurses were higher than male nurses, and the spirituality scale scores of the nurses who thought that nursing care was related to spirituality were found to be higher and significant (Dündar & Aslan, 2021). In similar studies to our study, it was determined that the spirituality levels of female nurses, those who were older and those who had more working years were higher (Aslan et al., 2020; Chew et al., 2016; Cruz et al., 2017; Melhem et al., 2016). This result can be explained by the fact that female nurses who care for patients for a longer period of time give more importance to spirituality as they understand the feelings and emotions of the patients better. Unlike our study, in a study examining the spirituality levels of intensive care nurses, it was determined that younger nurses had high spirituality (Tambağ et al., 2018). As a result of a similar study conducted by Pour and Özvurmaz (2017), it was determined that younger nurses had higher levels of spirituality (Pour & Özvurmaz, 2017).Due to the difference between the results of the studies in the literature, more research should be done on this subject and the subject should be reconsidered. In this study, it was found that the marital status and education level of the nurses did not affect their spirituality levels.As a result of the study in which the spirituality levels of nurses were evaluated by Vogel & Schep–Akkerman (2018), it was determined that marital status and educational status did not affect the spirituality levels, similar to our study results (Vogel & Schep–Akkerman, 2018). Similar results were found in similar studies.(Çelik et al., 2014; Erenoğlu et al., 2019; Midilli et al., 2017;). The results of this study were compatible with the literature.

Care behaviors in nursing affect the quality of the health service provided. The care behavior of the nurse to the patient is among the most important factors affecting patient satisfaction (Kabaroğlu et al., 2013). In this study, when the scores of the nurses from the CBS-24 and its sub-dimensions were examined, it was determined that the quality of care perception levels were high. As a result of the study by Erenoğlu et al., in which the factors related to nursing care behaviors and care behaviors were examined, it was determined that the total score average of the CBS-24 was at a high level (5.38 ± 0.50), similar to our study result (Erenoğlu et al., 2019). In the study of Cerit and Coşkun (2018), it was determined that the total score of perception of nursing care quality was high (5.23±0.52). (Cerit & Coşkun, 2018). In similar studies, it was observed that the perception of nursing care quality was high (He et al., 2013;Kiliç & Öztunç, 2015; Papastavrou et al., 2012).These results show that nurses' perceptions of the quality of care are positive. While there was no relationship between their perception level of quality of care and their demographic features, it was determined that nurses who thought that nursing care was related to spirituality and the spirituality affected their care behaviours had a higher perception level of

quality of care. In a study similar to our study, it was determined that the socio-demographic characteristics of nurses did not affect their perceptions of nursing care quality (Erenoğlu et al., 2019). In Aydın's (2013) study, it was determined that the socio-demographic characteristics of nurses did not affect their perceptions of nursing care quality (Aydın, Gürkan, & Akgün, 2013). When similar literatures were examined, it was found that the nurses' perception levels of quality of care were high and that there was no relationship between their perception of quality of care and their demographic features (Rumeysa, 2021; Von Essen & Sjöden, 2003). These results are similar to our study results.

Life satisfaction is explained as the emotional response of the person to his/her life, the satisfaction with his/her life and the psychological well-being of the person (Jang & Oh, 2019).Nurses, who are in constant communication with healthy and sick people in the field of health, have to effectively manage their emotions and show emotional labor behavior during their service (Silva et al., 2017). Nurses can be exposed to many stress factors in their physical, mental and social working environments. Different aspects of work life can strongly affect nurses' well-being and life satisfaction (Piotrkowska et al., 2019). In this study, the LSS scores of the nurses were found to be 13.42±2.45, and it was determined that they had a moderate level of life satisfaction. As a result of Atasoy and Turan's study, in which they examined the levels of life satisfaction of nurses and midwives, the mean LSS total score of nurses was found to be moderate (Atasoy & Turan, 2019).In a study conducted with nurses in Poland, it was reported that nurses' life satisfaction was moderate. It was reported in the studies that the level of life satisfaction of the nurses was medium and high (Erdoğan & Erdem, 2017; Piotrkowska et al., 2019).This finding of the study is in parallel with the literature. In the study, the nurses who were female, married, younger and with fewer working years were found to have a better life satisfaction. In the literature review, life satisfaction of nurses was found to be moderate, which was similar to our study result (Jang & Oh, 2019; Piotrkowska et al., 2019), and the female nurses who were younger (Kanbur, 2018; Camcı, 2021), married (Karlsson et al., 2019; Piotrkowska et al., 2019), and with fewer working years (Mirfarhadi et al., 2013) were found to have a higher life satisfaction.

In this study, a positive and significant relationship between the spirituality levels of the nurses, the quality of care behavior and life satisfaction was found. When the studies were examined, it was determined that there was a positive and significant relationship between the spirituality levels of nurses, their care behaviours (Azarsa at al., 2015; Mamier et al., 2019;), and life satisfaction (Joshanloo and Daemi, 2014; Plouffe &Tremblay, 2017; Vang et al., 2019). In line with these results, the spirituality level of the nurses can be considered an effective factor on their care behaviours and life satisfaction. Similar studies support our results (Assar Roudi et al., 2012; Chiang et al., 2016; Taylor et al., 2017).

It was determined in this study that the spirituality level of nurses and their perception level of quality of care were high, and their life satisfaction was moderate.

In addition, a positive and significant relationship was found between the level of spirituality, the perception of quality of care and the life satisfaction of the nurses. Nurses should consider spiritual care while providing care to patients in accordance with a holistic approach, and they should also take into the spiritual needs of patients into their considerations in their nursing care. In order for the nurses to ensure the spiritual care, they should have sufficient knowledge about spirituality and spiritual care and raise their level of spirituality. Training programs for nurses on spirituality and spiritual care should be officially planned. It is of great importance to raise awareness about spirituality and spiritual care for both the patients and nurses.

As a result, it is very important for the patients and their families to address the spiritual dimension of nursing care and to draw nurses' attention to this issue. It is very important for nurses to be aware of the spiritual needs of patients and to be able to provide supportive spiritual care without being affected by their own religious or spiritual thoughts in terms of holistic health care. For this reason, it is necessary for nurses to approach their patients holistically and to provide nursing care without ignoring the spiritual dimension. It is recommended that further research that evaluates the effects of factors affecting the spirituality levels of the nurses on their care behaviors and life satisfaction is recommended to be conducted in order to contribute to the national and international nursing literature. The study was conducted only with the nurses working in a health practice and research hospital in the north-west of Turkey, and thus, the results cannot be generalised to the entire society.

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Ethical approval. Throughout the research, the Helsinki Declaration of Human Rights was adhered to. Ethical approval was obtained from the Zonguldak Bülent Ecevit University Human Researches Ethics Commission (Date: 28.01.2022/32). Institutional permission was obtained from the Zonguldak Bülent Ecevit University Health Practice and Research Center (Date: 01.03.2022–E-97636971-300-154419). Informed consent was obtained from all individual participants included in the study.

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Research Article

Therapeutic Communication Skills and Spiritual Care Competencies of Nursing Students*

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Abstract

The spiritual care given by the nurses has an important place in the recovery of the illness and the development of the health of the individuals. To provide appropriate spiritual care, nurses must have good therapeutic communication skills. The educational processes of nursing students are extremely important in gaining knowledge about spiritual care and therapeutic communication. This research is a cross-sectional, descriptive/correlational study conducted to examine the relationship between nursing students' therapeutic communication skills and spiritual care competencies. The study sample consisted of nursing department students of a state university (n=468). The data were collected with the introductory information form, Therapeutic Communication Skills Scale for Nursing Students, and the Turkish version of the Spiritual Care Competence Scale. As a result of our research, it has been determined that nursing students have average level non-therapeutic and high-level therapeutic communication skills, and their spiritual care competence is above average. In addition, it was determined that there was a negative relationship between students' non-therapeutic communication skills and spiritual care competencies and a positive relationship between therapeutic communication skills and spiritual care competencies. It is recommended to include a course on spiritual care and therapeutic communication skills in the curriculum of the nursing department, with case studies and further research on the subject.

Keywords:
Spiritual care • Therapeutic Communication Skills • Nursing care • Nursing students • Morale

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Communication with the patient is the crowning touch of the entire nursing care. Nurses communicate with patients through diverse methods; the most important is therapeutic communication (Mohammed & Yas, 2016). Therapeutic communication in nursing was defined by Florence Nightingale in the 1860s as "the alphabet of care by which nurses can interpret each change in the patient's condition without saying a single word (Abdolrahimi et al. 2017-a). Therapeutic communication forms the basis of nursing care, including the necessary skills for the patient's psychological, emotional, cognitive, social, behavioral, and spiritual development (Crotty & Doody, 2015).

Therapeutic communication establishes a stronger bond between the patient and the nurse by building trust and encouraging patient-centered care (Umeron, 2017). Nursing students and nurses must communicate effectively to evaluate the health status of the patients they care for and provide good nursing care. Using therapeutic communication skills contributes to the benefit of the patient and the nursing student. In addition, the interactions established between the student and the patient affect the students' professional and personal development (Abdolrahimi et al., 2017-b); Abdolrahimi et al., 2018; Miles, 2014).

Spiritual care is a socially qualified, human-based personal care service that aims to strengthen the morale and development of individuals in need of care, to ensure that they are at peace with their world, and to stand by the individual in crises (Karaman & Macit, 2019). Spiritual care is a type of care that makes patients feel stronger, reduces pain and anxiety, and provides psychological comfort (Yılmaz, 2011). Furthermore, holistic nursing care, which includes the spiritual care needs of healthy/sick individuals, emerges as an expectation from modern health services, and meeting the spiritual care needs of individuals brings forth a positive approach and interest in the nursing profession (Timmins & Neill, 2013). Nursing aims to provide holistic care of patients and achieve optimal patient outcomes. In holistic care, physical care, spiritual care and spiritual care are included without separation from each other. Spirituality allows individuals to find hope and meaning when they feel most vulnerable. Nurses must conduct a spiritual assessment, identify spiritual distress, and provide spiritual care support for patients (Huehn et al., 2019).

Spiritual care, being with individuals, supporting and counseling them in crises or during rapid emotional changes due to the negative life conditions they experience, and giving meaning to their lives and experiences to guide them (Akay & Şahin, 2018). Spiritual care is personal care that takes its basis from unconditional love, enables the individual to realize his unique value, and is created by the nurse with the influence of his spiritual and cultural beliefs, feelings and thoughts (Erişen & Sivrikaya, 2017; Wittenberg et al., 2017). Spiritual care increases the individual's coping status and quality of life in crises, is an indispensable part of nursing care, and every nurse should provide individualized spiritual care (Uğurlu, 2014).

In addition to the physical, emotional and social needs of individuals experiencing a chronic illness, who are in a crisis or who experience any negativity, their spiritual needs also increase (İsmailoğlu et al., 2019). Spiritual needs are fundamental to all human beings and consist of concepts such as hope, trust, love, righteousness, prayer and worship. Studies have shown that spiritual care positively affects the healing process and the individual's quality of life. In addition, it has been found that providing spiritual care increases people's coping power, patient satisfaction, ability to find meaning in their illness, and job satisfaction of nurses (Bulut & Meral, 2019; Ercanet et al., 2017; Gönenç et al., 2016; Huehn et al., 2019; Panczyk et al., 2021; Wittenberg et al., 2017).

Nurses must have good communication skills to meet patients' wishes and needs and provide effective spiritual care (Panczyk et al., 2021). Nursing interventions suitable for the spiritual needs of the individual are to support the patient to respect and express his ideas, to listen to the patient sincerely, to use therapeutic communication techniques when communicating with the patient, to use therapeutic touch as appropriate, to respect their prayers and worship, to include other members of the family in spiritual care. In addition, spiritual care practices for nurses include respecting the items that are important to the patients, helping the patients with their prayers, smiling, listening to music, answering their questions, being sensitive to painful interventions, reading books, relieving the patient's concerns, aromatherapy, massage, counseling practices (Boztilki & Ardıç, 2017; Bulut & Meral, 2019; Wittenberg et al., 2017).

When the studies conducted with spiritual care were examined, it was determined that the patients did not receive enough spiritual care from the nurses and the health team did not have enough knowledge about spiritual care (Aktaş, 2019; Kavak et al., 2014; Özer et al., 2019). Besides, in other studies, it has been revealed that nurses do not know what spirituality and spiritual care mean, they do not receive adequate training on spiritual care with their students, and there are problems in the delivery of spiritual care due to the scarcity of literature on how to give spiritual care (Aksoy, 2015; Bulut & Meral, 2019). Although spiritual care is so important for the nursing profession, there are difficulties in its implementation due to a lack of knowledge, and it is thought that this need will be met by integrating the subject of spiritual care into the nursing curriculum (Dimoula et al., 2019; Han et al., 2023; Zehtab & Adib-Hajbaghery, 2014). In addition, for nurses to provide adequate and effective spiritual care to patients, the topics of spiritual care and identification of spiritual distress should be included in the nursing curriculum (Huehn et al., 2019).

In order to understand the spiritual care needs of the patient more easily, nurses need to communicate with patients accurately and therapeutically. In a study (Adams et al., 2017), most nurses in the intensive care unit stated that communicating with patients and their families is vital in their nursing role, and they need communication-related

training to remove communication barriers with patients and their families. Nursing students who cannot receive adequate therapeutic communication and spiritual care training during their undergraduate education cannot be trained enough in these fields. It is of great importance in terms of patient health that the spiritual care of the nurses is at a level that can meet the expectations of the person and that it is expressed in an appropriate way of communication. The educational experience is very important for nurses, who have a great role in patient care, to provide appropriate spiritual care and use therapeutic communication in the care given. For this reason, it is seen as a very important necessity for nursing students to learn spiritual care and therapeutic communication very well during their studentship processes (Aksoy, 2015; Aktaş, 2019; Çetintaş et al., 2021; Han et al., 2023; Kavak et al., 2014; İsmailoğlu et al., 2019; Özer et al., 2019; Prentis et al., 2014).

Our study has originality because no other study has been reached that examines the effect of nursing students' therapeutic communication skill levels on their spiritual care competencies. It is thought that the high therapeutic communication skill levels of nursing students will be more successful in determining the spiritual care needs of the patients and planning and implementing the care to be provided. The educational processes of nursing students are extremely important in gaining knowledge about spiritual care and therapeutic communication. This study aimed to examine the relationship between nursing students' therapeutic communication skills and spiritual care competencies. In this study, answers to the following research questions were sought.

(i). What are research nursing students' therapeutic communication skill levels?

(ii). What are research nursing students on therapeutic communication skill levels?

(iii). What are the spiritual care competencies of nursing students?

(iiii). Is there a relationship between nursing students' therapeutic communication skills and spiritual care competencies?

Method

Study Group

This research is a cross-sectional, descriptive/relational study. The purpose of descriptive research designs is to provide new information, reveal the meaning of the subject under study, and describe the situation or event under study. Relationship-seeking designs are used to explain, describe or examine the relationships between variables. On the other hand, cross-sectional research designs aim to explain and

describe the situation at a certain time or examine the relationships between events (Erdoğan et al., 2020). The study group of this research consisted of 832 students studying in the nursing department of a health sciences faculty of a state university in the Spring Semester of the 2020-2021 academic year. According to the sampling determination formula used in cases where the size of the sampling universe is known (Akbulut, 2021), it was found that at least 263 participants were needed once the calculation was made, and the students who agreed to participate in the research and filled out the data collection forms formed the sample of the study (n=468). The average age of the students participating in the research is 21.29±2.45; 25.0% are 21 years old, 62.18% are women, and 26.92% are fourth-grade students.

Data Collection

Data collection processes were carried out digitally between 25.05.2021 and 10.06.2021 due to the COVID-19 Pandemic, and the questionnaires were uploaded to the "Google Forms" by the researcher and collected on the internet by sending the relevant link to the mobile phones of the students.

Measurement Tools

The introductory information form. It was prepared by researchers in line with the literature (Acar, 2019; Es, 2018; Irmak, 2018; Karaman, 2019) and consisted of 19 questions. These questions include demographic characteristics of students such as age, gender, and high school they graduated from; it questions students' communication skills, therapeutic non-therapeutic communication concepts, thoughts related to the concept of spiritual care, and their education in therapeutic communication and spiritual care.

Therapeutic communication skills scale for nursing students (TCSSNS). TCSSNS was developed by Karaca et al. (019) and consists of examples of therapeutic (effective/beneficial to the patient) and non-therapeutic (ineffective/non-patient) communication skills that nursing students have learned in their educational life and used during their clinical practice. The scale is a 7-point Likert scale (1-Never, 4-Sometimes, 7-Always), with no reverse-coded questions in the scale. The first sub-dimension of the scale consists of 7 items, the second sub-dimension consists of 6 items, the third sub-dimension consists of 3 items and the scale consists of 16 items. Therefore, the maximum score obtained from the scale is 112, and the minimum score is 16. There is no cutoff score in the scale, and evaluation is not made using the scale's total score. Instead, as the score obtained from the sub-dimensions of the scale increases, an evaluation is made, which means that the students use the skills in that dimension more efficiently. As a result of the reliability analysis applied, the Cronbach's Alpha value of the TCSSNS was 0.77, the Cronbach's Alpha value of non-

therapeutic Communication Skills" sub-dimension was 0.82, the Cronbach's Alpha value of the "Therapeutic Communication Skills I" sub-dimension was 0.79, and the Cronbach's Alpha value of the "Therapeutic Communication Skills II" sub-dimension was 0.60" (Karaca et al., 2019). In our study, Cronbach's Alpha value of the TCSSNS was 0.88, Cronbach's Alpha value of the Non-therapeutic Communication Skills" sub-dimension was 0.86, Cronbach's Alpha value of "Therapeutic Communication Skills I" sub-dimension was 0.94, and Cronbach's Alpha value of "Therapeutic Communication Skills II" sub-dimension was 0.75.

Turkish version of the spiritual care competence scale (SCCS-T). The SCCS was developed by Leeuwen et al. (2009). The Turkish validity and reliability study of the SCCS-T was conducted by Dağhan et al. (2019). Three realms of nursing competency related to "evaluation and implementation of spiritual care (items 1-6)", "professionalism in spiritual care and patient counseling (items 7-21)", and "patient's attitude towards spirituality and communication (items 22-27)" which add up to a total of 27 items. The scale is a five-point Likert-type scale; there are no reverse-coded questions. The lowest score that can be obtained from the scale is 27, and the highest score is 135. A high score indicates that there is nursing competence related to spiritual care. "Factor loadings for the three-factor structures of the SCCS-T according to confirmatory factor loadings ranged between .436 and .895. Factor loadings of items in the first subscale" "evaluation and implementation of spiritual care," varied between .64 and .80; in the second subscale, "professionalism in spiritual care and patient counseling," they varied between .44 and .86, and in the third subscale" patient's attitude towards spirituality and communication," they varied between .83 and .90. The first, second, and third factors were found to be "60.51%, 10.19%, and 4.47% of the total variance of SCCS-T", respectively. The Cronbach's Alpha value of the scale was found to be 0.97 (Dağhan et al., 2019). In our study, the Cronbach's Alpha value of the scale was 0.98.

Statistical analysis

IBM SPSS Statistics 23 (SPSS Inc., Chicago, IL, USA) package program was used to evaluate the data. In addition to descriptive statistical methods (arithmetic mean, standard deviation), comparisons between groups were made with Kruskal Wallis, Mann Whitney U tests and Spearman Correlation analysis, and non-parametric Bonferroni analysis was used to determine between which groups there was a significant difference between the groups. As a result of the statistical analysis, the normality distribution of the data was examined with the Kolmogorov-Smirnov test (Öncü Öner & Can, 2018). It was observed that the data did not demonstrate normal distribution. Therefore, the results were evaluated at the 95% confidence interval and the significance level of $p<0.05$.

Ethics

To conduct the research, ethics committee approval (date: 02.04.2021, number: 0027-50) from the health sciences ethics committee of a state university which is permitted to use the scales from the responsible authors of the scales used in the research and official permission from the institution where the research was conducted were obtained. The students who will participate were informed about the research with the "Informed Consent Form," and the individuals who accepted were included in the research. It was explained that participation in the research was completely voluntary, that it did not contain any name/sign indicating personal information/ identity, that they could leave the research whenever they wanted, and that the information obtained would be kept confidential. Each individual participating in the research was treated equally. Since the necessity of protecting individual rights was prioritized in the research, the Helsinki Declaration of Human Rights was complied with throughout the study period.

Results

In this study,55.13% of nursing students have good communication skills, 70.1% think that well-established communication with patients by nurses will have a significantly positive effect on the patient's treatment, 67.95% know the concepts of therapeutic non-therapeutic communication, 62% use therapeutic non-therapeutic communication, 82.48% of them did not take any course about spiritual care, 68.2% of them did not feel competent in providing spiritual care, 45.73% of them provided spiritual care on an occasional basis, 96.79% of them stated that it is necessary to provide spiritual care to the individual as a nurse and 98.50% of them stated that spiritual care is needed for the sake of the recovery of patients.

Nursing Students' total mean score of the TCSSNS is determined as (71.93±26.05) The Non-therapeutic Communication Skills Sub-Dimension mean score is determined as (26.81±9.38), the Therapeutic Communication Skills I Sub-Dimension mean score is determined as (28.62±6.84), and Therapeutic Communication Skills II Sub-Dimension mean score is determined as (16.53±3.6). Students' total mean score on the SCCS-T is (93.63±25.64), the total mean score for the Evaluation and Implementation of Spiritual Care Sub-Field is (20.34±6.24), the total mean score for Professionalism in Spiritual Care and Patient Counseling Sub-Field is (50.55±15.30), and the total mean score of Patient's Attitude Towards Spirituality and Communication Sub-Field is (22.74± 7.92), (Table 1).

Table 1.
Examination of the distribution of the mean scores of the TCSSNS and the SCCS-T and their sub-dimensions (n=468)

Scale Score Averages	Mean	SD	Cronbach Alpha
TCSSNS Total Score	71.93	26.05	0.88
Sub-Dimensions			
NCS[a]	26.81	9.38	0.86
TCS I[b]	28.62	6.84	0.94
TCS II[c]	16.53	3.60	0.75
SCCS-T Total Score	93.63	25.64	0.98
Sub-Fields			
EISC[d]	20.34	6.24	0.95
PSCPC[e]	50.55	15.30	0.98
PATSC[f]	22.74	7.92	0.97

Note.Non-therapeuticrapeutic Communication Skills, [b]TCS I: Therapeutic Communication Skills I, [c]TCS II: Therapeutic Communication Skills II, [d]EISC: Evaluation and Implementation of Spiritual Care, [e]PSCPC: Professionalism in Spiritual Care and Patient Counseling, [f]PATSC: Patient's Attitude Towards Spirituality and Communication.

When the research findings are examined in terms of the sub-dimensions of the TCSSNS, the men (4.31±.09), first-year students (4.15±.11), the individuals who do not know the concept of thernon-therapeuticrapeutic communication (4.20±.09) and the individuals who do not take courses on thernon-therapeuticerapeutic communication (3.96±, non-therapeuticerapeutic Communication Skills Sub-Dimension average score was higher than the other students.

The individuals who think that their thoughts about communication skills are very good (5.07±1.08), the individuals who state that nurses' good communication with patients affects the treatment of the patient "very well" (4.83±1.17), the individuals who think that spiritual care affects the recovery of patients (4.78±.05) and the individuals who stated they "always" provide spiritual care (6.14±.21) was determined to be higher than the other nursing students in terms of the average score of the Therapeutic Communication Skills I Sub-Dimension.

Women (5.60±.07), fourth-grade students (5.76±.08), individuals who know the concepts of the-therapeutic therapeutic communication (5.64±.06), individuals who think that they have very good insights about communication skills (5.66±1.11), the individuals who think nurses good communication with patients affects the treatment of the patient "very well" (5.61±1.21), those who, as nurses, answer "it is necessary to provide spiritual care to the individual/patient" (5.52±.05). Those who state that they "always" provide spiritual care (6.76±.15) was determined to be higher than the other nursing students in terms of the average score of the Therapeutic Communication Skills II Sub-Dimension.

Moreover, once the results of the students' SCCS-T total mean scores were evaluated, it was found that women (3.59±.05), individuals who knew the concepts of thnon-therapeutictherapeutic communication (3.56±.05), individuals who took

courses on non-therapeutic-therapeutic communication (3.61±.07), nontherapeutic-therapeutic communication individuals who stated that they "always" use theirnon-therapeuticon-therapeutic communication skills (4.34±.13) and individuals who "always" provide spiritual care (4.21±.41) and individuals who answered "it is necessary to provide spiritual care to the individual/patient" as a nurse (3.50±.04) was determined to be higher than the other students in terms of the total mean score of the SCCS-T. The obtained results are statistically significant ($p<0.05$) (Table 2).

Table 2.
Examination of the introductory characteristics of nursing students and the mean scores of the TCSSNS sub-dimensions and total score of the SCCS-T

Introductory characteristics	**TCSSNS Sub-Dimension NCS[a] M±SD Test and p**	**TCSSNS Sub-Dimension TCS I[b] M±SD Test and p**	**TCSSNS Sub-Dimension TCS II[c] M±SD Test and p**	**SCCS-T Total Score M±SD Test and p**
Gender				
Female	3.54±.07	4.73±.06	**5.60±.07**	**3.59±.05**
Male	**4.31±.09**	4.84±.08	5.35±.08	3.27±.08
	U=16723.000	U=24950.500	U=21695.500	U= 21593.000
	p=.000	p=.571	**p=.004**	**p=.003**
Class				
1	**4.15±.11**	4.76±.11	5.19±.12	3.44±.09
2	3.90±.14	4.81±.11	5.38±.12	3.31±.10
3	3.87±.12	4.66±.10	5.69±.09	3.48±.09
4	3.41±.11	4.85±.09	**5.76±.08**	3.62±.08
	KW=22.451	KW=1.673	KW=11.999	KW=3.765
	p=.000	p=.643	**p=.007**	p=.288
Knowing therapeutic- non-therapeutic communication concepts				
Yes	3.66±.07	4.78±.06	**5.64±.06**	**3.56±.05**
No	**4.20±.09**	4.76±.09	5.23 ±.09	3.27±.08
	U=18071.500	U=22966.500	U=18687.000	U= 19341.500
	p=.000	p=.517	**p=.000**	**p=.001**
Learning situations related to non-therapeutic/non-therapeutic communication				
Yes	3.62±.10	4.80±.08	5.64±.08	**3.61±.07**
No	**3.96±.07**	4.75±.06	5.43±.07	3.38±.06
	U=21533.500	U=25551.500	U=23134.000	U= 22369.000
	p=.003	p=.855	p=.058	**p=.015**
Thoughts on communication skills				
Very good	3.98±1.20	**5.07±1.08**	**5.66±1.11**	3.37±1.22
Good	3.75±1.27	4.80±1.12	5.58±1.22	3.53±1.01
Middle	3.73±1.37	4.59±1.15	5.35±1.17	3.38±.92
Bad	3.27±1.33	4.34±1.46	4.72±1.39	3.59±.69
	KW=16.990	KW=10.272	KW=11.572	=6.474
	p=.063	**p=.036**	**p=.021**	p=.166
The effect of nurses' good communication with patients on the patient's treatment				
Very good	3.75±1.39	**4.83±1.17**	**5.61±1.21**	3.51±1.00
Good	3.98±1.20	4.64±1.07	5.26±1.18	3.37±1.04
Middle	4.51±1.06	4.30±.49	5.04±.62	3.27±.95
	KW=5.609	KW=7.287	KW=14.134	KW=2.315
	p=.061	**p=.026**	**p=.001**	p=.314

Table 2.
Examination of the introductory characteristics of nursing students and the mean scores of the TCSSNS sub-dimensions and total score of the SCCS-T

Introductory characteristics	TCSSNS Sub-Dimension NCS[a] M±SD Test and p	TCSSNS Sub-Dimension TCS I[b] M±SD Test and p	TCSSNS Sub-Dimension TCS II[c] M±SD Test and p	SCCS-T Total Score M±SD Test and p
The necessity of giving spiritual care to the individual/ patient as a nurse				
Yes	3.74±.06	4.79±.05	**5.52±.05**	**3.50±.04**
No	3.56±.31	4.14±.23	5.00±.29	2.61±.29
	U=12208.500	U=15216.000	U=13657.500	U=1717.500
	p=.061	p=.583	**p=.050**	**p=.001**
Whether spiritual care has an impact on the recovery of patients				
Yes	3.83±.06	**4.78±.05**	5.51±.05	**3.48±.04**
No	4.08±.35	4.42±.25	5.00±.54	2.49±.35
	U=2977.000	U=2119.500	U=2431.500	U=582.500
	p=.414	**p=.013**	p=.059	**p=.004**
Frequency of using spiritual care				
None	3.71±.09	4.64±.08	5.40±.09	3.34±.07
Now and again	3.81±.08	4.72±.07	5.45±.08	3.50±.06
Often	4.04±.17	5.10±.11	5.81±.12	3.63±.13
Always	4.08±.35	**6.14±.21**	**6.76±.15**	**4.21±.41**
	KW=11.604	KW=17.198	KW=16.460	KW=13.466
	p=.059	**p=.001**	**p=.001**	**p=.004**

Note. [a]NCS: Non-therapeutic Communication Skills, [b]TCS I: Therapeutic Communication Skills I, [c]TCS II: Therapeutic Communication Skills II. U= Mann Whitney U Test value, K.W. = Kruskal Wallis Test value.

According to the analysis results shown in Table 3, there is a negative correlation between the Non-Therapeutic Communication Skills Sub-Dimension score of the TCSSNS and all of the SCCS-T sub-domains and the total points of the SCCS-T. However, it was determined that there is a positive correlation between the Therapeutic Communication Skills I and II Sub-Dimensions score and all of the SCCS-T sub-domains and the total SCCS-T scores. Furthermore, these determined correlations were statistically significant ($p<0.05$).

Table 3.
Examination of the relationship between nursing students' TCSSNS and SCCS-T scores

TCSSNS and Sub-Dimensions	SCCS-T and Sub-Fields			
	EISC[d]	PSCPC[e]	PATSC[f]	SCCS-T Total Scores
NCS[a]	-.121**	-.078*	-.174**	-.122**
TCS I[b]	.107*	.164**	.091*	.162**
TCS II[c]	.200**	.260**	.240**	.279**
TCSSNS Total Scores	.018	.091*	-.015	.065

*Note. [a]NCS: Non-therapeutic Communication Skills, [b]TCS I: Therapeutic Communication Skills I, [c]TCS II: Therapeutic Communication Skills II, [d]EISC: Evaluation and Implementation of Spiritual Care, [e]PSCPC: Professionalism in Spiritual Care and Patient Counseling, [f]PATSC: Patient's Attitude Towards Spirituality and Communication. *p<0.05, **p<0.01*

Discussion

This study aimed to examine the relationship between nursing students' therapeutic communication skills and spiritual care competencies. The therapeutic/non-therapeutic communication skill levels and spiritual care competencies of nursing students were determined, and the relationship between therapeutic communication skills and spiritual care competencies was examined. The introductory information form, TCSSNS and SCCS-T scales were used for this.

According to this research, about half of the nursing students define their communication skills as "good," and more than half of them state that they know the concepts of therapeutic/non-therapeutic. Furthermore, it was revealed that they used non-therapeutic communication skills at an average level according to the TCSSNS, Non-Therapeutic Communication Skills Sub-Dimension and that they used high-level therapeutic communication skills according to the TCSSNS, Therapeutic Communication Skills I-II Sub-Dimension. In a study (Altundal et al., 2022), the level of non-therapeutic and therapeutic communication skills of nursing students is similar to our research results. Another study (Söğüt et al., 2018) determined that the communication skills level of nursing students was moderate. The results of the research are from our research, and it is thought that students use therapeutic communication skills more and non-therapeutic communication skills less.

Our study determined that more than half of the students did not feel competent in providing spiritual care; about half stated that they occasionally provided it. Almost all did not receive any training/course on spiritual care. Nevertheless, their spiritual care competence was above average according to the total score of the SCCS-T. According to a previously conducted study (Bulut & Meral, 2019), half of the nursing students did not know about spiritual care. They did not practice spiritual care during internships, and in a study (Wang et al., 2022), nursing students' spiritual care perceptions were determined as moderate. In another study (Aksoy, 2015), nursing students partially provided spiritual care; in another study (Çetintaş et al., 2021), nursing students' perceptions of spiritual care and spirituality were found to be at a desired level. Nevertheless, it has been determined that there are educational needs related to spiritual care. The results of the studies mentioned above and our research results are similar, and it is predicted that although the students' level of proficiency in spiritual care is at the desired level, the students do not feel sufficient to provide spiritual care to patients. They need theoretical and practical training related to spiritual care.

According to the research findings, men, first-grade students, individuals who do not know the concept of therapeutic/non-therapeutic communication individuals who did not take courses on therapeutic/non-therapeutic communication, individuals who think that their thoughts about communication skills are very good use their

non-therapeutic communication skills more compared to other students whereas women, fourth-grade students, individuals who know therapeutic/non-therapeutic communication concepts, individuals who think that their communication skills are very good, individuals who state that the nurses' good communication with the patients affects the patients' treatment "very well" use their therapeutic communication skills more compared to other students. A similar study conducted with nursing students (Altundal et al., 2022) revealed that men used non-therapeutic communication skills more than those who did not take communication courses, and fourth-year students used their therapeutic communication skills more. In another study (Tutuk et al., 2002), it was determined that students' communication skills improved as their classes advanced, and these results are similar to our research results. Regarding these results, it is contemplated that the therapeutic communication courses are given in the third or fourth grades in the nursing curriculum, and taking therapeutic communication courses enhances the therapeutic communication skills of the students.

According to our research results, women, individuals who know the concepts of therapeutic/non-therapeutic communication, individuals who take courses on therapeutic/non-therapeutic communication, individuals who state that they "always" use therapeutic/non-therapeutic communication skills and provide spiritual care, and individuals who state "it is necessary to provide spiritual care to the individual/patient" as a nurse were determined to be endowed with higher spiritual care competencies than other students. When we review the studies examining the relationships between spiritual care competency and gender, particularly in studies conducted with nurses, it was determined that women had higher spirituality score averages than men in one study (Okyay, 2008). In contrast, in another study (Uygur, 2016), gender did not affect spiritual care. In studies conducted with nursing students (Aksoy, 2015; Bulut & Meral, 2019), it was determined that the gender of the students did not affect spirituality and providing spiritual care. The results of some studies and our research results are similar, but there are certain studies in which the results are not similar to ours. It is contemplated that this difference may be due to personal and cultural variables.

When the relationship between the TCSSNS and the SCCS-T was examined, it was determined that there was a negative correlation between the Non-therapeutic Communication Skills Sub-Dimension score and all of the SCCS-T sub-domains and the total scores of the SCCS-T. According to this result, it is thought that the spiritual care competence of the students who use their non-therapeutic communication skills more is decreased. Non-therapeutic communication skills consist of communication barriers such as giving tenuous assurances, defending, undervaluing emotions, judging, giving advice, changing the subject, and warning. High non-therapeutic communication skills indicate high communication barriers with the individual/patient (Karaca et al., 2019). In a relationship where communication barriers are

high, the nurse may have difficulty in determining the spiritual care needs of the patient, may have problems in counseling in the field of spiritual care, and may be insufficient in the implementation and evaluation stages of spiritual care. Therefore, it is thought that using non-therapeutic communication skills more in nurse-patient communication will adversely affect the spiritual care competence of nursing students.

When another relationship between the TCSSNS and the SCCS-T was examined, it was determined that there was a positive correlation between the Therapeutic Communication Skills I and II Sub-Dimensions scores and all of the SCCS-T sub-domains and the total scores of the SCCS-T. According to this result, it is thought that the spiritual care competencies of the students who use their therapeutic communication skills will further increase. The Therapeutic Communication Skills I Sub-Dimension includes therapeutic communication skills such as conveying observations, verbalizing allusions, summarizing, reflecting, repeating and concentrating. In contrast, The Therapeutic Communication Skills II Sub-Dimension has therapeutic communication skills such as presenting one's presence, active listening, and asking questions (Karaca et al., 2019). In a study (Wang et al., 2022), it was determined that nursing students' spiritual care perceptions were positively correlated with spiritual well-being and empathy, and in another study (Panczyk et al., 2021), a positive relationship was found between nursing students' attitudes towards spiritual care and their communicative competence.

The literature was reviewed, but no previous study could examine the relationship between therapeutic communication skills and spiritual care. In spiritual care, nurses should have good therapeutic communication skills, establish confidence in the patient, and be encouraging (Aksoy, 2015; Köktürk Dalcalı, 2019). There are some important aspects in increasing the spiritual care competence of nurses, including nurses having high-level therapeutic communication skills, developing the care field, adopting an individual-oriented care approach, understanding the complex nature of spirituality, and increasing awareness on this subject (Irmak, 2018). Furthermore, nurses need to empathize with patients, listen to them effectively, and use therapeutic communication techniques to evaluate their spiritual aspects and reduce their suffering (Çetinkaya et al., 2004); nursing educators need to give importance to spiritual care education and give high-level developments related to spiritual care in the nursing education system in order to improve the spiritual care competencies of nursing students (Wang et al., 2022).

In addition, in a study conducted (Dimoula et al., 2019), it was determined that nursing students' knowledge about pain/symptom management, psychosocial and spiritual care is insufficient; in another study (Huehn et al., 2019) determined that nurses see the lack of education about spirituality and spiritual care as an obstacle to

meeting the spiritual needs of patients. In a study of healthcare lecturers (Prentis et al., 2014), it was found that 90% of educators thought it was appropriate to include the concept of spirituality in the curriculum. However, only 17% had spirituality integrated into their curriculum. A study (Han et al., 2023) revealed that the most important external factor affecting nurses' spiritual care is receiving training on spiritual care. Accordingly, it is extremely important that issues related to spiritual care are addressed during student life and included in the education curriculum (Han et al., 2023). In line with the results of the research and the literature on the subject, it is thought that it is of crucial importance for the health of the patients that the nurses communicate with the patients therapeutically so that the spiritual care that the nurses will provide to the patients is at a level that can meet the expectations of the person. For this reason, it is predicted that it is a very important requirement for nursing students to learn spiritual care and therapeutic communication well during their pupillage.

Conclusions and Suggestions. According to the results of this research, nursing students have average non-therapeutic communication skills and high-level therapeutic communication skills; their spiritual care competencies are above average, using non-therapeutic communication skills more hurts spiritual care competence, and not using therapeutic communication skills more has a positive effect on spiritual care competence. Therefore, according to the results of the research, it is recommended that therapeutic communication and spiritual care lessons should be included in the curriculum of the nursing department from the first year. Applying case studies on therapeutic communication and spiritual care should be practiced, more studies on spiritual care and therapeutic communication with nursing students, and interventional studies that increase students' skills and competencies should be applied.

Limitations of the Research. The limitations of this study are that it is a cross-sectional study, limited to the students participating in the research in a faculty and data collection forms. In addition, the fact that the data collection phase of the research was carried out in a digital environment due to distance education due to the COVID-19 Pandemic was accepted as another study limitation.

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Research Article

Methods Used in Spiritual Counseling and Guidance Services for Patients/Patients' Relatives in Turkey and Germany: A Qualitative Approach

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Abstract

This research focuses on Hospital Spiritual Counseling and Guidance (SCG) services in Germany and Turkey. The primary objective is to uncover the different methods of Muslim spiritual care used in patient interactions in hospitals in both countries through semi-structured interviews. The sample of hospital spiritual caregivers comprises individuals from various regions of Turkey, while the German sample mostly includes participants who graduated from the Mannheimer Institute. Ultimately, a total of 30 Muslim hospital spiritual caregivers, with 15 from Turkey and 15 from Germany, were interviewed using telephone and internet applications like Zoom. Thematic analysis was employed to comparatively examine the narratives of the participants. This research aims to uncover whether methodological differences can be expected between patients interacting with Hospital SCG providers in Turkey and those consulting with Hospital SCG providers in Germany. Based on the comparative findings, it is expected that Muslim Hospital SCG providers in both Germany and Turkey would employ similar approaches, with a specific emphasis on utilizing active listening during interactions with their clients. This study underscores the significance of active listening as a critical element in patient interactions, regardless of the geographical context. Consequently, Turkey and Germany share common aspects in the implementation of Muslim hospital SCG.

Keywords:
Religion • Spirituality • Spiritual Counseling And Guidance • Spiritual Care

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Introduction

This study focuses on Muslim Hospital Spiritual Counseling and Guidance (SCG) services, which is a field of practice that aims to assist individuals through psychological methods and techniques. Originating from the Western Christian tradition, this practice emerged to enable religious leaders to address public problems in a more scientific manner and has evolved into an effective psychological support service (Tan, 1992). Numerous studies have demonstrated the positive impact of religion on mental well-being (Dadfar et al., 2021). Research indicates that individuals in countries with a strong religious presence tend to be happier, suggesting that religion not only influences individual happiness but also has a social dimension and impact on people's lives (Okulicz-Kozaryn, 2010, p. 166).

Although SCG services are a relatively new practice in Turkey, they are found in hospitals, correctional facilities, and social institutions such as foster homes. Since health is not guaranteed, individuals may go through periods of illness. Therefore, the study focuses on exploring the role of religion and spirituality, which are known to impact the body and health. Some studies provide a general overview of the Hospital SCG service implemented in Turkey (Ertunç, 2021; Kurtoğlu, 2020). Notably, research has also focused on healthcare staff. Findings from these studies reveal that nurses possess a high perception of spirituality and are aware of patient's spiritual needs, but they lack the necessary resources to intervene (Çayır, 2021; İşbilen Esendir & Kaplan, 2018). At this point, SCG gains importance as a valuable resource in addressing these spiritual needs and supporting the well-being of both patients and healthcare providers.

It is important to highlight that there exists a research gap in the specific field of comparative analysis of Muslim hospital providers of SCG services from a methodological perspective. Therefore, this study aims to fill this gap by addressing this research area. The objective is to conduct a comparative examination of the Muslim Hospital SCG approach. For this purpose, Germany was chosen as it has an established practice of Hospital SCG, while Turkey was selected for comparison in terms of services provided to Muslims. The central research question revolves around whether the Western-originated SCG practice demonstrates a parallel implementation between the services offered to Muslims in Germany and Turkey. Identifying any differences is crucial for the effective development of Hospital SCG. The study primarily focuses on investigating the application methods of Hospital SCG among hospital personnel, patients, and their relatives, with a specific emphasis on Muslims in both Germany and Turkey.

Spirituality/Religion and Health

When examining the origin of the concept of spirituality, which is an important term in this study, it can be understood that the word spiritual refers to something that is grasped and known with the heart (soul) without the involvement of sensory organs.

It encompasses meanings related to essence, abstract, and non-material aspects, and it can express anything related to meaning, soul, and heart that is associated with spirituality or belief (Seyyar, 2015, p.13).

Spirituality is increasingly being utilized to represent an aspect of emotional, introspective, non-systematic, libertarian, personal, and subjective religious experiences. Conversely, religion, as highlighted in numerous Western studies, is often portrayed as a static set of rules (Hill & Pargament, 2003). This research adopts a unified definition encompassing religion, spirituality, and religiousness, and consistently builds upon this understanding throughout the study. According to this definition, religion provides a framework of rules and a path to be followed, while spirituality complements and enriches this framework. Spirituality, depicted as a unique picture, varies among individuals, leading to diverse forms of religiousness. Consequently, spirituality emerges as a dynamic structure shaped and molded by individual perceptions.

On the other hand, in exploring the relationship between spirituality and health, it is evident that health is defined by the World Health Organization (WHO) as not solely the absence of disease or infirmity, but rather as a state of complete physical, mental, and social well-being (World Health Organisation [WHO], 2022). Therefore, spirituality finds application in healthcare settings for providing comprehensive patient care. Numerous studies have shown that spiritual and religious practices, which are infrequently employed to alleviate tension and anxiety, prove to be among the most effective interventions. Religious practices are considered as particularly effective methods for regulating negative mental states (Dilmaç et al., 2016; Koenig & Larson, 2001).

Research indicates that religion/spirituality has a significant positive impact on various aspects of health and well-being. Studies have shown that it has beneficial effects on physical health (Gladding & Crockett, 2019), mental health (Tsuang et al., 2007), life purpose (Shiah et al., 2015), depression (Koenig, 2010), and overall well-being (Murray et al., 2004; Ravishankar & Bernstein, 2014).

Religion has been observed to provide essential support to individuals during serious surgical procedures, helping them navigate the process more positively. Additionally, in the context of diseases like cancer, study has demonstrated that religion serves as a positive coping mechanism for dealing with the stress caused by the illness (Ng et al., 2017).

For Muslim clients, Islamic therapy is particularly effective in treating grief, depression, and anxiety when combined with practices such as prayer and recitation of the Qur'an (Uyun et al., 2019). In a study conducted in Turkey with elderly individuals without chronic illnesses, increasing spirituality and spiritual care were found to lead to an improvement in their quality of life (Doğan, 2018). These findings highlight the significant role of religion and spirituality in promoting overall health and well-being across various contexts and populations.

Hospital SCG

Various definitions exist regarding Hospital SCG. When examining the literature, different disciplines offer distinct understandings of what spiritual care entails and encompasses. For example, Ağılkaya Şahin (2014, p. 3) defines Hospital SCG as a service area that aims to assist individuals in need of guidance, addressing not only their religious concerns but also worldly issues, through the answers offered by their religious beliefs. On the other hand, Ok et al. (2019, p. 39) define Hospital SCG as a spiritual service intervention conducted by a person who has received spiritual care education and completed clinical internships, aiming to alleviate existential and spiritual-based psychological distress that patients and their relatives may experience at different stages of the health process, based on their desires.

The common aspect in all these definitions is that Hospital SCG is tailored to respond to the needs of the person seeking help. These needs can be of a religious nature or simply the need for a conversation. Following a diagnosis of life-altering diseases like cancer, patients can experience fear, anxiety, depression, and hopelessness, which significantly impact their lives and can elevate their spiritual needs. Moreover, hospitalization may lead to feelings of loneliness and contribute to the emergence of a spiritual crisis (Rassouli & Majd, 2015). As a result, religious services in hospitals are recognized as a universal patient right by the WHO. Understanding and addressing the spiritual dimensions of patients' experiences is a crucial aspect of providing holistic and comprehensive healthcare.

Another significant aspect is the sense of sinfulness experienced by patients. This belief is widely prevalent across cultures, where illness is often viewed as a consequence of violating moral or religious rules. In other words, the illness can be perceived as a result of sin. In this context, religion can play a positive role in transforming an individual's sense of sinfulness into a more positive and redemptive feeling (Woods & Ironson, 1999).

As this study's findings will also reveal, as patients approach death, they may experience regret for negative actions they perceive as sinful and seek a path to redemption. At this juncture, a spiritual caregiver can offer comfort to a patient facing such a dilemma and help alleviate the sense of sinfulness, enabling the individual to adopt a more positive outlook on life.

Hospital SCG in Turkey

Hospital SCG in Turkey began in 2015 through a protocol signed between the Presidency of Religious Affairs (Diyanet İşleri Başkanlığı) and the Ministry of Health. The number of personnel involved in the service initially started with 15-20 individuals and reached 198 by the year 2021. This service is now provided in a total

of 146 healthcare facilities, including 143 hospitals affiliated with the Ministry of Health and 3 university hospitals, located in 74 provinces. In 2021, a total of 120,298 patients, their families, and healthcare personnel requested spiritual care services, and all these requests were fulfilled (Diyanet İşleri Başkanlığı [DIB], 2021, p. 241).

According to the professional definition published in the Official Journal dated October 25, 2019, SCG is defined as a counseling service that aims to assist clients in comprehending the influence of their belief systems on their lives. This approach employs a holistic perspective, combining modern counseling techniques with religious and spiritual methods to address the issues related to religion or spirituality that clients may encounter. The primary objective of SCG is to help clients achieve their goals regarding the identified problem through counseling (Official Journal, 2019).

SCG also plays an active role during disaster times. For example, during the pandemic period in which the study was conducted, SCG services were provided through 157 personnel in a total of 125 healthcare facilities, including 122 under the Ministry of Health and 3 university hospitals, spanning across 46 provinces designated by the Ministry of Health. In response to the pandemic, SCG services were offered to patients, their families, and hospital staff who may have been affected by COVID-19 or experienced exhaustion due to heavy workloads (Din Hizmetleri Raporu [DHR], 2020, p. 262). The inclusion of SCG during such critical times showcases its importance in addressing the spiritual and emotional needs of individuals and healthcare professionals amidst challenging circumstances.

Hospital SCG Services in Germany

It's important to note that in Germany, the term *pastoral care*, also known as *Seelsorge*, predominantly conveys the concept of religion-based support rather than the term *spiritual care*. In this context, within this work, both spiritual care and pastoral care refer to the specialized service provided in various healthcare settings to address the spiritual and emotional needs of patients, their families, and hospital staff.

Accordingly, within hospitals and correctional facilities, those providing spiritual care are predominantly associated with Christian denominations. The representation of Muslim caregivers is limited. Unlike in Christian congregations, Muslim tradition doesn't have a direct equivalent of the spiritual care role. Typically, within Muslim families, the social aspects of spiritual care are handled. Family members attend to the sick individual in hospitals, providing support. However, the traditional communal living of Muslim families is facing challenges today. Migration, educational pursuits, and work opportunities are causing families to separate. Specialized hospitals are often located far from their residences (Ateş, 2019; Thierfelder, 2017).

Consequently, Germany has a substantial Muslim population of approximately 5.3 to 5.6 million individuals. This has prompted the initiation of several Muslim SCG projects, especially within hospitals, to address the significant demand. A study has identified 45 hospitals, 18 emergency departments, 45 correctional facilities, 3 helplines, and 2 psychiatric facilities as SCG projects in Germany (Şahinöz, 2018). It is important to note that these numbers represent the count of projects themselves. SCG initiatives are most prominently implemented in hospitals, emergency departments, and correctional facilities. However, it should be noted that the distribution of SCG services is not uniform across Germany, with a higher concentration in the Western and Southern regions. Various organizations are involved in providing training and implementing SCG practices, offering both accelerated programs and longer training courses that last several weeks (Reiss, 2019). The specific content of the training programs may vary among different projects.

The standard for SCG services in Germany is determined by KSA-Klinische Seelsorgeausbildung (Clinical spiritual/pastoral care training), an organization that encompasses the most common and recognized German clinical SCG training programs approved by the German Society for Pastoral Psychology (Deutsche Gesellschaft für Pastoralpsychologie, DGfP) (Ağılkaya Şahin, 2018, p. 46). Muslim SCG services do not adhere to the standards provided by this organization (Cimşit, 2019); however, it is observed that many Muslim SCG projects strive to align their structure with the KSA standard. Currently, Hospital SCG is carried out on a contractual basis. After completing the respective training, SCG providers are appointed as honorary staff in hospitals. Therefore, there is no fixed SCG program among Muslims in Germany. It should be noted that there are intensive efforts for the development and establishment of such services. Various training programs exist based on regions and partnerships between Muslim organizations and churches, but there is no authority to measure the quality and functionality of the training (see Şahinöz, 2018, for more detail). According to Erdem (2020, p. 20), this diversity stems from the fact that each regional SCG initiative is designed under different conditions.

The Research Questions

The research question of this study aims to examine whether the Western-originated SCG practice is implemented similarly in the services provided to Muslims in Turkey and Germany. Identifying any variations is essential for effectively advancing Hospital SCG. The study specifically focuses on investigating how SCG methods are applied to hospital personnel, patients, and their relatives.

In this study, the research question is: Are there differences in the application method between Hospital SCG providers in Germany and Turkey? The sub-problems are listed as follows:

- If hospital SCG providers in Germany and Turkey mention different forms of practice, what are these differences?
- Can the variety of methods arising from the statements of SCG providers be attributed to cultural differences?

The primary aim of this comparative study is to reveal the intercultural aspect of Muslim SCG services by comparing the practice methods in Germany and Turkey. The study specifically seeks to understand the methods employed by SCG providers when interacting with clients in both countries. The focus is on identifying the preferred methods of SCG providers in their interactions with patients, their relatives, and hospital personnel, and exploring whether there are differences in method preferences between the two countries.

As the scope of Muslim SCG services expands globally, it becomes important to explore potential methodological differences between patients consulting with SCG providers in Turkey and those in Germany. Through analyzing the data obtained from the statements of SCG providers, this research aims to uncover whether methodological differences can be expected between a patient interacting with a hospital SCG provider in Turkey and a patient consulting with a hospital SCG provider in Germany. By doing so, this study aims to provide valuable insights and answers surrounding Muslim SCG services and contribute to a deeper understanding of the cultural aspects influencing SCG practices in different healthcare settings.

Method

Research Group

Between April and September 2021, a total of 30 Muslim hospital spiritual caregivers were reached and interviewed, with 15 participants from Germany and another 15 from Turkey. Due to the pandemic situation during the time of the research, face-to-face interviews could not be conducted. All participants were reached through social media platforms. Of the 30 participants, 16 were male, and 14 were female. Among the Turkish participants, 8 were male, and 7 were female. In Germany, the gender distribution was also the same, with 8 male and 7 female participants.

In Turkey, in 2021, there are 198 spiritual care staff in 71 provinces, 143 of which are within the Ministry of Health and 3 of which are university hospitals, in a total of 146 health facilities (DİB, 2021). 14 of these spiritual caregivers were interviewed via Zoom, while one interview was conducted over the phone due to a technical issue. The cities from which the spiritual caregiver participated have not been specified to protect their identity. In the Turkish group, all participants are graduates of the Faculty of Theology. Three of the participants have completed their second

undergraduate degrees, nine participants have completed their master's degrees, and one individual is currently in the process of pursuing a doctoral degree. Additionally, four participants have experience in foreign assignments. The average duration of hospital service among the participants is 4 years.

In Germany, 13 interviews were conducted via Zoom, while 2 interviews were conducted through WhatsApp. In the German research group, four participants were of foreign nationality (African, Arab, German, German-Turk), while the others were of Turkish nationality. Out of the 15 Hospital SCG reached in this study, 13 have received training at the Mannheimer Institute, which is experiencing rapid growth (see Mannheimer Institute, 2022, for more detail). The participants from Germany have diverse educational (Office Clerk, Health Personnel, Hairdresser, Theology Graduate, etc.) backgrounds. Three of the participants are graduates of Islamic theology, and among them, two have completed their master's degrees. The average duration of hospital service among the participants is 7 years.

All participants' names have been changed. The age range of the participants, both in Germany and Turkey, is between 25 and 60 years old. The average age of the participants in Turkey is approximately 30, while the average age of the German group is around 40. To maintain privacy, detailed age information has not been disclosed. The participants from Germany, Şule, and Hasan, work together as a couple in providing spiritual care. As a result, they answered the interview questions also together.

Research Design and Data Analysis

Thirty-seven questions were anticipated to be asked during the interviews with the participants. As the interviews were conducted, some questions were condensed into single questions or, in cases where they were deemed unnecessary, certain questions were not asked. The average duration of participant interviews in Germany was approximately 71 minutes. Participant interviews in Turkey lasted an average of 60 minutes. The obtained audio recordings were transcribed by the researcher. The four interviews conducted in German were translated during the process of converting them into text by the researcher.

Responses were analyzed using the inductive thematic analysis procedure described by Braun and Clarke (2006). Thematic analysis is compatible with both essentialist and constructionist paradigms within psychology. Through its theoretical freedom, thematic analysis offers a flexible and valuable research tool that has the potential to provide a rich, detailed, yet complex account of data. Themes or patterns within data can be identified in an inductive way. Within this methodology, inductive analysis becomes a process of coding the data without attempting to force it into a pre-established coding framework or the researcher's predetermined analytical

concepts. Consequently, this variant of thematic analysis can be described as data-driven (Braun & Clarke, 2006).

Accordingly, first during the transcription process, the researcher took notes relevant to the research topic. This way, the researcher who was familiar with the participants' expressions gained the opportunity to observe which themes stood out from the data. Additionally, the software program MAXQDA 2020 was utilized. MAXQDA is a computer program that assists researchers in systematically evaluating and interpreting qualitative texts (Creswell, 2012). It also assisted the researcher in analyzing the interviews. Coding has been conducted to encompass a multitude of potential themes.

Afterwards, units of text dealing with the same issue were grouped together into analytic categories. Data were systematically reviewed to identify information that supports each category. Accordingly, the researcher generated seven main themes, and each theme consists of 45 relevant sub-themes.

Given that the subject of this research revolves around the methods used by spiritual caregivers, content related to this topic has been consolidated and analyzed thematically, resulting in four themes. The themes that emerged from the interviews conducted with spiritual caregivers, for the purpose of this study, have been classified as follows: a) The importance of spiritual caregivers introducing themselves accurately, b) Methods used in SCG practice in Turkey and Germany, c) Content of meetings between spiritual caregivers and patient/ patient's family, d) Examples of SCG applications.

Any disrupted or incomplete sentences that could compromise the coherence of meaning have been appropriately completed to align with the intended expression.

Data Collection Tools

In this study, a semi-structured interview has been adopted due to its inclusion of both fixed-choice questions and the opportunity for in-depth discussions (Büyüköztürk et al., 2016, p. 154). The interview questions were prepared after consulting several experts. For the German sample, the interview questions were translated into German by the researcher. The interview questions consist of a total of 37 questions.

Credibility and Trustworthiness

To maintain the quality criteria of this qualitative research, all essential steps of the study have been documented. The researcher aimed to maintain an objective approach during both the interviews and the analysis. Furthermore, in this research, an audit trail is utilized. Auditing is frequently used in formal studies, such as dissertations, especially when committee members have quantitative training and may harbor

skepticism towards qualitative studies. Through this process of documenting a study and reviewing the documentation by an external auditor, the narrative account gains credibility (Creswell & Miller, 2000).

Results

The subsequent findings are organized under the four themes that formulate the headings. Explanations regarding the four themes are presented with relevant examples accordingly.

The Importance of Spiritual Caregivers Introducing Themselves Accurately

It has been observed that the Hospital SCG service is not widely known and understood by patients, their families, and hospital staff. Therefore, in the study, it has been revealed that the way SCG providers introduce themselves and emphasize that it is not a personal visit is crucial in alleviating anxiety and negative perceptions. Participants in both countries emphasized that SCG visits can cause anxiety and that proper introduction is important. Thus, healthier interviews can take place after the concerns are eliminated. For example;

"We introduce ourselves to a new patient. When they understand that it is a routine visit, the interaction becomes more effective. If we suddenly say, 'I am a spiritual caregiver, and I am here for you,' people can feel a bit uneasy because they are not yet familiar with the concept of spiritual care."(Fatma, Turkey).

"I enter the room, greet them, and introduce myself. I tell them who I am and why I am there. Because usually these people did not call for me, and some of them are afraid and ask, 'Did something happen? Why did you come?' I directly say that I came to say hello and ask about their well-being."(Sevilay, Germany).

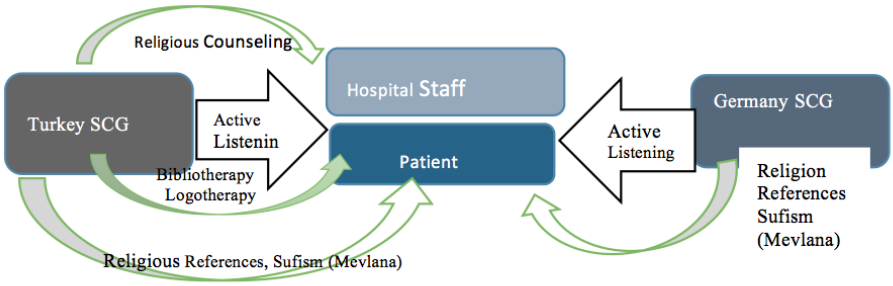
It can be understood from the participants' statements that the way SCG professionals introduce themselves is effective in reducing the patient's anxiety.

Methods Used in SCG Practice in Turkey and Germany

In Turkey, hospital spiritual caregivers provide hospital services four days a week. In the case of Germany, practitioners serve voluntarily and arrange a specific day for hospital services in agreement with the hospital. Both countries' hospital spiritual caregivers state that the frequency of patient visits increases depending on the patient's length of stay, but they also conduct more one-time consultations. Based on the data obtained from the interview study, it is observed that active listening is the most commonly used method by hospital spiritual caregivers in both Turkey and Germany.

Figure 1.

Methods Used by Hospital Spiritual Caregivers in Turkey and Germany



As seen in Figure 1, spiritual caregivers stated that they utilized religious elements such as Sufism as well as active listening. Participants in the Turkey group also mentioned methods such as bibliotherapy and logotherapy. For example;

"Perhaps the most common thing we do is active listening.(...)It is noticeable that there is a scarcity of individuals with whom they can open up and share their troubles, and this seems to be the greatest hunger."(Enes, Turkey).

"I prefer active listening.(...)I have read some poems a few times, I also write poetry myself, and I really enjoy reading as well."(Mehtap, Germany).

It is evident from the participants' statements that there is a clear need for communication and listening in patients and their families. Participants who utilize religious elements such as Sufism and artistic elements such as poetry and folk songs are more commonly observed in the German group.

"The most common practice is listening(...)And then reading, there are many who request reading, they ask me to read to them. I read to them verses from the Qur'an, healing verses."(Mine, Germany).

"I start by reciting the Ayat al-Kursi and Surah al-Asr. I say that it is my opening and closing(...)I am convinced that it brings great relief both to myself and the person I'm talking to, and I apply this regularly."(Yalçın, Germany).

"I need to quickly assess whether the patient is religious, whether they believe in Allah, or what their belief in fate is; I have to measure all of these immediately(...) Based on that, I create a concept in my mind(...)These are experiences gained over the years(...)You select from the established things through daily experiences. So, you have a basket on this matter, and you have to fill this basket with both knowledge

and experience. I'm still filling this basket(...)Sufism has a significant influence. I am someone who has read a lot of Mevlana and the Masnavi. In fact, I wrote my master's thesis on Mevlana. So, without Sufism, spiritual care would be really lacking(...)When you have knowledge of Sufism, especially Mevlana's ability to unite intellect, heart, and soul, you can provide beautiful support even to non-religious individuals(...)They have many stories with animals, and through Mevlana's metaphors, you can convey many stories. I use them a lot, and I can say they receive a lot of interest."(Nihal, Germany).

"There is indeed significant content in Sufism both in prisons and hospitals. There are materials that will help people and spiritually equip them. It needs to be systematized and used. I especially believe that there is a serious need in this field(...)Sometimes, when needed, I read them hymns from my prepared file because they request it. And for some, I sing them a folk song, as long as there is an atmosphere."(Hasan, Germany).

"The lives of the prophets, the stories of the saints, Sufi tales, etc. are very important. We often use quotes from Mevlana when necessary. These are very important, and every spiritual caregiver should have an abundance of them in their repertoire. You use them according to the situation."(Şule, Germany).

In the Turkish group, it is understood that religious elements are utilized based on the requests of the patients. "Sometimes the patient's family members themselves express it; for example, they say, 'we feel very distressed, could you read something (Qur'an) or can we read together?' They request it themselves."(Yıldız, Turkey).

On the other hand, regarding the methodological difference between personnel and patients, participant Elif points out: "Since patients are the ones who request our presence, they have things to share, and the most commonly used method is active listening method.(...)In our interactions with healthcare staff, we employ a slightly different approach. It often involves addressing religious questions, providing answers, or engaging in consultations."(Turkey).

Accordingly, while healthcare personnel tend to approach a spiritual caregiver with more religious questions, patients seek them out with a need for sharing and expressing themselves. Additionally, it is observed that the Turkish group utilizes bibliotherapy and logotherapy, which differs from the German group. "Although not extensively, we do employ the method of bibliotherapy," as mentioned by one of the participants Ahmet from Turkey.

"Now, generally speaking, we primarily use logotherapy with our patients. While I wanted to apply bibliotherapy more, especially in palliative and oncology settings, unfortunately, during the pandemic, we couldn't focus much on palliative and oncology cases. Also, in other departments where patients have shorter stays, like two or three

days, it becomes challenging to implement bibliotherapy since its effectiveness relies on maintaining continuity with a book. With logotherapy, our aim is to help patients reach their truest selves, maintain high spirits, and realize how their difficulties can actually contribute positively to finding meaning in their lives."(Aslı, Turkey).

It is evident that the participants expressed a desire to utilize psychological methods and techniques more. For example:

"Especially without psychological communication skills and the ability to read body language and behavior, we cannot perform this job effectively."(Yıldız, Turkey).

"Another crucial aspect is employing psychological communication techniques, knowing what to pay attention to when listening to a person. We need to know which methods to use in order to bring out what is within them."(Şule, Germany)

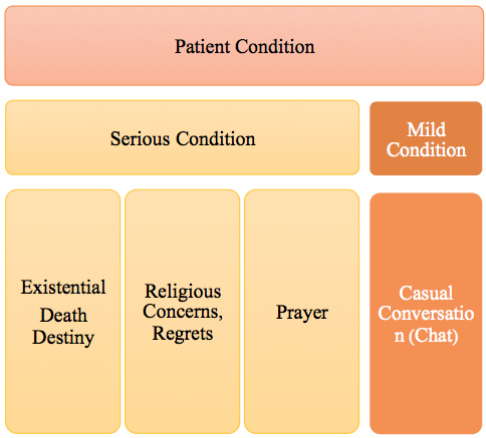
As seen, spiritual caregivers in this study emphasize the importance of psychological communication skills and techniques. They mention that it is challenging to carry out SCG without possessing these skills.

Content of Meetings between Spiritual Caregivers and Patient/ Patient's Family

Some participants expressed that the approach used in the meetings varies. While patients feel the need to share the difficulties they have experienced in their lives, the staff members seek spiritual care for their lingering religious questions or certain family-related issues. It can be observed that the spiritual caregiver assumes an active listening role when facing the patient, while they take on a speaking position when interacting with the staff. As a result, it is stated that patients are able to delve into subjective matters and share their experiences.

Figure 2.

Changing Content of the Conversation Based on the Patient's Condition



As seen in Figure 2, it can be understood that patients admitted to the hospital with a high likelihood of recovery engage in conversations with spiritual caregivers for social purposes, while those with more serious conditions ask questions related to death, existentialism, and fate. In terms of religious questions, patients' concerns range from how to maintain their religious practices without interruption, seeking redemption for past mistakes, to their desire to spend their remaining time in devotion and goodness. On the other hand, it is expressed, particularly by Turkish participants, that patients can adopt a rebellious attitude.

"Most patients seem to waiting for us. They can instantly share their lives with us, even the troubles they couldn't tell their closest relatives. It means we provide them with a sense of trust."(Zülal, Turkey).

"Many people have told me the following: 'I have never told my husband about this matter I have discussed with you, this is the first time I have opened up'(...) Sometimes, we even run into each other on the street, and sometimes I may forget them, but they come up to me and say, 'Mrs. Mine, do you recognize me from the hospital?' I guess we leave an impression on them."(Mine, Germany).

"The relatives of the patients are very satisfied. The hospital staff tells their troubles. If they have any religious needs, they try to fulfill them here. If they have any shortcomings, regrets, or repentance that they couldn't express to anyone else, they come here to share them. So, we see that both the hospital staff and the patients, as well as their family members, develop trust in a short period of time."(Ali, Turkey)

"Just holding the hand can make them feel like they have overcome a great obstacle. This is very important, just being by the patient's side is enough. There is no need for much talking; just sitting next to them, feels like lifting a heavy burden off their shoulders." (Rabia, Germany)

"The patients here, whether they are patients or their relatives, are inherently vulnerable individuals, like a bird with a broken wing. They long for someone to touch them, they wait for it(…)Sometimes they say, 'You were sent by God,' and we respond, 'Yes, we were sent by God.'"(Turgut, Turkey).

It can be observed that hospital SCG also works closely with families to provide holistic care. When compared to previous studies, it can be said that this service shows a development towards a more holistic approach in every culture. On the other hand, the content of the interview may consist of daily problems as well as religious motifs.

"Topics such as fate, surrender, belief, death, and the afterlife are discussed. So, I can't say it's just one point, it's a mixture of all, and we switch from one topic to another."(Gönül, Germany).

"They talk about family problems rather than illness. Sometimes it's about death, that feeling of death, the fear of death(...)The religious content mostly comes from the staff, at least in my experience."(Adile, Turkey).

"Once it is very much related to the stage of the patients, if the patient knows that they will recover, that they will be discharged; the request is only to have a conversation."(Şule, Germany).

"People who feel like they haven't lived their lives productively, those who have the intention to do something in their final moments, often come with requests like 'Let's do some readings (Qur'an).'(...)There are many questions about the fear of death, especially in palliative oncology. Another common question we encounter is whether their illness is a punishment for any past actions, whether it has happened as a consequence of any past deeds. They ask if it would be beneficial for their loved ones to recite prayers or supplications for them after their death, or if they have deep regrets from the past, they ask questions like 'If I seek forgiveness now, would it be accepted after such a long time?'"(Yıldız, Turkey).

"In the beginning, they hope for Allah's mercy. They say, 'Alhamdulillah, I am not a bad person. I didn't regularly perform prayers, but I helped others, I did good things in my life.' Over time, they start to doubt, 'Will Allah forgive me?' These are steps taken towards death, and we know this from research, that people go through various stages. Initially, there is denial, 'Why me?' 'This can't be happening,' and then there are questioning thoughts, wondering if everything was done correctly, if responsibilities were fulfilled. Some feel a sense of guilt, and I find this very distressing for the patients. We have the opportunity to feel remorse, to seek Allah's forgiveness through repentance, but I can't always succeed in establishing that connection and encouraging people to open up in that direction. It depends more on socialization in Islam, how religion is explained or presented."(David, Germany).

"The patient would say, 'Why did this illness come to me?' or they would seem judgmental towards God, talking about their problems with Allah. They blame fate, they blame Allah, they blame their faith. They can use accusatory statements like, 'I was a faithful person', 'Why didn't Allah protect me?' They say, 'It seems like He doesn't love me.' They ask, 'Why did it happen like this?' Maybe their current psychological state leads them to think in that way. That's where we try to intervene, to explain that it's not like that, that it's a test. Of course, without judging them, because when you judge, there's no turning back. Because they don't need judgment, they need someone who can be there with them, understand their feelings and emotions."(Turgut, Turkey).

As evident from the statements, individuals with severe illnesses tend to resort to religious elements more frequently. This tendency, as expressed by the participants,

indicates that the content of the conversations also varies depending on the course and severity of the illness.

Examples of SCG Applications

In this section, examples from the application field of hospital spiritual caregivers are presented. It can be observed that the application form of spiritual care largely overlaps in both countries. Having spiritual care by their side during distressing and sorrowful moments is perceived as a form of assistance by patients and leads to contentment. Especially patients are seen to welcome personalized visits with happiness. For instance, the dialogue experienced by participant Rabia during a patient encounter is provided below:

"I was called to the hospital for an uncle. He was around 74 years old. I went to him and he said:

'Who are you, my girl? Come closer, let me see who you are.'

'Uncle, I came for you, I came to have a conversation with you.'

'Ah, really? Did you come to have a conversation with me? Are you serious? Did you come for me?'

'Yes, I came for you.'

'The sentence 'I came for you' takes them to another realm. 'Are you really here for me?' This question arises, and it makes [the patients] very happy."(Germany).

In this example, it can be observed how patients can react joyfully, solely with the awareness that a spiritual caregiver is specifically there to visit them. Additionally, it is noteworthy that participants from both countries have experiences related to childbirth and being summoned. On the other hand, spiritual care providers in Germany are called upon to accompany them during death and to guide patients through funeral procedures.

"The mother of a patient's relative was in a critical condition, causing deep sadness for the relative. During our conversation, we focused on listening to her and acknowledging her mother's suffering. When we used religious references, such as expressing that Allah does not burden anyone beyond their capability and does not give them a heavy trial, she found comfort in these words. When we mentioned that her mother's spiritual status was elevated through her endurance of pain and that her illness served as an atonement for her sins, she felt happiness. From her perspective, her mother was gaining spiritual rewards, and she recognized the benefits of showing mercy and compassion towards her. Assuring her that their deeds were not in vain and that they would be rewarded in both this world and the hereafter provided them

with comfort. When she requested, we also speak to her father, who was in a more difficult situation. The situation was challenging, we aimed to provide the uncle with morale and motivation during our conversation. One touching thing he said was, "My dear, may Allah be pleased with you and with your parents. They have raised you as a virtuous child for the nation and the country."(Canan, Turkey).

As an example of providing support during the end-of-life process, the experiences of a participant named Nihal are presented below.It is seen that a spiritual caregiver can play an important role in motivating and providing support during critical times.

"I was called to console the mother of a baby who had no hope of survival. I had always been there for Turkish mothers.(…)The father was understanding, but the mother didn't seem willing to accept it at all.(…)She absolutely didn't want to hold her child. She expressed that she felt as if she would die if she separated from the baby after holding and smelling him once.(…)We talked a bit more, and two days passed like that, and then she was convinced. She called me and said, 'Can you come? I can't bear it alone.'(…)We went together(…)First, the father held the baby, then I said, 'Look, I am a mother, and I am holding him because I am a mother,' and I held him in my arms. Then she also took her child in her arms, sat there for a while, and after half an hour, they removed all the plugs and handed the baby to her. I will never forget that moment. It was a beautiful memory for me. It was both painful and beautiful. It was beautiful to be able to support a mother in such a way."(Nihal, Germany).

In cases related to death, distinct from the Turkish sample, it is evident in the German group that spiritual caregivers assist patients with funeral procedures when necessary and attend funerals. As seen below Muslim spiritual caregivers from Germany can also be included in funeral ceremonies held at the hospital. For example, the couple Şule and Hasan expressed that they attended a ceremony organized by Christian spiritual caregivers for premature babies who had passed away.

"About twenty years ago, prematurely born or miscarried babies under five months were disposed of as waste. Here, they call them 'Sternenkinder'[star children], and there is an association formed by them. Thanks to their initiative, these children are no longer discarded but kept in the morgue. They are buried collectively every three months. They have tiny coffins, slightly larger than a shoebox. When we first started, there was a cross on the coffin. But when we participated, they removed the cross and started painting the coffins blue and decorating them with stars. We never said anything about the cross, but they themselves felt uncomfortable(…)They said, 'Muslim babies are also included. Why didn't we think about it before and always put a cross?' So they took it off. They themselves offered it to us, and now we participate in the church together, like a ritual. We join them, recite prayers, and recite our Fatiha.[1]"(Şule, Germany).

1 Fatiha, refers to the recitation of the first chapter of the Qur'an in Islam, also known as Al-Fatiha.

"I recite the Fatiha in Arabic, and my spouse translates it. Then they say their prayers. We gather at the grave, all the parents. Afterwards, I perform the funeral prayer(…)One day, during the funeral prayer and burial, I recited the Fatiha in Arabic. As we were leaving the cemetery, I noticed a German couple following me. They came up to me and stopped. They said, 'We were deeply moved by what you recited a while ago.'"(Hasan, Germany).

From the above example, it can be observed that individuals belonging to different religions are engaged in an interaction. Therefore, this practice, which serves as an example of how different faith groups can come together in an important ceremony like a funeral by showing respect to one another, suggests that SCG services have an inclusive and unifying aspect.

"I used to recite the Qur'an by the bedside of a patient connected to a machine. One day, the chief physician wanted to meet me. I went to see him, and he asked, 'What are you doing for the patient?' I replied, 'Nothing, I am just meditating with the Qur'an.' The chief physician said, 'It's something else. It can't be that simple. (…)We don't see any changes in the patient's data, but when you come, we think the patient will recover, and the data changes.' Yes, I'm just reciting the Qur'an, but apparently, the Qur'an has a significant impact on the patient to the extent that the data on the machine changes. We don't attach much importance to the Qur'an we recite, but we also don't know how beneficial it is for the patient unless we have experienced it."(Sedat, Turkey).

In this example, emphasis is placed on the healing effects of religious elements. The spiritual caregiver expresses that the Qur'an has a significant impact on patients, even to the extent that it is reflected in the data of the medical machine. This highlights the healing power of religious elements in SCG services. However, it should be noted that further research is needed.

Discussion

The findings obtained from the participants align with previous research results on Hospital SCG in Turkey. According to this, the practice of Hospital SCG is consistent with the profession's description and purpose, both in Turkey and Germany (Chilean, 2017; Han, 2016). In this study, it was observed that the approach of Hospital SCG in both countries is similar. Both Turkish and German Hospital SCG predominantly use active listening as their primary method. However, in the Turkish sample, it was observed that Hospital SCG also employ methods such as answering religious questions and providing counseling. From the statements of the Turkish group, it can be understood that besides active listening, the use of bibliotherapy and logotherapy is also present (Belen, 2016; Yılmaz, 2016).

It was observed that prayer and Sufism topics were emphasized more in the German group. According to the statements of participants from both countries, religiously oriented questions are not frequently asked. However, the content of the conversations may vary depending on the patients' conditions. As the vital risk increases in the reason for the patient's hospitalization, there can be a greater transition to existential, fate, and religious topics, and religious elements can gain importance as coping mechanisms. According to the participants' statements, during the challenging process of severe illness, patients and their families emphasize the importance of religion and spirituality when questioning the meaning of life. It is known that other studies have also reached similar conclusions (Kurt, 2021; Küçük, 2019).

The methods and techniques used by Hospital SCG include elements such as inquiring about well-being, providing moral support, reading Hadith (sayings of the Prophet Muhammad) (Aydın, 2021), reading the Qur'an (Aka, 2020), praying (Baş, 2017), and listening (Ok et al., 2019), which are consistent with other research findings. In fact, another study has found that oncology patients receiving inpatient treatment have higher SCG needs compared to outpatient patients (Döndü, 2019).

When examining the differences between the two countries, it is observed that the German group provides more support in accompanying death, delivering news of death, and assisting with hospital paperwork (due to language barriers) compared to the Turkish group. On the other hand, according to this study, the Turkish group is focused on conducting conversations. The German group, while also conversation-focused, gives more emphasis to religious elements i.e. gifting prayer beads compared to Turkey. This could be attributed to a higher expectation of religious services from patients in Germany. Additionally, the observed differences may stem from the influence of the religious references experienced by the German sample from their Christian colleagues.

According to the shared statements of spiritual caregivers from both countries, verbal introduction methods help alleviate the concerns of patients and their families and elicit positive responses. In this regard, hospital spiritual caregivers mention the satisfaction of patients after the introduction of the service. Similar studies have shown that patients and their families who encounter hospital spiritual caregivers express satisfaction with the provided assistance (İnal & Gürsu, 2023).

Another noteworthy point in the study is that hospital spiritual caregivers in both countries are more frequently approached during childbirth and death situations, which are significant milestones involving both life and death. Accordingly, religion and spirituality are perceived as a need and support by hospitals during these important events, and the involvement of Hospital SCG is emphasized. In this regard hospital spiritual caregivers in both Turkey and Germany expressed a desire to learn more psychological methods and techniques, in line with other research (e.g. Pehlivan, 2018).

Furthermore, the presence of feelings of sinfulness among patients was also observed in this study. In this regard, it can have a positive impact when a hospital spiritual caregiver reminds the patient of the opportunity for repentance and Allah's forgiveness and mercy. Additionally, as mentioned by Sayın (2022, p. 72), the sense of compassion and empathy supports the understanding of self-renewal known as tasawwuf (Sufism). Repentance is stated to be the key and driving force for mental well-being, associated with the consciousness of self-renewal, feelings of hope, the concept of productivity, and the ability to know oneself. The inclusion of tasawwuf in this context demonstrates its potential functional knowledge within the Hospital SCG framework. However, further comprehensive research is needed regarding the relationship between patients, tasawwuf, and feelings of sinfulness.

Conclusion

The study conducted during a pandemic period has brought about certain limitations. As physical travel to reach participants was not feasible, online interviews were employed. The stagnant nature of SCG during the pandemic has restricted the depiction of current practices. On the other hand, the participants from Turkey and Germany narrated their experiences in both regular hospital operations and extraordinary situations like a pandemic, providing the opportunity to observe SCG functioning in two distinct scenarios. Thus, it has been realized that SCG services contribute positively in terms of providing morale, motivation, and support to patients during crisis situations related to illnesses. Furthermore, it should be underscored that this study, being a qualitative analysis, is based on data and interpretations that have emerged in conjunction with the researcher's observations. It is advisable for the findings to be complemented by quantitative research. Additionally, phenomenological research, like other qualitative research designs, relies on the researcher's interpretation of the obtained data. Therefore, the most significant limitation of phenomenological research is the inability to generalize research findings and accurately determine their validity (Yıldırım & Şimşek, 2016).

Additionally, the study is limited to 15 hospital spiritual caregivers reached from various cities in Turkey. The German group (13 out of 15 individuals) is restricted to hospital spiritual caregivers who graduated from the Mannheim Institute located in the state of Baden-Württemberg. This study is confined to the data collected between April 17, 2021, and September 25, 2021. On the other hand, this study is limited to the data collected from interview questions developed by the researcher with expert assistance. Ultimately, the findings obtained in the research are limited to the participants' statements and the researcher's analysis. As a result, the outcomes are influenced by a specific setting and organizational structure.

Despite the limitations, this study provides insight into the spiritual care practices of two different countries. Such an approach, involving two distinct groups of spiritual caregivers, offers an understanding of the universality of these practices. Nevertheless, it can be said the findings suggest a significant similarity between the SCG services in a country with a predominantly Muslim population (Turkey) and a country where Muslims are a minority (Germany). Therefore, no significant methodological differences were observed in the expressions of the German and Turkish participants regarding their service practices. No difference in practices resulting from cultural differences was identified.

Ultimately, it is assumed that Muslim Hospital SCG providers in Germany or Turkey would approach their clients using similar methods, particularly employing active listening. This study highlights the significance of active listening as an important aspect of patient interaction, irrespective of the country.

However, as evident from the statements of all participants in the study, hospital spiritual caregivers have the ability to impact various aspects of patients' lives. They listen to their concerns, provide comfort, address their religious anxieties, witness their reconciliations with the past, and assist them in achieving mind-body harmony. It has been observed that even listening to the why and how questions of individuals facing difficulties in life by a person with a religious identity can bring them relief. Furthermore, seeking approval and advice from someone representing religion seems to serve as evidence of doing things correctly from a religious perspective, enabling individuals to continue this inevitable challenging process with higher motivation. The heavy burden and guilt arising from past mistakes, finding meaning in the illness, existential questions, disruptions in religious practices due to treatment, and approaching death can all be comforted through a religious perspective. Such comfort is believed to be something that no other service can provide. Therefore, it is believed that Muslim SCG has the potential to be a supportive and complementary element in the field of healthcare and should be supported with further research.

Indeed, this study shows that spiritual caregivers from different faith groups can foster unity and solidarity among patients and their families by showing respect for different beliefs and cultures.This aspect is considered deserving of further in-depth research involving a diverse group of spiritual caregivers from various nationalities.

Another important point observed in this study is the emphasis of spiritual caregivers on the healing effects of religious elements. Spiritual caregivers expresses that the Qur'an has a significant impact on patients, and this effect can even be observed in the data obtained from medical devices. This highlights the healing power of religious elements within the SCG service. It should be noted that further research is needed in this regard. These statements present a significant research area

concerning the positive impacts of religion on patients and the potential role of SCG in facilitating patients' healing through the utilization of diverse religious elements. This research area should be supported through the implementation of empirical research methods.

Furthermore, it has been observed that spiritual caregivers in both countries are interested in utilizing more psychological techniques and methods to provide a more effective service. Considering the requests of Hospital SCG, it is believed that a comprehensive and multidimensional SCG implementation would require the incorporation of various disciplines. Indeed, equipping Hospital SCG practitioners with effective tools is believed to be important in terms of being an easily accessible, fast, and efficient intervention tool for public health. Therefore, it is important to conduct additional research to determine which methods and techniques are more effective through experimental studies.

In addition, several aspects emerged in this study that require separate and thorough investigation. Further research is required;

- for a more comprehensive exploration of the reasons behind spiritual caregivers being summoned during patients' moments of passing.
- for investigating whether there are varying perceptions of spirituality/religion among patients based on the type of illness. And exploring whether there are varying psychological disturbances among patients based on the type of illness.
- exploring the potential contribution of Sufism to SCG practices.

Through this study, an attempt has been made to fill a gap by comparatively examining the Muslim SCG application within two sample groups. The hope is that the data obtained will contribute to the field, enhance the understanding of Muslim SCG services, and provide researchers with insights for further studies.

Ethical approval. This study was conducted with the permission of Sivas Cumhuriyet University Rectorate, dated 02.04.2021 and numbered 29067, as well as the ethical approval from the Ethics Committee and the permission of the Presidency of Religious Affairs, dated 25.08.2021 and numbered E-30339839-622.02-15822519.

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Research Article

Exploring The Moderating Effect of Spiritual Resilience on The Relationship between Psychological Resilience and Mental Health

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Abstract
In recent years, the literature has increasingly emphasized potential factors contributing to resilience, with a particular focus on components related to spirituality and their interconnectedness with mental health. However, research findings regarding the role of spirituality have proven to be complex. This cross-sectional study explored whether spiritual resilience moderates the connection between psychological resilience and mental health. The study sample, consisting of 280 adults (81.1% female, 18.9% male) aged 18-65 years (M= 25.19; SD= 7.87) living in Turkey, completed a questionnaire that included a socio-demographic form, the Spiritual Resilience Scale, the Connor-Davidson Psychological Resilience Scale (short-form), and the General Health Questionnaire (GHQ-12). The results of the t-test analysis indicated that individuals who placed a high level of importance on religious beliefs exhibited high scores in spiritual resilience ($p < .05$). The correlation analysis results indicated positive correlations in the expected direction between psychological resilience and spiritual resilience.
In contrast, psychological and spiritual resilience negatively correlated with general health. The findings from the moderator analysis indicated that spiritual resilience has a moderating role in the relationship between psychological resilience and general health. Consequently, enhancing spiritual resilience is crucial in the interplay between psychological resilience and mental health.

Keywords:
Spirituality • Spiritual resilience • Psychological resilience • Mental health • Adults

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In its most basic form, psychological resilience can be expressed as the ability of individuals to adapt and maintain their resilience healthily in the face of adverse events such as difficulties in life, stressors, trauma, or change (Fletcher & Sarkar, 2013; Luthar, Cicchetti & Becker, 2000). In other words, it includes easy recovery from negative situations (Kobasa, 1979). People with psychological resilience show the ability to easily recover, adapt and overcome difficult life situations they have experienced (Masten & O'Connor, 1989). Öz and Yılmaz (2009) suggested that the findings of the study on resilience indicated that people with high resilience cope more successfully with various kinds of stressful life events they encounter, while people who are unsuccessful in coping with them can overcome the problems they encounter more easily by improving their resilience levels.

Psychological resilience is characterized both as a personality trait and as a skill acquired as a result of a developmental process (Campbell-Sills, L., Cohan, S. L., & Stein, M. B., 2006; Fletcher & Sarkar, 2013; Luthar, Cicchetti & Becker, 2000; Masten & O'Connor, 1989). In any case, resilience is united in three main common themes. The first is any risk or difficulty, the second is adaptation and coping, and the last is the protective factor. Therefore, psychological resilience is a phenomenon that includes the interaction of protective factors that contribute to a healthy adaptation process with existing risk factors (Masten, 2001; Masten & Powell, 2003). For instance, a meta-analysis of 60 studies revealed that trait resilience was negatively correlated to negative indicators of mental health and positively correlated to positive indicators of mental health (Hu, Zhang, & Wang, 2014).

The ability of individuals to cope with difficulties, manage stress, maintain emotional balance and adapt to life's challenges is critical for mental health (Gross & Muñoz, 1995; Lazarus & Folkman, 1987; Schneiderman, Ironson & Siegel, 2005). Stressful events are included in the epidemiology of psychopathologies. However, it is seen that some people do not develop psychopathology when they encounter stressful events and they can protect their mental health (Davydov et al., 2010). For example, people with high psychological resilience also show emotional resilience and adapt to difficulties (Waugh, Fredrickson, & Taylor, 2008). Psychological resilience has a role in reducing the risk of depression (Fredrickson et al., 2003). Another study found that individuals with high levels of psychological resilience were protected from stress and therefore, reported lower levels of anxiety and depressive symptoms (Gloria & Steinhardt, 2016). Because resilience plays a role that alleviates the negative effects of stressors, it actively increases and supports positive psychological well-being (Davydov et al., 2010).

It is possible to come across studies in the literature showing the relationship between psychological resilience and the mental health of individuals in the face of stressful events (natural disasters, epidemics, being ill, etc.). Ran et al. (2020)

investigated the relationship between psychological resilience and mental health during the Covid-19 epidemic, which is stressful for the whole world. As a result of the study, a significant negative relationship was found between psychological resilience and mental health. Another similar study suggested that having high psychological resilience during the covid 19 outbreak was associated with lower levels of anxiety and depression (Song et al., 2021). Toukhsati et al. (2017) discussed the relationship between the psychological resilience of cardiovascular patients and their depression symptoms. The results show that psychological resilience is inversely related to the affective, cognitive, and somatic symptoms of depression. Bayat and Olca (2023) also investigated the relationship between nurses' psychological resilience and anxiety-depression levels during the covid 19 period. Consequently, it has been determined that nurses' high level of psychological resilience has a protective role in dealing with anxiety and depression. Wang et al. (2022) explained in their study that improving the resilience of patients with major depression in remission has a critical importance in preventing the recurrence of depression.

Based on the literature as mentioned above, resilience, in brief, is an individual's ability to show resilience, develop a positive perspective and maintain emotional balance in the face of life's stresses, difficulties, and changes. As the pursuit of both physical and mental health requires a potentially significant source of strength, purpose, coping mechanisms, and ultimately, healing and recovery, decades of research have linked health outcomes with spirituality (Koenig, 2008). Spirituality has often been recognized in the literature as a resilience-oriented approach when dealing with stress and potential risks, including its applicability to adults (Baysal, 2022) and even children (Gunnestad & Thwala, 2011). Nevertheless, the need to consider the extent to which spirituality leads to better psychological resilience is crucial, given its significant role in protecting and promoting mental health and resisting adverse influences.

Spirituality as a Resiliency Resource

Religion and spirituality have stirred controversy among researchers regarding their content (Esendir & Kaplan, 2018, p. 330). Although some earlier studies have proposed that religiosity and spirituality are different natüre (Lazaridou & Pentaris, 2016), a consensus among most researchers has emerged, suggesting that the distinction between the two is inadequate. For example, Hill et al. (2000) and Pargament (1997) have contended that these distinctions are useful as conceptual tools; they have noted that the notion of spirituality forms the underlying foundation for both religious and spiritual dimensions of life. In this context, the exploration of these interconnected constructs in individuals' lives is presented, as they potentially constitute the fundamental building blocks of psychological resilience when confronted with challenges. It's important to note that this study won't dwell on the

differences in definitions or concepts between them, although references have been made. Instead, the primary focus of this article lies in the exploration of spiritual recovery and mental health associations.

Religion has a positive impact on an individual's mental health, primarily by giving believers the chance to perceive some negative events from a constructive perspective (Yapıcı & Kayıklık, 2005). As a matter of fact, due to this feature, religiosity embraces various facets, including behavior, cognition, and emotion. Those who embrace a religious and spiritual lifestyle develop a profound emotional connection with the Creator, which provides them with emotional strength and endurance. An individual's connection to God can serve as a trigger for personal growth involving devotion, healing, and self-improvement (Yılmaz, 2021, p. 222). According to Bahadır (2010, p. 23), religion offers a unique mechanism for spiritual recovery that can alleviate individuals' personal difficulties. This improvement ultimately manifests in the individual's psychological-spiritual well-being and has a positive impact on their mental and physical health. In other words, people may assume that being religious or engaging in spiritual activities is always linked to improved mental well-being (Apaydın, 2010, p. 60).

Resilience comprises elements such as spirituality and religious perspectives, in addition to personal convictions. It is suggested that religiosity can serve as a source of inner strength during challenging and traumatic circumstances (Feder et al., 2013), contribute to the prevention of depression (Cengil, 2003), and reduce feelings of death anxiety (Yılmaz, 2021). Earlier research uncovered a significant and positive link between religiosity and life satisfaction, as well as a negative correlation between religiosity and generalized anxiety (Ayten & Karagöz, 2021). Similarly, previous evidence shows that although college students have a fairly low level of hopelessness, their level of religious belief is significantly higher (İmamoğlu & Yavuz, 2011).

Researchers have defined spirituality as our transcendent side, as body-mind-spirit integrity is an important life factor that is frequently studied in both theology and health fields (Özdoğan, 2009). Spirituality was also considered as a significant standalone predictor of resilience in individuals grappling with depression (Min et al., 2012) and hopelessness (Maraj et al., 2020). Numerous factors influencing spiritual resilience have been discussed in existing literature. For example, elements linked to spirituality such as happiness (Açıkgöz, 2016), social support (Eroğlu & Peker, 2011), self-help (Gören, 2023), and gender (Sambu & Mhongo, 2019) are among these factors (Kasapoğlu, 2020). Kim and Esquivel (2011) have affirmed that spirituality has positive results on mental health and resilience issues. As previously noted, psychological resilience involves adapting to challenging life circumstances. Reutter and Bigatti (2014) examined the moderating effect of spirituality on stress and health and determined its moderator effect. Consequently, the study's findings

demonstrate spirituality's moderating role in the connection between resilience and mental health. Another study conducted by Min et al. (2013) explored patient individuals with low resilience levels and found a robust predictive association between low spirituality and diminished resilience.

Objective of the Study

Numerous studies have explored the interplay between spirituality, resilience, and mental health across diverse populations (Schwalm et al., 2022). Previous research has explored the possible impact of resilience on enhancing life satisfaction and psychological adjustment among university students in Turkey (Yıldırım et al., 2022). However, the investigation of spiritual resilience's contribution to sustaining mental well-being, especially within the Turkish population, remains significantly limited. Upon reviewing the existing literature, it becomes apparent that investigations into the moderating effect of spiritual resilience have been conducted within the context of health crises, such as the COVID-19 pandemic (Gireyhan, 2022). This scarcity of research is particularly crucial given that psychological resilience can be influenced by factors such as trauma, anxiety, and depression. This current study, however, seeks to revisit and analyze the moderating effect of spiritual resilience within the framework of regular or non-crisis circumstances. Therefore, it is essential to gain insights into how spiritual-based resilience can aid individuals in effectively coping with these challenges amidst potentially adverse life events.

This study aims to delve into the intricate connections among spiritual resilience, psychological resilience, and overall well-being. Drawing upon existing literature related to spirituality-oriented resilience and its impact on the psychological health of individuals in the Turkish context, the research aims to fill a notable gap in our understanding. As of now, there exists no consensus regarding the influence of spirituality on general health, including the potential moderating role of spirituality in the link between resilience and overall well-being.

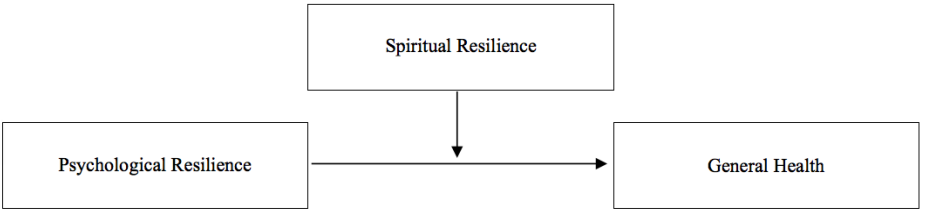
Consequently, this study sets out to address the following inquiries: (a) How are participants' demographic characteristics associated with the measured variables? (b) Is there a significant connection between general health, spiritual resilience, and psychological resilience? (c) Does spiritual resilience exert a moderating effect on the relationship between psychological resilience and general health well-being?

Purpose

The purpose of this study was to examine the moderator role of resilience in the relationship between resilience and mental health. The research model created for this purpose is presented in Figure 1 below.

Figure 1.

Suggested Moderating Model of the Study



Method

Measures

In the current study, participants were administered the researcher-developed Socio-demographic Information Form, along with the Spiritual Resilience Scale, the Connor-Davidson Psychological Resilience Scale Short Form, and the General Health Questionnaire-GHQ12.

Socio-demographic Information Form

In this form prepared by the researchers, data on information such as age, gender, marital status, education level, income level, where they lived the longest, and the role of religious beliefs in coping were collected.

Spiritual Resilience Scale

The original form of the resilience scale was devised by Maltby et al. (2015), which encompasses a 12-item scale divided into three subscales: Engineering, Ecological, and Adaptive resilience (EEA). The scale was designed as a 4-point response, with responses ranging from 1 (strongly disagree) to 4 (strongly agree). The internal consistency coefficient of the scale was found to be .83 for the engineering dimension, .73 for the ecological dimension and .77 for the adaptive dimension. In the present study, the scale items were arranged based on spiritual expressions. Some of the items on the scale are "It doesn't take long for me to recover from a stressful event thanks to my spiritual resilience," "I usually get through difficult times with fewer problems thanks to my spiritual resilience," "it usually doesn't take long for me to overcome the setbacks in my life thanks to my spiritual resilience." The internal consistency coefficient for this study was calculated as .92.

Connor-Davidson Psychological Resilience Scale Short Form

The adaptation of the short form of the Psychological Resilience Scale developed

by Connor-Davidson into Turkish and its validity and reliability study was carried out by Kaya and Odacı (2020). The scale was developed to determine the potential of individuals to recover after their negative experiences. The short form of the scale made by Campbell-Sills and Stein (2007) consists of 10 items in a 5-point Likert type. Responses to scale items were rated as '0' not at all correct and '4' as almost always correct. High scores obtained from the scale correspond to high psychological resilience. The internal consistency coefficient of the scale was found to be .85. The internal consistency coefficient for this study was calculated as .86.

General Health Questionnaire-GHQ12

The 12-item form of the scale, which has 30, 28, and 12-question short forms developed by Goldberg (1979) as a 60-question form, was used in this study. In addition, the scale consists of two factors: "anxiety, depression" and "social functionality." The Turkish validity and reliability study was performed by Kılıç (1996). The internal consistency coefficient of the scale was calculated as .78. As a result of the answers given to the scale items, the highest 12 and the lowest 0 points can be obtained. An increase in the General Health Questionnaire score corresponds to the fact that people may be in a risky group in terms of mental illnesses and poor mental health. The internal consistency coefficient for this study was calculated as .84.

Universe and Sampling

This study is a cross-sectional study conducted to determine the effect of spiritual resilience on mental health in adults aged 18 and over. The study included a total of 280 adult participants (53 males, 227 females) residing in Turkey, with ages ranging from 18 to 65 years (M= 25.19; *SD*= 7.87). These participants were selected through an online platform for recruitment. Additional demographic statistics concerning the sample group can be found in Table 1.

Procedure

The necessary ethics committee permission was obtained from the ethical committee to collect the data for the study. The survey form of the research was prepared online and disseminated by the researchers. In the online questionnaire, informed consent was sent to the participants before they started to fill out the questionnaire. In the informed consent, the purpose of the research was briefly mentioned to the participants and it was stated that participation in the research was not compulsory and that they could withdraw at any time.

Data Analysis

The collected data were subjected to analysis using SPSS version 22. Descriptive statistics such as frequency and percentage were utilized to provide an overview of the participants' characteristics. To assess the relationships between Spiritual Resilience, General Health Questionnaire (GHQ) scores, and Psychological Resilience scores, Pearson correlation coefficients were computed. Given that the conditions for parametric analysis were met (including normality and homogeneity of variances), independent t-tests and one-way ANOVA F-tests were employed to uncover potential variations in religious coping across different variables. Furthermore, using Process Macro v.4.0 (Hayes, Model 1), a moderating effect analysis was carried out to identify predictors of GHQ scores. The significance level was set at 0.05.

Results

Descriptive Statistics

In line with the hypotheses of the research, descriptive statistics of the scales and, accordingly, difference tests were analyzed. The distribution, numbers and percentages of the individuals in the sample group according to demographic variables such as age, gender, marital status, income status, education level, city of residence and the role of religious beliefs in coping with psychosocial problems are presented in Table 1. The significant ones of the independent sample *t*-test and one-way ANOVA analyzes performed to determine whether there is a significant difference in the scores of the individuals participating in the study regarding differences based on gender and the role of religious beliefs in coping are shown in Table 1 below.

Table 1.
Frequency and percentage of participants' socio-demographic data (n= 280)

Variables	*N*	*Frequency (%)*	
Age 18-25	210	75.0	
Gender Woman	227	81.1	
Marital Status Single	240	85.7	
Education Status Undergraduate	235	83.9	
Income Status Medium	190	67.9	
Where did you live the longest? Province	102	36.4	
The role of religious beliefs in coping High	211	75.4	$t_{(278)} = -2.244$; $\mathbf{p < .001}$

Notes: Parametric tests: Independent Sample t-test

According to the independent sample *t*-test result, it was observed that the role of individuals' religious beliefs in coping with problems differed at low and high levels [$t_{(278)}$= -2,244, p< .001]. In addition, One-Way ANOVA *F*-test analysis was performed for demographic questions such as age, marital status, educational status, income status and place of residence for the longest time, and no significant difference was found between the groups (p> .05).

Correlation Analysis

The findings regarding the results of the Pearson correlation analysis performed to determine the level and direction of the relationships between the main variables of the study are given in Table 2 below.

	1	**2**	**3**	**4**	**5**	**6**
1. Spiritual Resilience	-	.23**	.45**	-.18**	-.19**	-.12*
2. Religious Belief in Coping		-	.11	.05	.01	.08
3. Psychological Resilience			-	-.31**	-.34**	-.18**
4. Total General Health (GH)				-	.91**	.86**
5. GH-Depression Anxiety					-	.57**
6. GH-Social Functioning						-
Mean	34.44	4.18	24.87	3.99	2.19	1.80
(SD)	(6.20)	(1.01)	(7.37)	(3.41)	(2.14)	(1.71)
A	.92	-	.86	.85	.79	.76

*Notes. **p<.01, *p<.05; SD= Standart Deviation*

The correlation analysis in Table 2 presents the interrelationships of the variables, their descriptive statistics (mean and standard deviation) and reliability coefficients. According to the findings, there is a statistically positive and significant relationship between spiritual resilience and psychological resilience [r(280)= -.45; p<.01]. Again, when looking at the relationship between spiritual resilience and total general health, the relationship between spiritual resilience and total general health [r(280)= -.18; p<.01] found a negative and significant relationship. Depression-anxiety [r(280)= -.19; p<.01] and social functioning subcomponents [r(280)= -.12; p<.05] and spiritual resilience were also found to have a negative and significant relationship. On the other hand, while there was no statistically significant relationship between total motivational religiosity and total general health [r(280)= -.09; p>.01] or any of its sub-components [depression-anxiety r(280)= .10; p>.01; social functioning r(280)= .05; p>.01], a positive and significant relationship was found only between psychological resilience [r(280)= .12; p<.05]. In addition, no significant difference was found between the role of religious belief in coping with problems and any of the variables.

The Moderated Regression Analysis Results

As a result of the analysis, psychological resilience, spiritual resilience and the interaction of these two explain 11% (R^2= .109) of the change in general health.

There is an inverse relationship between psychological resilience and general health scores (b= -.3336, %95GA [-.5394, -.1279], *t*= -3,1920, *p*<.01). The increase in the psychological resilience of individuals corresponds to a decrease in the risk of mental illnesses. A significant inverse relationship was found between spiritual resilience and general health (b= -.1666, %95GA [-.3153, -.0178], *t*= -2,2046, *p*<.05). It has been observed that the interaction effect of psychological resilience and spiritual resilience is significant, that is, there is a moderator effect of spiritual resilience (b= .006, %95GA [.0002, .0116], *t*= 2,0312, *p*<.05). Table 3 shows the summary of the moderation analysis model for the variables predicting mental health.

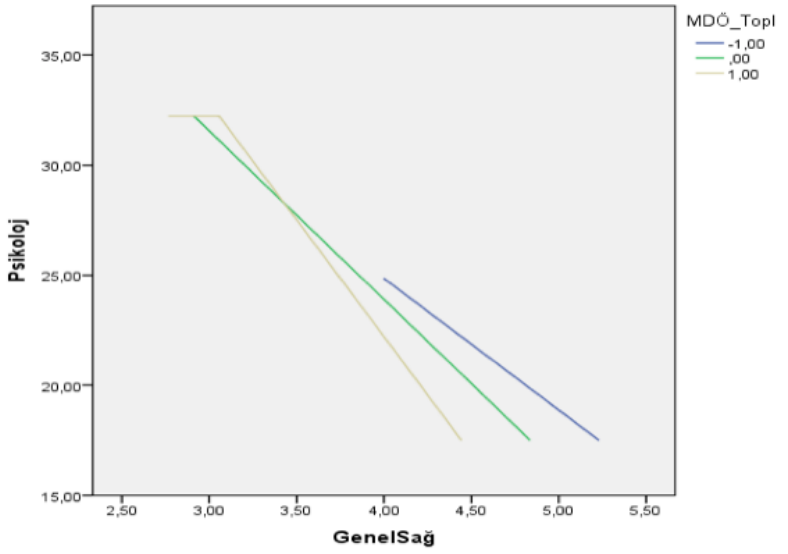
Table 3.
Summary of Moderation Analysis for Variables Predicting Mental Health

	b	**SE**	***t***	***p***	***LLCI***	***ULCI***
Constant	12,8596	2,5177	5,1078	,0000	7,9034	17,8159
PR	-,3336	,1045	-3,1920	,0016	-,5394	-,1279
SR	-,1666	,0755	-2,2046	,0283	-,3153	-,0178
Interaction	,0059	,0029	2,0312	,0432	,0002	,0116

Note: R^2 *= .11, PR: Psychological Resilience, SR: Spirituality Resilience*

Based on all these results, the increase in the psychological resilience of the individuals corresponds to the decrease in the risk in terms of mental illnesses. As spiritual resilience plays a moderator role in this relationship, as the spiritual resilience of individuals increases, the risk of mental illnesses decreases. Slope analysis was performed to look in more detail at the modulating effect of spiritual resilience (Figure 2).

Figure 2.
Relationship between psychological resilience and mental health under the influence of spiritual resilience



According to three different levels of spiritual resilience, the relationship between psychological resilience and general health is significant when spiritual resilience is low (b= -.1672, %95GA [-.2353, -.0990], *t*= -4,8299, *p*<.001). The relationship between psychological resilience and general health is significant when spiritual resilience is moderate (b= -.1307, %95GA [-.1884, -.0729], *t*= -4,4541, *p*<.001). When spiritual resilience is high, the relationship between psychological resilience and general health is significant (b= -.0941, %95GA [-.1615, -.0268], *t*= -2,7532, *p*<.01). The results are shown in Table 4.

Table 4.
Conditional Effects of the Focal Predictor at Values of the Moderator(s)

SPI	*Effect*	SE	*t*	*p*	*LLCI*	*ULCI*
28,2462	-,1672	,0346	-4,8299	,0000	-,2353	-,0990
34,4429	-,1307	,0293	-4,4541	,0000	-,1884	-,0729
40,6395	-,0941	,0342	-2,7532	,0063	-,1615	-,0268

Discussion

The relationship between psychological resilience and mental health is multifaceted. The relationship between these two concepts involves an interaction where one can affect the other. Because psychological resilience helps individuals cope with stressful situations more flexibly (Fletcher & Sarkar, 2013; Luthar, Cicchetti & Becker, 2000), people who show greater psychological resilience in the face of challenging life events or stressors may tend to better protect their mental health (Fletcher Masten, 2001; Masten & Powell 2003). Spirituality, which includes deep inner processes such as finding the meaning of life, recognizing their values, dedicating themselves to a purpose and strengthening their social connections, provides resilience by improving the capacity of individuals to make sense of the difficulties they experience. Therefore, spirituality has a role that can both increase psychological resilience and positively affect mental health. From this point of view, the present study is aimed to examine the moderator role of spiritual resilience between psychological resilience and mental health.

The outcome of the t-test conducted in this study indicated that an assessment of individuals' religious belief levels in relation to coping revealed a notable increase in spiritual resilience scores among those with higher religious beliefs. A comparable finding was also evident in a study conducted by Gireyhan (2022), suggesting that individuals with moderate to high levels of spirituality might possess heightened faith, potentially contributing to a decreased sense of fear in the face of adversity. Another significant observation derived from the current study lies within the correlational outcomes. These results highlight that psychological resilience was significantly and inversely related to mental health, as expected. This relationship between psychological resilience and mental health provides support for different studies indicating that psychological resilience may be a protective factor in terms of mental health (Fredrickson et al., 2003; Gloria & Steinhardt, 2016; Hu, Zhang, & Wang,

2014). In the study, mental health was evaluated with a general health questionnaire. In addition to the general health questionnaire total score, the relationship between depression-anxiety and social functionality sub-dimensions and resilience was also discussed. The results proved that there is a significant inverse relationship consistent with the literature (Kim & Esquivel, 2011; Min et al., 2013; Reutter & Bigatti, 2014). Spirituality is a concept that has positive results in terms of both psychological resilience and mental health. Studies in the literature provide evidence for the connection of spirituality with psychological resilience and mental health (Kim & Esquivel, 2011; Min et al., 2013). The findings of this study also confirm the research findings in the literature. In this study, it has been determined that there is a positive and significant relationship between the psychological resilience of individuals and their spiritual resilience, and there is a negative significant relationship between spiritual resilience and general health.

When the results of the analysis on the moderator effect of the study are examined, higher psychological resilience is associated with a lower risk of mental health, and spiritual resilience further strengthens this relationship. The effect of spiritual resilience differs according to resilience levels and affects the link between psychological resilience and general health. An increase in spiritual resilience means an increase in one's capacity to cope with difficulties based on one's inner resources, beliefs, and values (Gireyhan, 2022). In other words, increasing the spiritual resilience of individuals can enable them to establish emotional balance, cope with stress, alleviate their negative emotions, and establish social bonds (Kim & Esquivel, 2011; Kasapoğlu, 2020; Pargament, 1997). All of these contribute to improving mental health in a positive way (Koenig, 2008).

This study includes some limitations. First and foremost, a notable constraint pertains to the method of data collection, which was reliant on an online platform. This is due to the fact that the researchers lacked control over participants' surroundings during the questionnaire completion. Moreover, the correlational research design was used in the present study, so this research is limited in terms of causal relationships between variables. In this context, the current study findings pointing to the relationship between resilience, mental health, and resilience can be re-evaluated with future longitudinal studies. Furthermore, an additional constraint pertains to the predominant female composition of the sample under scrutiny, raising concerns about the extent to which the findings can be generalized. Future studies may contribute to the generalizability of the findings through the use of gender-matched samples. The final limitation of this study is the notion that spirituality gains prominence owing to Turkey's portrayal as a devout society (Gireyhan, 2022). Consequently, delving into whether comparable outcomes endure or variations arise within diverse cultural settings can furnish invaluable insights for forthcoming investigations.

To sum up, notwithstanding these constraints, the outcomes of this present study bear significant importance as a valuable addition to comprehending the connections between spiritual behaviors and mental health. In this study, it can be inferred that incorporating the concept of spiritual resilience into psychological intervention programs has the potential to enhance the efficacy of such interventions, thereby aiding in the prevention of various psychological issues. This holds particular relevance for counselors who aid individuals in recognizing the potential beneficiaries and mechanisms through which spirituality can positively impact their lives.

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Authors' contribution. Both authors made equal and significant contributions throughout the entire preparation of this study.

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Research Article

Examination of Differential Item Function for Resilience Scale Items with Latent Classes Based on Intolerance of Uncertainty

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Abstract
The concept of resilience encompasses various elements such as spirituality, cultural heritage, adverse life events, and family lineage. Due to this diversity, examining the items measuring resilience, which is one of the concepts evaluated within the scope of positive psychology, differential item function (DIF), is considered important in terms of revealing the structure. As well as determining DIF, there is a need to reveal the reasons for its sources. At this point, the variable intolerance of uncertainty, which is highly related to resilience, is addressed. In this context, the general purpose of this research is to examine whether the resilience scale items show DIF before and after the latent classes have been created within the scope of intolerance of uncertainty. The research, in which the Brief Resilience and Intolerance of Uncertainty scales were used, was conducted with 718 university students. In the first stage of data analyses, likelihood ratio, one of the DIF determination methods, was used. In the second stage, the latent class analysis was carried out to create latent classes within the scope of intolerance of uncertainty. According to the results of this research, all items within the scope of gender for the Brief Resilience scale show a middle level of DIF. Within the scope of Latent Class analysis, it was determined that the four-class model was compatible with the data. After the groups were formed, DIF was examined in terms of gender for the Brief Resilience scale within each group. DIF was not determined in any of the items in class 1 and class 4. However, in class 3, all items showed moderate DIF. It was determined that the DIF results changed after the created latent classes. All these results show that intolerance of uncertainty may be the source of DIF determined in resilience scale items. Therefore, it is recommended to study the interrelated variables together when studying DIF.

Keywords:
Resilience • Intolerance of Uncertainty • Differential Item Functioning • Latent Class Analyses

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Introduction

A human being can exist in the context of the psychological characteristics he/she has. He/she encounters many different situations throughout his/her life, either positive or negative, and he/she can survive in line with his/her reactions to the negative situations he/she faces. Undoubtedly, situations that individuals describe as negative and their reactions to these situations may differ. In the face of these negative situations, some individuals may show chaotic reactions such as anxiety, emotional or mental exhaustion, and burnout. Some individuals consider these negativities as an opportunity, which can be regarded as a new beginning or a driving force that will contribute to their development (Brown & Nagel, 2004; Conner & Davidson, 2003; Coutu, 2002; Kobasa, 1979). Although there are surely many different psychological characteristics underlying this difference between individuals, the ability of the individual to return to their normal life or maintain their psychological health under adverse conditions can also be explained by the concept of resilience in the positive psychology approach (Doğan, 2015; Tuck & Anderson, 2014; Neenan, 2009).

The concept of resilience, which was first used by Block (1950), is one of the important concepts within the scope of positive psychology (Tura & Doğan, 2020). The concept of resilience, which is of Latin origin, derives from the word "resiliens" and has been defined in different ways in the literature. These definitions can be summarized as follows:being able to struggle against unpleasant situations, stress, difficulty, and loss; adapting internally and externally; being able to heal or recover after these experiences; finding life meaningful despite bad experiences and having hope for the future; not feeling like a victim when faced with bad experiences (Coutu, 2002; Day & Gu, 2014; Ee & Chang, 2010; Giroux, 2007; Masten, 1994; Smith *et al*., 2004; Weston & Parkin, 2010). Although the definitions of resilience vary the common points appear to bereturning to normal or getting better by overcoming difficult conditions, stress, bad experiences, and negativities.

Individuals with resilience are able to establish social and positive relationships; have positive outlook on the future, high self-confidence, self-esteem and motivation (Henderson & Milstein, 2003). They have problem solving skills and are purposeful (Benard, 1991). They canaccept the facts as they are rather than denying them; use the available resources in a unique way and are flexible in the face of difficulties and uncertainty (Coutu, 2002). Resilience, which is not just a personality trait, can also increase or decrease depending on the social environment the individual is in or other characteristics he/she has (gender, age, birth order, number of siblings, etc.) (Day *et al.*, 2011). When examining the variables in which individuals' resilience is discussed in the literature, age (Aydın *et al*., 2019; Bingal, 2018; Bozdağ, 2020; Kimter, 2020; Ulukan, 2020), number of siblings (Aydın & Egemberdiyeva, 2018; Erata & Özbey, 2020; Ergül, 2016; Özkapu, 2019), birth order (Arslan & Topal, 2021; Polat Başpınar,

2021; Oktan *et al*., 2014), gender (Cantez, 2018; Çelebi, 2020; Çelik *et al*., 2019; Doğan & Yavuz, 2020; Hoşoğlu *et al*., 2018; Karal & Biçer, 2021; Önder & Gülay, 2008; Turgut, 2016) variables are seen. It can be stated that studies with the finding that resilience differs especially according to gender stand out in number. These differences may be related to the characteristics of the studied group or due to the items included in the measurement tool. It may be caused by the substances in the measuring instruments. In this context, the concepts of bias and differential item function (DIF) regarding scale items measuring resilience are considered important.

Bias is a systematic error in the measurement process (Osterlind, 1983).It can be defined as the probability of individuals in one group to answer the item correctly compared to individuals in the other group due to some properties of the items or test conditions (Zumbo, 1999). Bias causes the validity of the measurement to decrease. In order to determine whether the scale items show bias or not, it is necessary to determine whether they show DIF. Differential Item Functioning (DIF) is the matching of individuals according to their abilities in terms of the variable to be measured, and then statistically revealing whether these individuals in different groups have different probabilities of responding to the item (Camilli & Shepard, 1994; Embretson & Reise, 2000; Zumbo, 1999). DIF is a preliminary step in determining bias, and expert opinions are generally consulted to make decisions about bias (Demirtaşlı & Ulutaş, 2015; Kalaycıoğlu & Kelecioğlu, 2011; Karakaya & Kutlu, 2012; Roever, 2005). However, experts cannot reach a common opinion regarding the source of DIF (Karami & Nodoushan, 2011). Determining the causes or sources of DIF is as important as determining the DIF. The sources cited among the most common causes of DIF in the studies in the literature are different scoring models (Gelin & Zumbo, 2003; Henderson, 2001; Tunç & Kutlu, 2018), item contents (Liu & Wilson, 2009; Mendes-Barnett & Ercikan, 2006; Ong *et al.*, 2011) and cultural differences (Asil, 2010; Girl & Khaliq, 2001). When it is aimed to determine DIF and its sources, in addition to these, other latent variables that are related to the relevant latent variable can also be evaluated. In this context, latent variables related to the concept of resilience can be addressed in order to determine whether the scale items of resilience show DIF and, if so, what their potential sources might be.

Variables that affect resilience can be handled under three main headings: risk factors, protective factors, and positive results (Rutter, 2006). Positive results for individuals can occur when risk factors are less effective than protective factors (Masten & Reed, 2005). For this reason, risk factors are considered important in affecting resilience. However, unexpected events are an important risk factor for resilience (Weick & Sutcliffe, 2011). People who react negatively to unexpected or uncertain situations are those who cannot tolerate uncertainty (Buhr & Dugas, 2002). Intolerance of uncertainty is the tendency of individuals to interpret uncertain situations as a source of discomfort or threat (Carleton,

2022; Majid & Pragasam, 1997). Dugas *et al.* (2004) defined the tendency to react negatively to situations and events characterized by uncertainty occurring in emotional, cognitive and behavioral areas as "intolerance to uncertainty". People with intolerance to uncertainty experience distress and anxiety when faced with uncertainty. They believe that uncertainty is negative and should be avoided, and they have difficulty adapting to uncertain conditions (Dugas *et al*., 2001; Buhr & Dugas, 2002). These individuals believe that uncertainty is a source of stress and persecution, and they tend to identify various reasons for anxiety in situations they see as unacceptable (Buhr & Dugas, 2006; Francis *et al*., 2016). Intolerance of uncertainty has been consistently associated with psychopathological constructs, including worry, anxiety, and obsessive-compulsive symptoms (Dugas *et al*., 2001; Holaway *et al*., 2006). Studies have shown that intolerance to uncertainty causes anxiety disorders, high levels of anxiety, depression and obsessive thoughts (Dugas *et al*., 2005; Yüksel, 2014; Gentes & Ruscio, 2011; Değirmenci, 2017; Sarıçam, 2017; Çevik, 2017; Yıldız, 2017) and in this context, it has been shown that individuals have a negative impact on their level of resilience (Cook *et al*.; Einstein, 2014; Durna *et al.*, 2022). Individuals with high resilience are less intolerant to the uncertainty they face (Bozdağ, 2020; Karataş & Tagay, 2021). In the literature, there are many studies in which resilience and intolerance of uncertainty are discussed together (Kılınç & Uzun, 2022; Lee, 2019; Mitmansgruber, *et al.* 2016; Sarıçam *et al.*, 2020; Tingley, 2020) and intolerance of uncertainty is thought to be an important latent variable for resilience. Therefore, intolerance to uncertainty variable can be examined as a possible source of DIF that can be observed in resilience items. While carrying out this examination, it is important to establish the latent classes based on intolerance of uncertainty and to examine DIF in this context in order to determine the source of DIF. Therefore, in this study, first of all, it was examined whether the items of the resilience scale showed DIF, and then DIF analyses were performed again for the latent classes formed within the scope of intolerance of uncertainty.

The general purpose of this research is to examine whether the resilience scale items show DIF before and after the latent classes have been created within the scope of intolerance of uncertainty.

Method

Model of the Research

In this study, DIF was determined for the Resilience Scale items, and latent classes were created to see the effect of students' intolerance of uncertainty levels on DIF. DIF analysis was conducted separately both for the entire group and each latent class. Within the scope of this purpose, it was determined that this research was in the descriptive survey model.

Study Group

There is no specific rule about the sample size required for Latent Class Analysis (LCA) because the sample size depends on many conditions. However, since the sample size plays a decisive role in defining the model, the sample is expected to be as large as possible (Cleveland *et al*., 2010). The study group of the research consists of 718 students studying at a public university in Istanbul. 61.3% of the students are female and 38.7% are male students.

Data Collection Tool

Within the scope of this research, the Brief Resilience Scale and Intolerance of Uncertainty Scale were used.

Brief Resilience Scale (BRS): Smith et al. (2008) was developed to measure the resilience of individuals. BRS is a five-point Likert-type measurement tool consisting of six items. High scores from the scale indicate high resilience. The development and validity-reliability studies of the scale were carried out on four different study groups. Accordingly, the first two groups were university students, and the next two groups were patients with heart conditions and fibromyalgia. Exploratory factor analysis was performed to determine the construct validity of the scale, and as a result of the analysis, a single factor structure was obtained, which explained 61%, 61%, 57% and 67% of the total variance for four different sample groups respectively. The factor loads of the scale items ranged from .68 to .91. The reliability of the scale was calculated with internal consistency and test-retest methods. The internal consistency reliability coefficient was found to vary between .80 and .91. The test-retest reliability coefficient was found between .62 and .69. Within the scope of criterion-related validity, the relationships between BRS and other scales were examined. Accordingly, there were significant positive correlations between BRS and ego resilience, optimism, life goals, social support, positive coping strategies and positive emotions. Negatively significant relationships were found between BRS and pessimism, depression, anxiety, negative emotions, perceived stress and negative coping strategies.

In the adaptation made by Doğan (2015), 295 (186 females, 109 male) university students were studied. As a result of the exploratory factor analysis, a single factor structure was obtained, which explained 54% of the total variance, and factor loadings were found to vary between .63 and .79. CFA result for BRS, goodness of fit indices, x^2/df (12.86/7) = 1.83, NFI = 0.99, NNFI = 0.99, CFI = 0.99, IFI = 0.99, RFI = 0.97, GFI = 0.99, AGFI = 0.96, RMSEA = 0.05, SRMR = 0.03. The reliability of the BRS was examined by the internal consistency method and the internal consistency coefficient was obtained as .83. The BRS is a five-point Likert scale and the response is "not at all appropriate" (1), "not suitable" (2), "somewhat appropriate" (3), "appropriate" (4), "completely appropriate" (5). Items 2, 4 and 6 in

the scale are reverse items. Cronbach's α reliability of the results obtained from this study was determined as .87 and McDonald's ω reliability was determined as .87.

Intolerance of Uncertainty Scale (IUS): The Intolerance of Uncertainty Scale was developed by Carleton, Norton, Asmundson (2007) on the basis of a 27-item scale previously developed in French by Freeston et al. (1994) in order to measure the level of intolerance of uncertainty. Adaptation studies of the scale into Turkish were carried out by Sarıçam et al. (2014). High scores on the scale are interpreted as the individual's high level of intolerance of uncertainty. The research was conducted on total 593 university students in two mid-state universities. Results of confirmatory factor analyses demonstrated that 12 items yielded two factors as original form and that the two-dimensional model was well fit (χ^2 = 147.20, *df* = 48, RMSEA =.073, CFI =.95, IF I=.95, GFI =.94, and SRMR =.046). Factor loadings ranged from .55 to .87. Cronbach alpha internal consistency coefficient was found as .88 for overall scale, .84 for prospective anxiety subscale and .77 for inhibitory anxiety subscale. In the concurrent validity significant relationships were found between the Intolerance of Uncertainty Scale (IUS-12) and Coping Flexibility Scale, Educational Stress Scale (*r*=-.43, .41 respectively). Test-retest reliability coefficient was .74. Corrected item-total correlations ranged from .42 to .68. Cronbach's α reliability of the results obtained from this study was determined as .93 and McDonald's ω reliability was determined as .91.

Data Analysis

The analysis was carried out in two stages. In the first stage, DIF was determined within the scope of gender for the items in the Brief Resilience Scale. Likelihood ratio, one of the DIF determination methods, was used. In this method, the hypothesis of whether there is a difference between the focus and reference group item parameters is tested. Furthermore, limited and generalized models are created, and their ratios to one another are tested by creating accordingly. By taking the Likelihood Ratio logarithm, the G^2 value is obtained and checked from the Chi-Square table using the degrees of freedom. If this value is significant, this shows the presence of DIF (Thissen, 2001). G^2 values give information about DIF size. The DIF levels are presented below based on the values of the G^2 value (Greer, 2004; Thissen, 2001):

- If it is $3.84 < G^2 < 9.4$, then, no DIF or DIF at a negligible level,
- $9.4 \leq G^2 < 41.9$ shows a middle level of DIF,
- $G^2 \geq 41.9$ shows a high level of DIF.

In the second stage, Latent Class Analysis was carried out to create latent classes within the scope of Intolerance of Uncertainty. LCA; It is a statistical method that aims to divide individuals into homogeneous subgroups, based on the observable (measurable) response patterns of individuals. Latent classes are subgroups that

cannot be observed directly. While individuals in these subgroups are similar to each other in terms of certain criteria, they also differ significantly from individuals in other groups (Vermunt, 2003; Vermunt & Magidson 2004).

When choosing a model in latent class models, the aim is not to find the correct model, but to identify the model that provides more information. The most common way is to select the model with the best fit by analyzing models with different numbers of classes and comparing their fit indices. Elections are made comparatively (Moors and Wennekers, 2003). Fit indices such as Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), AIC Consistent AIC (CAIC), Likelihood-ratio test (G^2) are used to evaluate model fit. Likelihood-ratio test interprets even the smallest difference between two models as incompatibility of the models when the sample size increases. Additionally, it may not be able to control parameters even in medium-sized samples (McCutcheon, 2002). In this case, this method intended to be used for model selection may be misleading. BIC and CAIC are preferred statistics because they also control sample sizes (Kankaras *et al*., 2010). Nylund *et al*., (2007) stated in their study that the BIC index gave better results. Lukočienė, Varriale & Vermunt (2010) reported in their simulation study that BIC is the best criterion in model selection. Güngör Culha (2012) also stated in his research that BIC and CAIC criteria give better results than other criteria in making the right decision when choosing the most appropriate model as the sample grows. It is stated that the lower the values obtained from the information criteria, the better the model fit.

After examining the model fit indices, homogeneity and degree of separation of latent classes, it is very important to examine the "entropy" value. The entropy value indicates the uncertainty in classification. A single entropy value is produced for the entire analysis, and this value, which has values between 0.00 and 1.00, takes values close to 1.00, indicating that the classification uncertainty is low (Collins & Lanza, 2010; Cheng, 2012).

Within the scope of LCA, latent class probabilities and conditioned response probabilities are obtained (Lanza *et al.*, 2003; Nylund *et al*., 2007). The latent class probability parameters show the proportion of the universe in each latent class, and the sum of these parameters is equal to 1. Conditional response probability parameters show the probability of a certain response to the observed variable. This parameter represents the relationship between the observed variable and the latent variable. It can be said that values close to 1.00 show a strong relationship between the latent variable and the observed variable. Through these parameters, it can be predicted how individuals will react to the observed variable in each latent class condition (Akbaş & Kahraman, 2019). Conditional response probability is the probability of individuals in each latent class approving the items in the measurement tool used. Jamovi 2.3.13 program was used in data analysis.

Results

There are six items in the Brief Resilience scale, and the DIF results of these items according to Likelihood ratio analysis are given in Table 1.

Table 1.
Likelihood ratio Chi-square statistics for Brief Resilience Scale

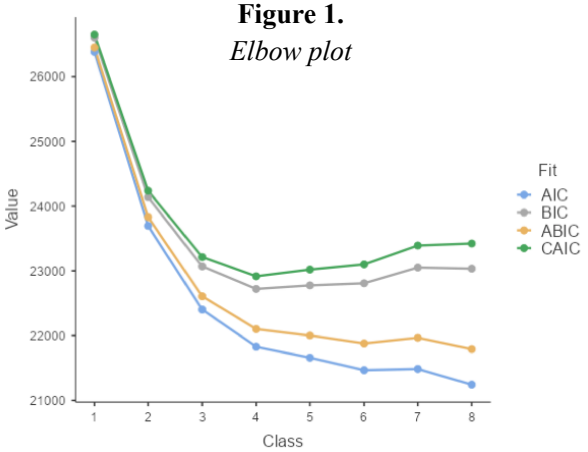
	G^2	*p*
Item 1	12.8	<.001
Item 2	11.0	<.001
Item 3	16.1	<.001
Item 4	17.4	<.001
Item 5	12.0	<.001
Item 6	14.1	<.001

As seen in Table 1, the G^2 values of all items are in the range of $9.4 \leq G^2 < 41.9$. For this reason, it is seen that all items in the scale show a middle level of DIF according to gender. To determine the source of DIF, LCA was performed to determine the latent classes that would occur within the scope of Intolerance of Uncertainty. Models with 2, 3, 4, 5, 6, 7 and 8 classes were tested in the analyses, respectively. The fit measures related to the models tested during the analyses are given in Table 2 and Elbow plot is given in Figure 1.

Table 2.
Fit Measures of Formed Models Related to the Intolerance of Uncertainty

Class	Log-likeli-hood	AIC	CAIC	BIC	df	G^2
2	-11751	23696	24237	24140	620	15412
3	-11053	22399	23213	23067	571	14017
4	*-10714*	*21819*	*22906*	*22673*	*522*	*13339*
5	-10534	21556	22917	22711	473	12978
6	-10406	21399	23033	22740	424	12723
7	-10294	21271	23178	22836	375	12497
8	-10192	21167	23347	22956	326	12295

Figure 1.
Elbow plot



It is known that BIC and CAIC statistics are better in model selection (Güngör Culha, 2012; Kankaras *et al.,* 2010; Lukočienė *et al*., 2010; Nylund *et al*., 2007). Therefore, in this study, especially considering these two values, it was determined that the four-class model fit the data. The entropy value, which gives a general value of classification accuracy, was obtained as 0.938. The fact that this value is close to 1.00 indicates that the classification uncertainty is low. This finding provides information that the established four-class model is successful in assigning individuals to the correct classes. There are 12 items in the Intolerance of Uncertainty scale. Parameter estimates for the four-class model for each item are given in Table 3.

Table 3.
Parameter estimates for the four-class model

		Y=1	Y=2	Y=3	Y=4	Y=5
Item 1	**Class 1**	0.0421	0.0331	0.109	0.251	**0.5650**
	Class 2	0.0167	0.0375	0.261	**0.428**	0.2569
	Class 3	0.0141	0.1534	**0.413**	0.384	0.0354
	Class 4	0.1319	0.3232	**0.489**	0.0000	0.0563
Item 2	**Class 1**	0.0000	0.0745	0.102	0.172	**0.6515**
	Class 2	0.0366	0.0619	0.349	**0.399**	0.1530
	Class 3	0.0139	0.2867	**0.447**	0.216	0.0357
	Class 4	0.2453	**0.3981**	0.186	0.113	0.0570
Item 3	**Class 1**	0.0474	0.0527	**0.354**	0.1989	0.3470
	Class 2	0.1125	0.1090	**0.442**	0.2533	0.0836
	Class 3	0.0381	0.4052	**0.422**	0.0809	0.0534
	Class 4	**0.4149**	0.2426	0.171	0.1530	0.0189
Item 4	**Class 1**	0.0000	0.0949	0.166	0.2006	**0.5384**
	Class 2	0.0237	0.1350	**0.382**	0.3264	0.1325
	Class 3	0.1073	**0.3946**	0.266	0.1515	0.0809
	Class 4	**0.4524**	0.2818	0.171	0.0565	0.0377
Item 5	**Class 1**	0.02312	0.0374	0.129	0.149	**0.6613**
	Class 2	0.00820	0.0547	0.328	**0.404**	0.2049
	Class 3	0.05460	0.2562	**0.472**	0.144	0.0735
	Class 4	**0.31923**	0.2261	0.210	0.245	0.0000
Item 6	**Class 1**	0.0000	0.0237	0.178	0.1678	**0.6303**
	Class 2	0.0133	0.0839	0.394	**0.4259**	0.0832
	Class 3	0.0359	0.3556	**0.510**	0.0867	0.0119
	Class 4	**0.4141**	0.3800	0.149	0.0377	0.0189
Item 7	**Class 1**	0.0000	0.0520	0.0303	0.130	**0.7878**
	Class 2	0.0155	0.0332	0.1610	**0.536**	0.2546
	Class 3	0.0000	0.2711	**0.3965**	0.259	0.0730
	Class 4	0.2642	0.2666	**0.2994**	0.132	0.0375
Item 8	**Class 1**	0.0000	0.0000	0.0000	0.1708	**0.8292**
	Class 2	0.0233	0.0363	0.146	**0.5797**	0.2151
	Class 3	0.0000	0.3914	**0.466**	0.0963	0.0468
	Class 4	**0.6604**	0.2251	0.0000	0.0200	0.0944

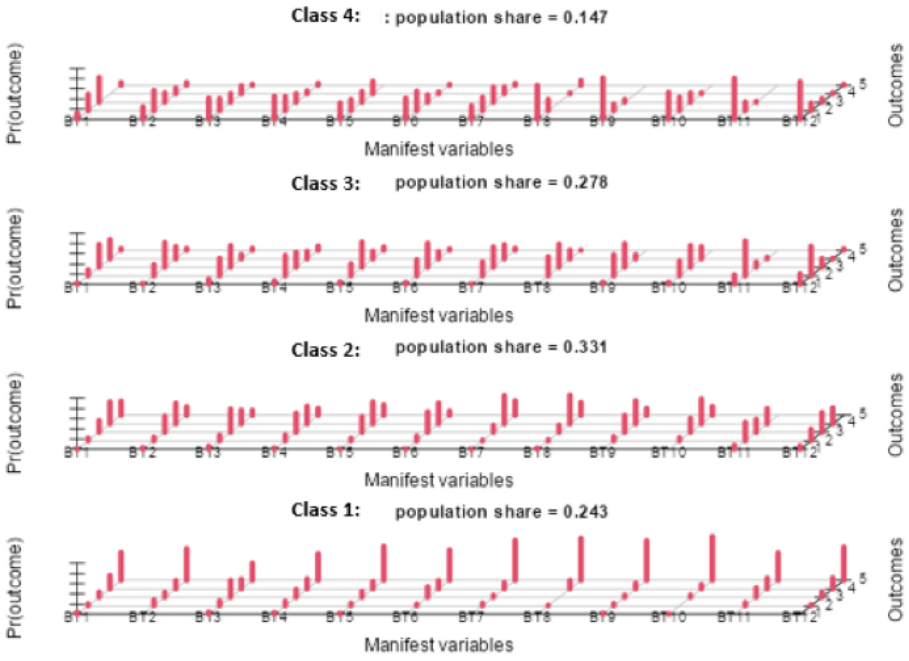
Table 3.
Parameter estimates for the four-class model

		Y=1	Y=2	Y=3	Y=4	Y=5
Item 9	**Class 1**	0.0237	0.0000	0.0498	0.1181	**0.808**
	Class 2	0.0230	0.0782	0.3365	**0.4397**	0.123
	Class 3	0.0122	**0.4831**	0.4566	0.0482	0.0000
	Class 4	**0.8097**	0.1327	0.0576	0.0000	0.0000
Item 10	**Class 1**	0.0118	0.0000	0.0119	0.0965	**0.8798**
	Class 2	0.0000	0.0624	0.3106	**0.4664**	0.1607
	Class 3	0.0434	0.3102	**0.4104**	0.2244	0.0117
	Class 4	**0.5277**	0.2667	0.1866	0.0190	0.0000
Item 11	**Class 1**	0.0000	0.0701	0.1631	0.2218	**0.5451**
	Class 2	0.0798	**0.4010**	0.2405	0.2786	0.0000
	Class 3	0.1935	**0.6373**	0.1322	0.0263	0.0108
	Class 4	**0.8067**	0.1744	0.0189	0.0000	0.0000
Item 12	**Class 1**	0.0000	0.0238	0.1155	0.2327	**0.6280**
	Class 2	0.0850	0.2606	**0.3716**	0.2829	0.0000
	Class 3	0.1949	**0.5529**	0.1665	0.0105	0.0753
	Class 4	**0.7350**	0.1523	0.0749	0.0189	0.0189

1= Not at all suitable for me 2= Very little suitable for me 3= Somewhat suitable for me
4= Very suitable for me 5= Completely suitable for me

The conditional response probabilities seen in Table 3 are the probability of individuals in each latent class approving the items in the measurement tool. For example, when the conditional probabilities are examined, within the scope of the first item, 56% of those in Class 1 are likely to answer “Completely suitable for me”, while 43% of those in Class 2 are likely to answer “Very suitable for me”. 41% of those in Class 3 and 49% of those in Class 4 are likely to answer “Somewhat suitable for me”. When Table 3 is examined in general, it can be stated that Class 1 has the probability of answering the items as “Completely suitable for me”, Class 2 as “Very suitable for me”, Class 3 as “Somewhat suitable for me” and Class 4 as “Not at all suitable for me”. The visualization of the estimated conditional response probability parameters can be seen in Figure 2.

Figure 2.
Parameter estimates for the four-class model



As seen in Figure 2, 24% of individuals are in class 1; 33% are in class 2; 28% are in class 3, and 18% are in class 4. Without creating latent classes, the middle level of DIF was determined for all items in the Brief Resilience Scale for all individuals. DIF results by gender within the scope of four latent classes formed within the scope of Intolerance of Uncertainty are given in Table 4.

Table 4.
Likelihood ratio Chi-square statistics for Brief Resilience Scale (Emerged Latent Classes)

	Class 1		Class 2		Class 3		Class 4	
	G^2	*p*	G^2	*p*	G^2	*p*	G^2	*p*
Item 1	1.359	0.244	3.121	0.077	11.1	<.001	0.994	0.319
Item 2	0.740	0.390	0.667	0.414	15.9	<.001	7.516	0.006
Item 3	1.831	0.176	3.451	0.063	10.2	0.001	7.793	0.005
Item 4	0.359	0.549	14.505	<.001	10.0	0.002	0.167	0.683
Item 5	0.120	0.729	5.298	0.021	13.5	<.001	1.818	0.178
Item 6	0.274	0.600	2.779	0.096	14.3	<.001	4.938	0.026

As seen in Table 4, there are no items showing DIF for Class 1. Since the G^2 value in Item 4 for Class 2 is in the range of $9.4 \leq G^2 < 41.9$, it shows a middle level of DIF. Since the G^2 value of the fifth item is in the range of $3.84 < G^2 < 9.4$, DIF is observed

at a negligible level. Since the G^2 value of all items for Class 3 is in the range of $9.4 \leq G^2 < 41.9$, it shows a middle level of DIF. For Class 4, as the G^2 value of the second, third and sixth items is in the range of $3.84 < G^2 < 9.4$, a negligible DIF is observed.

Class 1 has the possibility of answering "Completely suitable for me". For those with high levels of Intolerance of Uncertainty, Brief Resilience Scale items do not function differently depending on gender. A similar situation also applies to Class 4. Class 4 generally has the possibility of responding "Not at all suitable for me" within the scope of Intolerance of Uncertainty. Therefore, for those with low Intolerance of Uncertainty levels, the Brief Resilience Scale items do not function differently depending on gender. The situation is different for Class 3. There is a possibility that Class 3 will generally answer "Somewhat suitable for me" within the scope of Intolerance of Uncertainty. In Class 3, all items also show a middle level of DIF. Before creating latent classes, all items exhibited DIF; now, all items still display a middle level of DIF based on gender among those with a medium level of Intolerance of Uncertainty.

Discussion

According to the results of this research, all items within the scope of gender for the Brief Resilience scale show a middle level of DIF. In this regard, it can be stated that men and women with the same level of resilience tend to respond differently to the items. When the studies conducted in Turkey were examined, no research could be found examining the item function of the Brief Resilience scale items depending on gender. However, when the international literature is examined, there are studies on resilience and DIF. In their study examining the psychometric properties of the Brief Resilience scale, Liu & Lim (2020) determined negligible gender-based DIF for the fifth and sixth items. In a study where the psychometric properties of the Resilience Scale (RS-25) were determined, it was examined whether the items showed DIF according to gender, and evidence was obtained that there was no DIF according to gender (Seong *et al*., 2023). In their study, Gorman and colleagues, (2021) determined DIF according to gender within the scope of the Connor–Davidson Resilience Scale. In the study where Chen and colleagues (2020) examined DIF according to gender with the Chinese version of the Resilience Scale (RS-14), they detected DIF according to gender in four items of the scale. Wongpakaran and colleagues (2023) found that two items of the resilience scale they developed within the scope of their study showed DIF. Although all these studies examined DIF according to gender in line with resilience, possible sources of DIF were not investigated. For this reason, after determining the DIF in this research, results were obtained within the scope of latent classes, whichcould provide information about possible sources.

Within the scope of Latent Class analysis, it was determined that the four-class model was compatible with the data, especially by using BIC and CAIC statistics. It has been

demonstrated that the classes created with entropy value are successful in distinguishing individuals. When the created classes are examined, it can be stated that Class 1 tends to answer "Completely suitable for me", and thus, their intolerance to uncertainty level is high. On the contrary, it can be stated that Class 4 is inclined to answer "Not at all suitable for me", and thus, their level of intolerance to uncertainty is low. It is seen that Class 2 generally tends to answer "Very suitable for me" and the level of intolerance of uncertainty is also high for this class. It can be stated that Class 3 is prone to answer "Somewhat suitable for me" and there is a medium level of intolerance to uncertainty for this class. In the study with 519 students, Boelen & Lenfeink (2018) identified four latent classes in parallel with the findings of this research. Similarly, Volarov *et al*. (2021) identified four classes in their study conducted with 1440 university students. Results suggest that IU has four latent classes, named as Low IU, Moderate-Low IU, Moderate-High IU and High IU. Therefore, it can be stated that this scale is divided into similar latent classes in different cultures.

After the groups were formed, DIF was examined in terms of gender for the Brief Resilience scale within each group. There was no substance showing DIF for Class 1. For Class 2, only the fourth item (when something bad happens it's hard for me to get over it) shows a middle level of DIF. In Class 3, unlike other classes, all items show a middle level of DIF. In Class 4, negligible DIF is observed in three items. For the group with a moderate level of intolerance to uncertainty and a high probability of answering "Somewhat suitable for me", the items continue to show DIF according to gender. Considering that all items of the scale showed DIF before the latent classes were created, it can be stated that the variable intolerance of uncertainty may have affected the difference in DIF results after the classes were created. In other words, it can be shown that the levels of intolerance of uncertainty, which is one of the possible sources of DIF seen in resilience items, differ. Although there are no studies examining two variables together within the scope of DIF, there are many studies showing the relationship between the two variables. These studies have shown that intolerance of uncertainty negatively affects individuals' resilience levels (Cook *et al*., 2013; Einstein, 2014; Joshi, *et al.*, 2020; Durna *et al*., 2022).

This research was carried out within certain limitations. In this study, Likelihood ratio analysis was performed to determine DIF. Other DIF determination techniques may also be used in other studies. In the study, DIF was examined according to gender whereas in other studies, DIF can be investigated for the resilience scale within the scope of other variables. Possible sources of DIF can be examined by creating latent classes with other variables that may be related to resilience.

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Ethical approval. The study proposal was examined by the Istanbul Okan University Ethics Committee, and it was decided that the research was ethically appropriate. The approval date was 10.03.2021, and the protocol number was 134. Informed consent was obtained from all individual participants included in the study.

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Peer-review. Externally peer reviewed.

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Review Article

Guilt and Shame As a Result of Violating Beliefs: "Moral Injury"

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Abstract

This study on moral injury, which has a content as old as the history of humanity, is believed to contribute significantly to the relevant literature. Despite the limited number of sources in the literature on the subject, which are mostly related to veterans with war experience or limited to the field of religious psychology, this study is expected to fill the gap and provide valuable insights. The study attempted to clarify the distinction between moral injury, which involves a psychological injury caused by a dilemma, and post-traumatic stress disorder, which shares similar features with moral injury and arises after experiencing a traumatic event. As part of this study, psychotherapy approaches within the scope of interventions for the symptoms of moral injury were also included and the issue was tried to be addressed from a mental health perspective. In this context, "mindfulness-oriented meditation", "self-compassion", "spiritually-oriented counseling", and "work focused on forgiving oneself and others", whose effectiveness has been tested, are included. The issue of moral injury was addressed with psychology-spirituality dimensions; the scope of the study was further expanded with intervention-treatment titles. This study summarizes moral injury's conceptual framework and focuses on interventions and treatment approaches. As a result, the concept of moral injury was addressed holistically and contributed to the conceptual framework.

Keywords:
Moral injury • moral resilience • trauma • PTSD • belief

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Introduction

Litz et al. (2009) define morality as *personal and shared familial, cultural, social and legal rules for social behavior, basic assumptions about how things should work and how one should behave*. Moral injury refers to the deterioration in an individual's understanding of morality and capacity to act fairly. Perceived immoral acts cause this injury, the inability to stop such actions or witnessing acts that are particularly inhumane, cruel, immoral or violent, causing pain, suffering or death to others (Drescher et al., 2011).

Various events that cause moral damage may occur in the form of the individual's inability to prevent situations in which the individual directly acts against others or in which others may be harmed or it may occur in the form of having to witness events in which others are harmed by others (Litz et al., 2009). Thus, as a result of these negative experiences, the fundamental beliefs that the world they share with others is reliable and reasonable are shaken, and thus they may experience temporary or permanent problems in terms of mental health.

The most common personal-based potentially morally injurious events (PMIE=potentially morally injurious events) are as follows (Yeterian et al., 2019):

(a) seeing immoral acts and doing nothing to stop them (96.2 percent);

(b) killing within the rules of engagement/agreement (84.6 percent) and

(c) making a mistake or failing in a task that harmed others (73.6 percent).

The most common personal-based potential moral injury incidents based on others are:

(a) seeing others suffer as a result of decisions made or not made by someone else (92.3 percent);

(b) seeing others treat the helpless with disrespect (88.5%), and

(c) harm to the patient or others / causing harm to the patient or others (88.5%).

Events that cause moral injury may have negative consequences for the mental health of an individual and may also trigger a pathology to which the individual is prone. Litz et al. (2009) state that the symptoms of moral injury include event-related avoidance and depersonalization/hypersensitivity components related to post-traumatic stress disorder (PTSD). In addition, it includes demoralization, self-sabotage and self-harming behaviors. In other words, violative actions and moral injury overlap with the mechanisms of moral injury such as guilt, shame, withdrawal, self-condemnation, etc., as well as with secondary consequences such as self-sabotage, demoralization,

self-harm, etc. Among the possible manifestations of moral injury described so far (Drescher et al., 2011; Litz et al., 2009; Vargas et al., 2013) are guilt and shame, social or relational problems, spiritual and existential problems (which may include loss of spirituality or weakened religious faith, negative attributions towards God or a higher power, lack of forgiveness, meaning crisis, etc.), substance abuse and attempts at self-sabotage, self-harming behaviors and suicide. The impact of events that have the potential for moral injury is mainly based on affect and cognitions such as shame, not on the fear it creates. That is, the emotional consequences of moral injuries such as shame and guilt, are realized when the individual confronts the event and/or the meaning of the event.

Changing beliefs about the self and the world due to moral injury can be deeper and more universal. For example, someone who experiences moral injury may begin to see themselves as immoral, irredeemable and irreparable or believe that they live in an immoral world. Litz et al. (2009) explain this with the signs of anguish, guilt and shame, or even a strong conscience, which they believe are inherent in moral injury. In other words, moral injury is only possible if individuals have a sound moral belief system. In this respect, moral injury involves the normal and expected reactions of the individual to morally violating actions. Moral emotions (e.g., anger, contempt, disgust, guilt, shame), both towards oneself and others, are part of the development after moral injury. Interestingly, these emotions also provide a strong social influence on the phenomenology of moral injury and recovery (Farnsworth et al., 2014)

Principles determining the process of moral injury

Feelings of anger, guilt and shame that emerge as a result of the personalization of emotions and thoughts arising from violations cause moral injury. These are the features that characterize the moral injury process. The framework of how the moral injury process, which occurs after events that have the potential to cause moral injury, works with the inclusion of some variables is explained in the light of 5 principles determined by Zalta & Held (2020):

Principle 1: *"Moral injury is characterized by high levels of shame and negative beliefs about the self*."

Principle 2: *"Moral injury is characterized by unashamed guilt and few negative beliefs about the self*."

Although the feelings of guilt and shame that arise in relation to moral injury are often both described as characteristic features of moral injury, there are also fundamental differences between these feelings. Guilt is an emotion with adaptive qualities towards positive behavior change. Shame, on the other hand, involves an

evaluation that results in negative beliefs about oneself (e.g., "*I am a bad person*" or "*I am a terrible person for not intervening*"). Although guilt and shame often co-occur, guilt without shame is likely to be adaptive, whereas shame is often associated with negative outcomes such as social isolation, maladaptive coping, depression and suicide (Tangney et al., 2007). Unlike guilt and shame, although it does not characterize moral injury on its own, if the emotion of anger is related to an event that has the potential for moral injury in the form of witnessing the violations of others, it can be personalized and the moral injury can be experienced as "*I am a terrible person for not intervening*" (Litz & Kerig, 2019). Therefore, the fact that the event with the potential for moral injury involves violations of others, despite the feeling of anger, the individual's lack of reaction (not intervening, not preventing/preventing, not talking about the event, etc.) may trigger feelings of shame and cause moral injury.

Principle 3: *Moral injury-induced rumination (initially in the form of internal explanations of the event) is a process of self-blame and guilt, followed by feelings of shame and negative beliefs about the self.*

Principle 4: *Individuals with high shame tendency are more likely to solve the rumination about the event with internal explanations than those with low shame tendency.*

A key factor in how to resolve rumination triggered by moral injury is the tendency to feel shame for perceived transgressions (Tangney et al., 2007). Individuals with high shame tend to be able to resolve rumination processes faster by finding internal explanations. Individuals with lower shame tend to distinguish between their actions and their identity (e.g., "*Even though I have done something wrong, I am not a bad person*") (Zalta & Held, 2020).

Principle 5: *Individuals with higher cognitive flexibility are more likely to resolve event-related rumination with external explanations than those with lower cognitive flexibility.*

Cognitive flexibility is a process that enables individuals to make more than one explanation about their roles and outcomes in events (Rende, 2000). In other words, individuals having higher cognitive flexibility may act as a buffer against maladaptive self-evaluations. Zalta & Held (2020) found that individuals with high cognitive flexibility, although they feel guilty about their behavior, conceptualize the reasons for their behavior in a situation-specific way (*"I did something terrible, but I was under stress and could not see anything else among the options at the time").* However, individuals with lower cognitive flexibility are likely to adhere to stricter rules (e.g., *black-and-white thinking*) and rely more on internal explanations.

Consequences of moral injury

Moral injury can have profound effects at the personal level as well as at the societal level. Theorists have suggested that the cognitive and emotional changes that occur after exposure to potentially morally wounding events (especially if the individual avoids direct confrontation and/or reparative interventions) can lead to a range of personal, social and spiritual consequences. According to Litz et al. (2009) and Wortmann et al. (2017), these consequences may include social withdrawal, alienation, self-sabotaging behaviors (e.g., substance use, criminal behavior), avoidance, demoralization, and spiritual distress.

1. Personal consequences

In a study conducted by Yeterian et al. (2019) with clinicians, it was observed that clinicians stated that their patients who experienced events with the potential for moral injury based on self and others showed significant changes in their attitudes and behaviors related to the event; in parallel with these, they expressed low self-esteem, high self-criticism, beliefs that they were bad, damaged, worthless and weak. It has been suggested that patients exposed to events with the potential for moral injury also engage in self-harming and/or high-risk behaviors (substance abuse and neglect of self-care). Clinicians reported that patients exposed to incidents with the potential for moral injury directly to the individual self viewed themselves as unlovable and unforgivable. Those exposed to incidents with the potential for moral injury to others reported feeling inadequate passive and having difficulty in persisting in goal-directed behaviors (low self-efficacy to stick to what they believe is right or to do the right thing at a critical moment; "nothing will ever *be good again*"), especially in responding effectively to subsequent exposures. Indeed, one clinician summarized the overall internal impact of any potentially morally injurious event as follows: "*It changes them at their core. They no longer have basic confidence in themselves, let alone the capacity to trust the world. They don't know how to get back to themselves."*

Demoralization, one of the symptoms of moral injury, is the phenomenon of "not being able to cope" (Clarke & Kissane, 2002), feeling hopeless and helpless. Although it is often seen together with depression, in a study conducted with a large sample (Kuo et al., 2004), it was found to predict suicide more strongly than depression. In fact, it was stated that being exposed to an event with the potential for moral injury directed toward another person causes more demoralization than being directed toward oneself, for example, not being able to prevent the death of a relative in war, fighting or disasters. Bryan et al. (2013) stated that hopelessness as a component of demoralization is a risk variable for suicidality among veterans directly exposed to war. Bryan et al. (2010) and Selby et al. (2010) reported that suicidal individuals tend to have extremely negative self-perceptions and to be highly critical of perceived

flaws. In addition, it is stated that neuroticism (negative affect) is negatively related to self-forgiveness (Ross et al., 2007), which has a very strong positive relationship with self-condemnation (Ross et al., 2004).

2. Interpersonal consequences

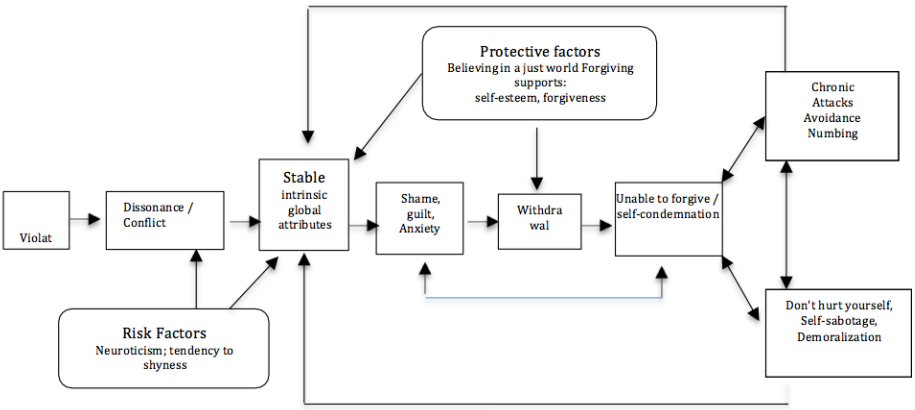
In the literature (Currier et al., 2015; Nash et al., 2013), individuals with moral injury are defined as individuals who experience social isolation and withdrawal in the form of difficulty in relating to, connecting with, or caring about others (e.g., in military service providers, especially towards civilians). In fact, Koenig et al. (2021) state that the concept of moral injury was initially discussed among military personnel as limited to the transgression of moral beliefs and values during combat but has now expanded beyond these boundaries to include similar feelings experienced by healthcare workers, first responders, and others who experience moral emotions arising from work performed during traumatic events or circumstances. It has also been reported that these individuals are disinterested in socializing with people who do not know how dangerous and/or corrupt the world really is. Scholars (Currier et al., 2015; Nash et al., 2013; Yeterian et al., 2019) have even reported that people with moral injury tend to behave in relationships in a way that they exposed to more traumatic situations (staying in unhealthy relationships, using aggression in relationships, etc.). Therefore, it can be said that individuals who experience moral injury have poorer social and relational adjustment.

Tangney et al. (2007) focused on how negative moral evaluations of self such as shame and guilt, affect interpersonal relationships. While guilt is an emotion arising from a "negative evaluation of a particular behavior", shame is a "negative universal evaluation of the self" (Farnsworth et al., 2014). Shame is basically related to the negative evaluation that occurs as a result of the violation of what is expected by others who are valuable to the person. The shame caused by condemnation and rejection in traumatic conditions will also lead to withdrawal in a wide area. This withdrawal will inevitably lead to toxic interpersonal problems, such as anger and lack of empathy. In general, research has shown that shame is more damaging to emotional and mental health than guilt (Tangney et al., 2007).

Another aspect of moral injury, guilt, focuses on a specific behavior, while shame is a negative global evaluation of the self, accompanied by feelings of worthlessness, powerlessness, vulnerability and exposure (Tangney et al., 2007). In this respect, guilt stimulates greater empathy and socially restorative initiatives, whereas shame typically stimulates social isolation (Joireman, 2004). Furthermore, shame is strongly associated with substance misuse, anger and aggression (Tangney & Dearing, 2002), whereas guilt deters individuals from such problematic behaviors (Tangney et al., 1996).

Figure 1.

The ordinary/daily/temporary work framework for moral injury (Litz et al., 2009)



Existential and spiritual consequences

Regardless of the type of event with the potential for moral injury, individuals often complain of existential and spiritual conflicts, as well as changes in beliefs about morality and humanity. In studies on moral injury (Purcell et al., 2016; Vargas et al., 2013; Yeterian et al., 2019), clients who lost faith in the religious beliefs that individuals previously held and no longer believe that there is a just world or expect people to be good have been identified. It has been observed that after an event with any potential for moral injury, clients have more certain and established views about right and/or wrong. Their thoughts are exaggerated or more black and white, contrary to cognitive flexibility. It is also stated that they tend to be overly rigid, intolerant of their own harm or the harm of their relatives in terms of their moral expectations towards themselves or others and that many clients no longer have a meaning to life and have difficulty finding a worldview that makes sense to them (Yeterian et al., 2019). Therefore, it can be said that moral injury is related to spiritual or existential conflict or questioning. Witvliet et al. (2004) stated that moral injury is associated with intense post-traumatic symptoms of spiritual struggles within oneself (especially religious doubt), alienation from others (especially believers), and/or spiritual struggles with God or the divine (feeling abandoned or punished for one's sins).

As a result, the individual's revision of their beliefs about themselves, others and the world and their efforts to find meaning again after the events involving violations both by themselves and others they witnessed show that events with the potential for moral injury have existential and spiritual consequences.

Conceptualizing moral injury and post-traumatic stress disorder

Although moral injury is conceptualized in the literature with reactions that occur within the framework of guilt and shame, it should not be considered as very different from post-traumatic stress disorder (PTSD), trauma-related major depressive disorder or mental reactions that occur in parallel with the search for meaning after trauma. Although it is a newer concept in the literature compared to post-traumatic stress disorder, it overlaps at many points in the context of reactions that develop after trauma.

Moral injury should not be conceptualized as a distinct syndrome to replace PTSD or major depressive disorder. Currier et al. (2014) and Mantri et al. (2021) found that experiences of moral injury were significantly associated with mental health problems. Research (Farnsworth et al., 2014; Litz et al., 2009) suggests that the moral suffering that characterizes moral injury, as well as maladaptive attempts to avoid or control such suffering, clearly overlap with PTSD, major depressive disorder and other existing mental health disorders. Moral injury can be identified as a risk factor for such conditions, affecting recovery processes and/or further complicating the clinical picture. Bryan et al. (2018) stated that (a) moral injury and PTSD emerge as distinct constructs (e.g., fear in PTSD vs. guilt/shame in moral injury) and (b) PTSD accompanied by moral injury is associated with more severe suicidal ideation/attempt than when it occurs alone. Although moral injury has clear similarities with PTSD in terms of content, PTSD involves more negative thoughts that the world is not a safe place, while those with moral injury exhibit more prescriptive beliefs expressing moral values such as "the world should be a safe place."

It should be noted that moral injury cannot be mentioned for everyone with PTSD. Although feelings of guilt and shame related to moral injury have also been described as potential PTSD symptoms, they are not diagnostic criteria. Similarly, not everyone who experiences moral injury has PTSD. In particular, someone with moral injury does not necessarily have to have experienced the kind of trauma required for a diagnosis of PTSD. Diagnostic criteria for post-traumatic disorder and adapted scales developed for moral injury can be utilized. In a recent study, the Moral Injury Scale developed by Litz et al. (2022) was adapted into Turkish by Tunç et al. (2022).

Treatment

Litz et al. (2009) state that by the end of a successful therapy process, the client is now able to recognize that it is both possible and healing to express thoughts and feelings about painful situations, especially in the presence of others who show compassion. The following interventions for the treatment of moral injury are also shown to work on the concepts of anger, shame and guilt that are often characterized by moral injury. Especially at the beginning of the treatment, it is important to work on painful memories and to be able to share situations that are defined as both necessary

and important for a healthier life and even shameful without being condemned by another person.

Central to the therapy process is the client's values and efforts to change behavior. Mental health service providers are well aware that only part of moral repair is intrapsychic and that compassion and forgiveness, which are part of therapy, require the support of the community (Wortmann et al., 2017). Since being part of a whole and being accepted by a group will help create meaning and purpose beyond the self. Thus, being connected to supportive cultures and groups can be a functional tool in the process of moral repair. Therefore, in the therapy process, the client's participation in group activities and communities that have the potential to provide spiritual support is a channel of treatment (Drescher et al., 2007).

After moral injury, the counselor's attitude of increasing the flexibility of cognitive schemas and supporting socially oriented behaviors regarding potential stressors that may cause moral injury may help moral repair (Farnsworth et al., 2014). Leary et al. (2007) stated in their research that self-compassion acts as a buffer against negative emotions and taking responsibility for personal failures. Farnsworth et al. (2014) also suggested that self-compassion causes changes in self-understanding for moral repair and may even be an indicator that moral repair has taken place. Accepting the imperfect self that performs the action is not the same as accepting the action (Litz et al., 2009).

Adaptive Disclosure (AD)

Adaptive disclosure (AD), which is one of the interventions that treat self-forgiveness and compassion within the scope of post-moral injury interventions, was first applied in a 6-8-session study developed by Gray et al. (2012) for active duty military personnel. In the AD application, after the client first describes the violating event in a safe therapeutic environment, it is carried out in the form of participating in an imaginary dialogue supported by the therapist with a forgiving and compassionate moral authority about the violating event and the harm it caused (e.g., self-harm) (Frankfurt & Frazier, 2016).

AD is carried out through the application of imaginary exposure exercises to facilitate the processing of the psychological, behavioral and spiritual/existential consequences of traumatic military experiences. The therapist makes use of the "empty chair" exercise for a dialogue between the client and an imaginary compassionate moral authority. The aim of this exercise is to elicit a reappraisal of the event and to bring about the hoped-for behavioral change from self-blame to compassion and forgiveness. Results of an initial pilot study showed improvements in PTSD symptoms, depression, and reductions in negative post-traumatic cognitions (Gray et al., 2012).

Building Spiritual Strength (BSS)

BSS is a faith-based, 8-session group therapy model first developed for military personnel with mental distress(Harris et al., 2015). Forgiveness within religious and spiritual frameworks is considered as a vital repertoire in alleviating guilt, shame and demoralization. Witvliet et al. (2004), in a study with veterans, stated that veterans who did not forgive themselves and had punitive religious beliefs had worse mental health problems.

Spiritual care is thought to help to develop a sense of meaning and purpose, confront pain, to recognize forgiveness and gratitude, accept oneself, to better connect with others and to recognize the existence of a higher power, a benevolent deity or to re-establish a relationship with God (Kopacz et al., 2014). Spiritual care should not be seen as the imposition of values or beliefs or as a passive endeavor focusing only on "discovery". In simple terms, spiritual care involves expressing one's own sense of spirituality, using one's own words to determine that it gives the individual a sense of meaning and purpose (Kopacz et al., 2016).

Awareness Based Approaches

Mindfulness-Based Stress Reduction (MBSR) (Kabat-Zinn, 2003), Acceptance and Commitment Therapy (ACT) (Hayes, 2004) and Mindfulness-Based Cognitive Therapy (MBCT) (Morgan, 2003) are examples of mindfulness-based approaches with appropriate strategies for addressing dynamic grievances associated with moral injury. Mindfulness practices include interventions to improve attention regulation, body awareness and emotion regulation. Hölzel (2011) states that the reduction of complaints and psychological change is possible through the development of physical-physiological, emotional and cognitive awareness.

The 8-week, structured Mindfulness-Based Stress Reduction (MBSR) program, offered in group sessions of approximately 2.5 hours and one full-day retreat, includes quiet sitting meditation, body awareness and yoga positions, walking meditation and group support (Kabat-Zinn & Hanh, 2009). Fjorback et al. (2011), in their study in which they applied the MBSR program, stated that many symptoms, including depression and anxiety, decreased. In the MBSR studies conducted by Kearney et al. (2012) and Niles et al. (2012) with veterans, it was reported that there was a decrease in PTSD symptoms, but there was no significant effect on outcomes related to moral injury (However, conceptually, the effect of MBSR on moral injury symptoms may have been weak compared to the effect of decreasing depressive and anxious thoughts). Mindfulness skills preserve the power to connect with the here and now but also teach how to acknowledge painful thoughts and decide which thoughts are worthy of more attention. Each skill involves refocusing attention on the here and now, as well as recognizing dysfunctional thoughts. Raes & Williams (2010)

emphasized that MBSR is also useful in alleviating the distress caused by brooding on past experiences and negative thoughts about the future, which are common in moral injury.

Mindfulness-based strategies have been integrated into empirically supported therapies such as cognitive-behavioral therapy, which was more recently developed for depression and adapted for PTSD (King et al., 2013). In addition, Acceptance and Commitment Therapies also include interventions that use mindfulness specifically designed to help people cope with painful thoughts, feelings and memories (Orsillo & Batten, 2005).

Cognitive Processing Therapy (CPT)

CPT, developed as a unique form of Cognitive Behavioral Therapy, is a 12-session psychotherapy developed for the treatment of PTSD (Resick et al., 2002). After the traumatic experience, the development of maladaptive beliefs that negatively affect the individual's self-worth, reactions to safety and danger, and the capacity to trust themselves and others may cause the individual to be "stuck" in the natural healing process and prolong the acute process (Resick et al., 2008). These maladaptive beliefs include guilt, shame and self-harming behaviors. CPT develops the cognitive restructuring skills necessary for the individual to gain a new personal meaning related to the trauma (Resick et al., 2008). It can be said that CPT as a treatment method is highly effective in reducing the symptoms of PTSD, depression, guilt and suicidal ideation, all of which are also the main features of moral injury (Gradus et al., 2013; Resick et al., 2002).

Acceptance and Commitment Therapy (ACT)

ACT was developed in the tradition of cognitive behavioral therapy. Nieuwsma et al. (2015) state that ACT, which supports seeing human suffering as normal, predictable and potentially meaningful; forgiving in a way that accepts guilt; respecting current suffering and even engaging in morally harmful experiences, is also inclusive in moral injury.

Luoma et al. (2012), in a study on substance users, also reported the effectiveness of ACT in coping with the feeling of shame, which is one of the characteristic features of moral injury. In another study examining the effect of ACT (Zettle & Rains, 1989), it was stated that ACT not only reduces depression symptoms but also reduces unwanted thoughts, feelings and behaviors that the individual experiencing moral injury has difficulty with.

Although moral injury is not part of the typical human experience, it is considered normal to feel feelings of guilt, anger, shame, etc. when under the influence of moral

injury. In ACT, it is paradoxically hypothesized that an attempt to control/resolve negative memories, thoughts and feelings associated with moral injury, on the contrary, increases or prolongs them (Walser & Westrup, 2007). Many people suffering from moral injury try to control unwanted memories, thoughts, and emotions that they think restrict their lives. However, this control effort is often not functional. ACT supports reducing such managing efforts and liberating the individual to make choices rather than working on current emotional states and past events (Nieuwsma et al., 2015).

Individuals who connect to life in a more psychologically flexible way can also change their perspective by allowing different reactions to emerge under different and changing conditions. This increases the capacity to respond appropriately in a variety of situations, leading to adaptability and therefore to healthy living. But more importantly, the psychologically flexible person is able to maintain a balance between various life domains. Nieuwsma et al. (2015) consider this as a potential that needs to be developed in people suffering from moral injury, corresponding to the capacity to realize their future in a flexible, viable and purposeful way. In fact, the feeling of guilt that arises under moral injury is an emotion worth studying to understand how one can choose to live in the future.

As can be seen, ACT, as an alternative to therapies for the control of emotions, thoughts and behaviors, puts forward acceptance and willingness that develops with inner experiences. Reactions such as guilt, shame and regret arising from experiences of moral injury are also reactions to stop/control past experiences.

"Moral resilience" in the context of moral injury

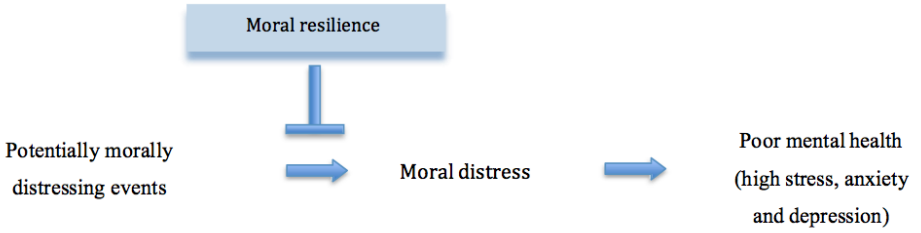
Rushton (2018) defines moral resilience as a buffer against moral injury and its negative consequences. Heinze et al., 2021; Holtz et al., 2018 also define moral resilience as "*an individual's capacity to maintain or restore integrity in response to moral challenges*". Moral resilience, which is developing as a new concept in the literature, is based on a sound understanding of personal, professional and relational integrity. Clinicians state that moral resilience includes the essential components of personal and relational integrity, vitality, self-regulation and awareness, moral efficacy and self-management (Holtz et al., 2018). Heinze et al. (2021) state that moral resilience consists of four sub-dimensions: (1) reactions to moral challenges, (2) personal integrity, (3) moral competence, and (4) relational integrity.

At the individual level, moral resilience includes skills such as knowing one's own values, the ability to self-regulate, being flexible in complex ethical situations, distinguishing the boundaries of integrity, acting decisively in morally charged situations, and seeking meaning in situations that threaten integrity (Rushton, 2018).

Moral resilience, related to the capacity to maintain or reconstruct one's integrity in response to moral distress (Rushton, 2018), is also a way to mitigate the harmful effects of moral distress (Rushton, 2016). The concept of moral resilience, relatively new in the literature, was conceptualized with an innovative model by Spilg et al. (2022). This model is associated with the idea that (1) moral resilience alleviates the degree of moral distress caused by potentially morally distressing events and (2) moral distress caused by these events reduces the degree of poor mental health burden (Figure 2).

Figure 2.

Theoretical model of moral resilience (Spilg et al., 2022)



Moral resilience is also associated with lower symptoms of stress, anxiety and depression. Spilg et al. (2022) state that being male, being older, not having a diagnosis of a mental disorder, getting more sleep, and receiving more support from employers and colleagues are factors that can be independently associated with stronger moral resilience. Moral recovery, as a concept also related to moral resilience, is more global than local according to Kant's approach and largely local rather than global to Hume's constructivist approach (Arruda, 2017). Moral improvement, whose effect can be explained at the global or local level in different approaches, can be a start for restructuring and making sense of life in human life.

Results

In this study, it was attempted to create an up-to-date source on the subject by reviewing the relevant literature. Although the concept of moral injury is related to many different disciplines, it was observed in the relevant literature that studies do not reflect this diversity. In this study, the differences between moral injury, in which moral values are under threat as a kind of dilemma, and post-traumatic stress disorder, which has common aspects, are characteristically revealed. The concept of moral injury, of interest to disciplines such as psychology, social psychology, guidance and counseling, psychology of religion and spiritual psychology as different approaches, is mentioned in this study through the use of contemporary sources. This study summarizes the conceptual framework of moral injury and focuses on interventions

and treatment approaches. In a similar study (Altınlı Macić, 2022), it was stated that theoretical and applied studies on moral injury in various contexts should bring new perspectives to the literature on the concept in different fields. As a result, in the present study, the concept of moral injury was addressed holistically to attract the attention of different disciplines and tried to contribute to the conceptual framework.

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