Skip to main content

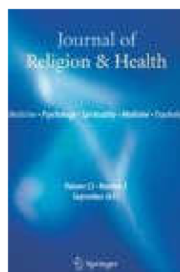
Advertisement

Search

- Authors & Editors
- My account

Menu

- Authors & Editors
- My account



Journal of Religion and Health

- Journal home
- Editors

Editors

EDITOR-IN-CHIEF
Lindsay B. Carey, M.App.Sci., Ph.D., La Trobe University, Melbourne, Victoria, Australia

Associate Editors
Carl Aiken, M. Min, D.Min., *Alumnus, Drew University, Madison, NJ*, and *Alumnus, Royal Women's and Children's Hospital, Adelaide, South Australia, Australia*
Jacinda R. Carey, BA (Hons), Dip.Lang., Dip.Global.Iss. (Melb), La Trobe University, Melbourne, Victoria, Australia
Jeffrey Cohen, M.P.H., D.Min., D.D., OAM, University of Notre Dame, Sydney, New South Wales, Australia
Ezra Gabbay, M.D., M.S., Weill Cornell Medical Center, New York, NY
Terrence D. Hill, Ph.D., The University of Texas at San Antonio, San Antonio, TX
Harold G. Koenig, M.D., M.H.Sc., Duke University Medical Center, Durham, NC

EDITORIAL BOARD

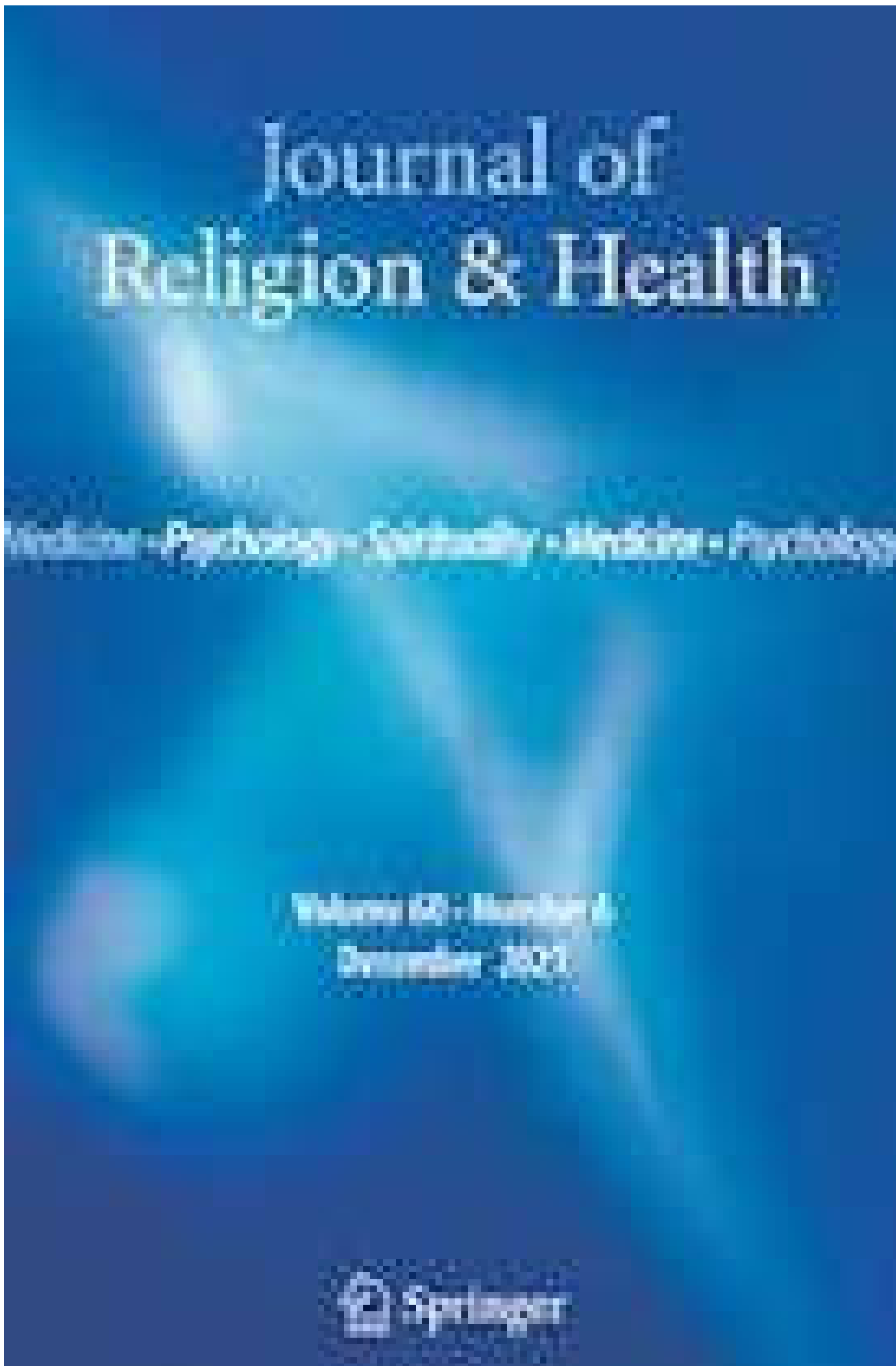
Claude Barbre, M.Div., Ph.D., L.P., The Chicago School of Professional Psychology, Chicago, IL, and The Harlem Family Institute, New York, NY
Arndt Büssing, M.D., Witten/Herdecke University, Herdecke, Germany
Wyatt Butcher, B.Comm, B.Min, M.H.Sc., Mental Health Services, Canterbury District Health Board, Christchurch, New Zealand
Ana Maria Catanzaro, R.N., Ph.D., Holy Family University School of Nursing and Allied Health Professions, Philadelphia, PA
David Drummond, B. Theol., M. Counsel., The McKellar Centre, Barwon Health, North Geelong, Victoria, Australia
Soren Ekstrom, Ph.D., C. G. Jung Institute of New York, New York, NY, and C. G. Jung Institute - Boston, Newton, MA
Donald R. Ferrell, Ph.D., C. G. Jung Institute of New York, New York, NY
Kevin J. Flannelly, Ph.D., Center for Psychosocial Research, Massapequa, NY
Pat Fosarelli, M.D., D.Min., The Ecumenical Institute of Theology, Baltimore, MD
Panagis Galiatsatos, M.D., M.H.S., Johns Hopkins School of Medicine, Baltimore, MD
R. Frank Gillum, M.D., M.S., Howard University College of Medicine, Washington, D.C.
Daniel E. Hall, M.D., M.Div., M.H.Sc., University of Pittsburgh, Presbyterian Hospital, Pittsburgh, PA
Curtis W. Hart, M.Div., Weill Cornell Medical College, New York, NY, USA
Timothy J. Hodgson, M. Theol., Ph.D., The University of Queensland, Brisbane, Queensland, Australia
Brick Johnstone, Ph.D., University of Missouri, Columbia, MO
James W. Jones, Psy.D., Ph.D., Th.D., Rutgers, The State University of New Jersey, New Brunswick, NJ
Donald E. Kalsched, Ph.D., Inter-Regional Society of Jungian Analysts, Albuquerque, NM
Felicity Kelcourse, Ph.D., Christian Theological Seminary, Indianapolis, IN
Jeff Levin, Ph.D., M.P.H.; Baylor University, Waco, TX
Kathryn Madden, Ph.D., Private Practice, New York, NY
John B. Nezlek, Ph.D., SWPS University of Social Sciences and Humanities, Poznań, Poland; College of William & Mary, Williamsburg, VA
Donald P. Owens, M.Div., Ph.D., Emeritus, Tulane University School of Medicine, New Orleans, LA
Jennifer Shepard Payne, L.C.S.W., Ph.D., Azusa Pacific University, Azusa, CA
John Peale, Ph.D., Charlottesville, VA
John R. Peteet, M.D., Harvard Medical School, Boston, MA
Billie A. Pivnick, Ph.D., Columbia University Teachers College, New York, NY
Mohammad Rababa, Ph.D., C.N.S., C.P.T., R.N., Jordan University of Science and Technology, Irbid, Jordan
Stephanie St. Pierre, M.Div., M.P.H., Hunter college of the City University of New York, New York NY, USA
Ann Belford Ulanov, Ph.D., Union Theological Seminary, New York, NY
Peter H. Van Ness, Ph.D., M.P.H., Yale University, New Haven, CT
Ernst R. von Schwarz, M.D., Ph.D., Cedars Sinai Medical Center, Los Angeles, CA
Warren E. Wyrostek, M.Div., Ed.D., Valdosta State University, Valdosta, GA

FORMER EDITORS

Donald R. Ferrell, Ph.D., **Curtis W. Hart,** M.Div., **David A. Leeming,** Ph.D., **Harry C. Meserve,** D.D.†, **Ann Ulanov,** Ph.D., **Barry Ulanov,** Ph.D.†

For authors

Submission guidelines
Ethics & disclosures
Fees and funding
Contact the journal
Submit manuscript



SPRINGER NATURE
Your article submissions
Do you carry out research? If so, we'd like to ask for 2 minutes of your time to ask about your article submissions, this year and next.
Yes, I'll take part
No Thanks

dy

0022-4197

Abstracted and indexed in

1. Arts & Humanities Citation Index
2. BFI List
3. CLOCKSS
4. CNKI
5. CNPIEC
6. Current Contents / Social & Behavioral Sciences
7. Current Contents/Arts and Humanities
8. Dimensions
9. EBSCO Academic Search
10. EBSCO Advanced Placement Source
11. EBSCO Biomedical Reference Collection
12. EBSCO CINAHL
13. EBSCO Discovery Service
14. EBSCO STM Source
15. EMCare
16. Google Scholar
17. JSTOR
18. Japanese Science and Technology Agency (JST)
19. Journal Citation Reports/Social Sciences Edition
20. Medline
21. Naver
22. OCLC WorldCat Discovery Service
23. Portico
24. ProQuest Central
25. ProQuest Health & Medical Collection
26. ProQuest Health Research Premium Collection
27. ProQuest Medical Database
28. ProQuest Psychology Database
29. ProQuest Public Health Database
30. ProQuest Religion Database
31. ProQuest Research Library
32. ProQuest-ExLibris Primo
33. ProQuest-ExLibris Summon
34. PsycINFO
35. SCImago
36. SCOPUS
37. Semantic Scholar
38. Social Science Citation Index
39. TD Net Discovery Service
40. UGC-CARE List (India)

Copyright information

Rights and permissions

Springer policies

SPRINGER NATURE

Your article submissions

Do you carry out research? If so, we'd like to ask for 2 minutes of your time to ask about your article submissions, this year and next.

Yes, I'll take part

No Thanks

Discover content

Master Journal List | Match Manuscript | Downloads | Help Center | Login

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Journal of Religion and Health

Search

Sort By: Relevancy

Search Results

Found 2,088 results (Page 1)

Share These Results

Journals Relevant To "Journal of Religion and Health"

JOURNAL OF RELIGION & HEALTH

Publisher: SPRINGER , ONE NEW YORK PLAZA, SUITE 4600 , NEW YORK, United States, NY, 10004

ISSN / eISSN: 0022-4197 / 1573-6571

Web of Science Core Collection: Social Sciences Citation Index | Arts & Humanities Citation Index

Additional *Web of Science* Indexes: Current Contents Arts & Humanities | Current Contents Social And Behavioral Sciences | Essential Science Indicators

Share This Journal

View profile page

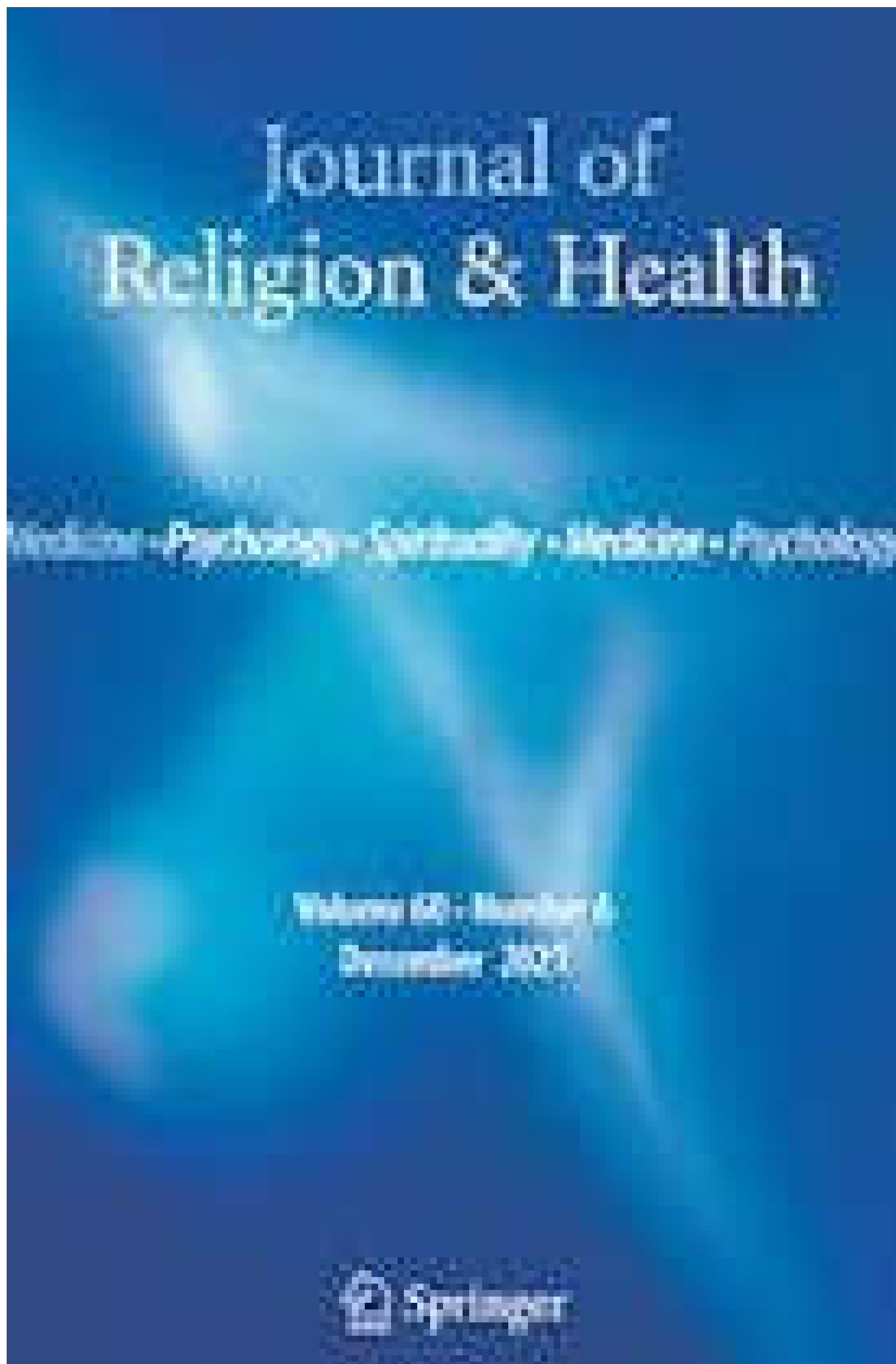
** Requires free login.*

Feedback

MENTAL HEALTH RELIGION & CULTURE

Publisher: ROUTLEDGE JOURNALS, TAYLOR & FRANCIS LTD , 2-4 PARK SQUARE, MILTON PARK, ABINGDON, ENGLAND, OXON, OX14 4RN

ISSN / eISSN: 1367-4676 / 1469-9737



Volume 60, issue 6, December 2021

49 articles in this issue

1. [Christianity, Family, Students, and COVID-19](#)

   Authors (first, second and last of 7)

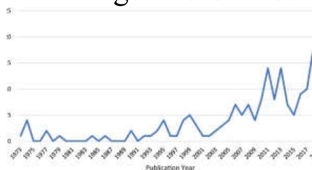
   - Lindsay B. Carey
   - Jeffery Cohen

- Jacinda R. Carey
- Content type: Editorial
- Published: 12 October 2021
- Pages: 3753 - 3758

2. **Bibliometric Analysis and Visualization of Catholic Health Care Research: 1973–2019**

Authors

- Lana V. Ivanitskaya
- Anastasia E. Bjork
- Mark R. Taylor
- Content type: Original Paper
- Published: 15 April 2021
- Pages: 3759 - 3774



3. **The Lourdes Pilgrimage and the Impact on Pilgrim Quality of Life**

Authors

- Jennifer Klimiuk
- Kieran J. Moriarty
- Content type: Original Paper
- Open Access
- Published: 09 September 2021
- Pages: 3775 - 3787

4. **Transcendent Experiences Among Pilgrims to Lourdes: A Qualitative Investigation**

Authors (first, second and last of 4)

- Emmylou Rahtz
- Sara L. Warber
- Paul Dieppe
- Content type: Original Paper
- Open Access
- Published: 25 June 2021
- Pages: 3788 - 3806

erience of Lourdes; what ha
(unusual/moment of change
u in any way? Has it affectec
s special? What part of it has

5. **Occupational Stress and Catholic Priests: A Scoping Review of the Literature**

Authors (first, second and last of 4)

- Miguel Ruiz-Prada
- Samuel Fernández-Salinero
- Gabriela Topa
- Content type: Original Paper
- Open Access

Authors

- Elif Uludağ
- Funda Tosun Güleroğlu
- Arzu Kul Uçtu
- Content type: Original Paper
- Published: 05 June 2021
- Pages: 4249 - 4263

30. **The Relation Between Religious Coping, Adjustment to Fertility, Being Affected by Infertility, and Satisfaction with Life in Turkish Women with Infertility**

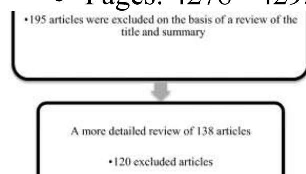
Authors

- Gulbahtiyar Demirel
- Feride Taskin Yilmaz
- Ayse Gonca Yenicesu
- Content type: Original Paper
- Published: 03 July 2021
- Pages: 4264 - 4277

31. **The Power of Women's Faith in Coping with Intimate Partner Violence: Systematic Literature Review**

Authors

- Barbara Simonič
- Content type: Original Paper
- Published: 11 March 2021
- Pages: 4278 - 4295



32. **Spirituality and Well-Being of Children, Adolescent, and Adult Students: A Scientific Mapping of the Literature**

Authors (first, second and last of 4)

- Mehmet Karakus
- Alpay Ersozlu
- Salih Yucel
- Content type: Original Paper
- Published: 27 September 2021
- Pages: 4296 - 4315

33. **Nursing Students' Perception Levels of Spirituality and Spiritual Care in Turkey**

Authors

Journal of Religion and Health (2021) 60:4264–4277
https://doi.org/10.1007/s10943-021-01319-1

ORIGINAL PAPER

The Relation Between Religious Coping, Adjustment to Fertility, Being Affected by Infertility, and Satisfaction with Life in Turkish Women with Infertility

Gulbahtiyar Demirel[1] · Feride Taskin Yilmaz[2] · Ayse Gonca Yenicesu[3]

Accepted: 17 June 2021 / Published online: 3 July 2021
© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021

Abstract

Religion has been an important tool in treating the difficulties expereinced by infertile females. This study was conducted to determine the relationship between religious coping styles and infertility adjustment, infertility distress, and satisfaction with life in a group of women with infertility problems. The study was a cross-sectional study that involved a convenience sample of 168 women with infertility living in Turkey. A weak negative correlation was found between women's positive religious coping and infertility distress. There was no significant correlation between women's negative religious coping and their infertility adjustment, infertility distress, and satisfaction with life.

Keywords Female Fertility adjustment · Infertility · Religious coping · Satisfaction with life

✉ Gulbahtiyar Demirel
gulbahtiyar_doganer@hotmail.com

Feride Taskin Yilmaz
feride_taskin@hotmail.com

Ayse Gonca Yenicesu
goncaimir@cumhuriyet.edu.tr

[1] Department of Midwifery, Faculty of Health Sciences, Sivas Cumhuriyet University, 58140 Sivas, Turkey

[2] Department of Internal Disease Nursing, Health High School of Susehri, Sivas Cumhuriyet University, 58140 Sivas, Turkey

[3] Department of Obstetrics and Gynecology, Faculty of Medicine, IVF Center, Sivas Cumhuriyet University, Sivas, Turkey

Introduction

Infertility is defined as not being able to achieve pregnancy despite having unprotected and regular sexual intercourse for at least one year (Center for Disease Control and Prevention (CDC), 2014). Although infertility is not a life-threatening problem (Altıntop & Kesgin, 2018), it is a condition that negatively affects women in biological, psychological and social aspects (Karaca & Unsal, 2015; Turan & Celik, 2019). Having children, which is an expected and indispensable phenomenon of the institution of marriage (Guneri et al., 2011), is also extremely important in religious, historical, cultural and economic terms (Vizheh et al., 2015). The role of women in family and society is discussed in conjunction with fertility and childcare in traditional societies, such as predominantly Muslim Turkey. The infertile woman sees herself as unnatural, incompatible with society, feels social shame (Guneri et al., 2011), and experiences intense stress due to concerns such as the loss of the feeling of motherhood, productivity, self-esteem and genetic continuity (Karaca & Unsal, 2015). In the literature, it has been shown that women with infertility have psychopathological symptoms such as self-depreciation, feeling inadequate, self-accusation and suicidal ideation (Karaca & Unsal, 2015), and infertility affects women's quality of life and satisfaction with life more than in men (Vizheh et al., 2015).

Infertility is a stressful and difficult crisis (Vizheh et al., 2015). In these crises, religious values and beliefs are the main reference point for many people in the perception and interpretation of reality, especially in tragic moments of life, when there is intense tension (Pargament & Raiya, 2007). Religious coping is an individual's way of using one's beliefs in the process of coping with problems and stress (Karakas & Koc, 2014; Pargament & Raiya, 2007). Positive religious coping includes the evaluation of negative situations from a good perspective, cooperative coping, seeking spiritual support from God, seeking support from a clergy or community members, religious assistance to others, and religious forgiveness. Negative religious coping involves a weak relationship with God in situations of tension and confusion, and a superficial and ominous worldview (Pargament & Raiya, 2007). Strong religious beliefs can aid coping and recovery in women with infertility. Some women may find solace in believing that infertility is part of a divine plan, while some women may interpret infertility as a punishment of a higher power (Domar et al., 2005). In this respect, especially positive religious coping can beneficially affect health (Eryucel, 2013). Some studies have shown that women with infertility problems used religion to cope with their situation (Aflakseir & Mahdiyar, 2016; Domar et al., 2005; Donkor & Sandall, 2009; Oti-Boadi & Asante, 2017; Roudsari et al., 2014) and religious coping was associated with less infertility distress and depressive symptoms (Aflakseir & Mahdiyar, 2016; Elgohail, 2017; Oti-Boadi & Asante, 2017). In this context, it is important to determine the types of religious beliefs women use to cope with stressful situations such as infertility (Aflakseir & Mahdiyar, 2016).

When the literature is examined, an increase is seen in the number of quantitative and qualitative studies examining the relationship between religion and

psychological health in the field of infertility (Aflakseir & Mahdiyar, 2016; Domar et al., 2005; Elgohail, 2017; Oti-Boadi & Asante, 2017). However, there was no study examining the relationship between religious coping and fertility adjustment, infertility distress, and satisfaction with life. Determining how women with infertility are affected by this process, their level of adjustment, satisfaction with life and religious coping will allow women to be better understood leading to more holistic care. This study aimed to determine the relationship between religious coping styles and fertility adjustment, infertility distress and satisfaction with life in a group of women with infertility.

Materials and Method

Design

The study is a cross-sectional design.

Population and Sample

The population of this research consisted of 346 primary women with infertility who referred to Assisted Reproductive Treatment Center (IVF Center) of a university hospital located in the central Anatolia region of Turkey in 2019. The sample size in the study was calculated using power analysis. In the literature, Infertility Distress Scale (IDS) total mean score of women was reported to be 37.83 ± 8.31 (Tural & Celik, 2019). One hundred and sixty-eight women with infertility were planned to be included in the study, taking into account the parameters of $= 0.05$ first type error level and $= 0.10$ s type error level, 0.90 test power, approximately 0.05 difference for mean: 37.8 and SD: 8.3. Accordingly, 168 women who were literate, married, aged between 19 and 49, had at least 6 months of infertility treatment history, had no chronic physical or psychological disease, and who volunteered to participate in the study were included in the study.

Data Collection Tools

Data were collected using form including sociodemographic and health status, "Religious Coping Scale," "Fertility Adjustment Scale (FAS)," "Infertility Distress Scale (IDS)" and "Satisfaction with Life Scale (SWLS)."

Religious Coping Scale

The Turkish adaptation study of the Religious Coping Scale Table 1, which was developed by Abu-Raiya et al. (2008) to measure religious coping attitudes of individuals, was carried out by Eksi and Sayin (2016). The scale consists of 10 items

Table 1 Religious Coping Scale

After reading the statements below, consider how you generally behave when you encounter a problem in life, and choose the option that best reflects your situation. *(1)Almost never (2)Rarely (3)Sometimes (4)Often*

(1)Almost never (2)Rarely (3)Sometimes (4)Often					
1	When I encounter a problem in life, I try to be closer to God	1	2	3	4
2	When I encounter a problem in life, I think it is a test from God to deepen my faith	1	2	3	4
3	When I encounter a problem in life, I seek the love and patronage of God	1	2	3	4
4	When I encounter a problem in life, I read the Quran to find solace	1	2	3	4
5	When I encounter a problem in life, I ask God's forgiveness	1	2	3	4
6	When I encounter a problem in life, I remind myself that God has commanded to be patient	1	2	3	4
7	When I encounter a problem in life, I do my best and leave the rest to God's discretion	1	2	3	4
8	When I encounter a problem in life, I believe that I am punished by God for the sins I have committed	1	2	3	4
9	When I encounter a problem in life, I wonder what I did to cause God to punish me	1	2	3	4
10	When I encounter a problem in life, I think God punishes me because I am not a loyal enough servant	1	2	3	4

and two subscales as positive religious coping and negative religious coping. Positive and negative religious coping scores are calculated separately. A total religious coping score is not obtained. The raw score that can be obtained from the positive religious coping subscale ranges between 7 and 28, and the raw score that can be obtained from the negative religious coping subscale ranges between 3 and 12. While a higher score on the positive religious coping subscale reflects more positive religious coping, the higher score on the negative religious coping subscale reflects more negative religious coping. The scale items are answered by participants on a 4-point Likert scale rating "1: Almost Never, 2: Rarely, 3: Sometimes, and 4: Often." In the study of Eksi and Sayin (2016), the Cronbach's alpha value of the scale was 0.91 for the positive religious coping and 0.86 for the negative religious coping. In this study, the Cronbach's alpha value of the scale was 0.91 for the positive religious coping and 0.91 for the negative religious coping.

Fertility Adjustment Scale (FAS)

The Fertility Adjustment Scale was developed by Glover et al. (1999) to standardize the measurement of psychological adjustment in infertility. Turkish validity and reliability of the scale were conducted by Arslan and Okumus (2016). FAS is considered to be a heterogeneous concept that includes cognitive, behavioral and emotional aspects. The scale is considered a useful tool in evaluating the effects of the treatment process on the psychosocial adjustment and psychological needs of individuals. This 4-point Likert-type scale is answered as "1: Strongly disagree, 2: Disagree, 3: Agree, and 4: Strongly agree." The highest possible score from the scale is 40 and the lowest is 10. The total score is obtained by scoring on individual items. A high score is considered to be an indicator of poor

adjustment. The reliability coefficient of the scale was determined as 0.85 in the original. Arslan and Okumus (2016) determined that the Cronbach alpha coefficient of the scale was 0.81. In this study, the Cronbach Alpha value of the scale was found to be 0.79.

Infertility Distress Scale (IDS)

The IDS was developed by Akyuz et al. (2008) to determine the level of psychological distress caused by infertility and the treatment process in Turkish women. The Cronbach alpha value of the item scores of the scale was 0.89. In the scale, there are statements used to describe the emotional states of people and there are boxes showing the frequency of these emotions next to them. After reading each statement, the person expresses how he/she feels about not being able to have a child, by marking the most appropriate box next to the statements. It consists of a total of 21 items, 16 positive and 5 negative statements on a 4-point Likert-type scale. Positive statements are scored on a rating from 1 (never) to 4 (always), and negative statements are scored oppositely. The scale does not have subscales and the lowest possible score from the scale is 21 and the highest score is 84. A high score on the scale indicates a high level of infertility distress. The Cronbach alpha coefficient of the scale was determined as 0.93 by Akyuz et al. (2008). In this study, the Cronbach alpha value of the scale was found to be 0.91.

Satisfaction with Life Scale (SWLS)

The scale was developed by Diener et al. (1985) to assess satisfaction with people's lives as a whole and the Turkish validity and reliability study of the scale was conducted by Dagli and Baysal (2016). This 5-item scale is a 5-point Likert type. The scale items are answered by the participants as "strongly disagree (1), somewhat disagree (2), neither agree nor disagree (3), somewhat agree (4) and strongly agree (5)." The possible score that can be obtained from the scale varies between 5 and 25. The high score obtained from the scale indicates higher satisfaction with life. In the study of Dagli and Baysal (2016), the Cronbach alpha value of the scale was found to be 0.88. In this study, the Cronbach alpha value of the scale was found to be 0.91.

Application

Data forms were given to women with infertility in a sealed envelope before the examination who had previously provided written consent that they volunteered to participate in the study. The women were asked to fill in the forms in a single room where privacy was preserved, put them in an envelope and put them in the box in the room. Filling out the data forms took approximately 15–20 min.

Statistical Analysis

The SSPS 23.0 program was used to evaluate the data obtained from the study. The normality of the data was evaluated using the Kolmogorov–Smirnov test. Since the data did not meet the parametric conditions (because the distribution of the data was not homogeneous), the Mann Whitney U test was used for two independent groups and the Kruskal Wallis test for more than two groups. In addition, the relationship between the mean scores of the Religious Coping Scale, FAS, IDS, and SWLS of women was evaluated by Spearman correlation analysis and multiple regression analysis. Statistical significance was examined at the 0.05 significance level in evaluating the data.

Results

The mean age of the women in the study was 32.76 ± 5.78 years and the duration of marriage of 36.9% was 1–5 years. Of the women, 39.9% and 45.8% of their spouses were high school graduates. 76.2% did not work and about half (53.6%) of them stated their economic status was at a moderate level Table 2.

51.2% of the women wanted children for 1–5 years and they have used family planning methods to prevent pregnancy. 30.4% of the participants had a diagnosis of infertility for 1–2 years, 75.6% had received treatment before having a child, and 59.8% used the fertilization treatment method Table 3.

Women's positive religious coping mean score was 26.23 ± 3.08, negative religious coping mean score was 3.54 ± 1.46, SWLS mean score was 21.20 ± 3.70, IDS mean score was 72.36 ± 5.82 and FAS mean scores was 19.58 ± 3.96 Table 4.

Positive religious coping score of women was 26.23 ± 3.08, and negative religious coping score was 3.54 ± 1.46.

A weak negative correlation was found between women's positive religious coping mean score and IDS mean score ($p < 0.05$). There was no significant correlation between women's negative religious coping mean score and their FAS, IDS and SWLS scores ($p > 0.05$) Table 5.

In the multiple regression analysis, it was determined that the importance women attached to positive religious coping, fertility adjustment and satisfaction with life were the factors that significantly affected the level of infertility distress ($R = 0.506$, $R^2 = 0.256$, $F = 14.015$, $p = 0.000$). The importance women attached to positive religious coping, fertility adjustment and satisfaction with life explained 25.6% of the total variance in the level of infertility distress. The high importance attached to positive religious coping, fertility adjustment and life satisfaction reduced the level of infertility distress. However, in the multiple regression analysis, negative religious coping was the excluded variable Table 6.

The study found that there was a relationship between women's positive religious coping and their educational level ($KW = 13.955$; $p < 0.01$), duration of infertility diagnosis ($KW = 8.544$; $p < 0.05$), and history of obtaining treatment

Table 2 Participant Demographic Characteristics

Characteristics	*n*	%
Age (year) ($X \pm$ SD)	32.76 ± 5.78	
Duration of marriage		
1–5 year	62	36.9
6–10 year	44	26.2
11–15 year	41	24.4
16 year and above	21	12.5
Educational level		
Primary school	24	14.3
Secondary school	31	18.5
High school	67	39.9
University	46	27.4
Working status		
Yes	40	23.8
No	128	76.2
Economic status		
Good	77	45.8
Moderate	90	53.6
Bad	1	0.6
Smoking habit		
Smoker	18	10.7
Never smoker	137	81.5
Quit smoking	13	7.7
Presence of chronic illness		
Yes	36	21.4
No	132	78.6
General health assessment		
Good	76	45.2
Moderate	90	53.6
Bad	2	1.2

to have a child ($Z = -2.610$; $p < 0.01$). It was determined that women who were secondary school graduates, who were infertile for 11 years or more, and who received treatment to have a child beforehand, had high levels of positive religious coping. Similarly, the negative religious coping levels of women who did not have treatment to have children were found to be high ($Z = -3.961$; $p < 0.01$).

Discussion

In many cultures around the world, motherhood is an important goal for many women (Oti-Boadi & Asante, 2017). However, increasing infertility due to various factors is seen as a developmental problem that includes individual and spousal

Table 3 Infertility-related characteristics of women

Characteristics	n	%
Duration of wanting to have a child		
1–5 years	86	51.2
6–10 years	42	25.0
11–15 years	25	14.9
16 years and above	15	8.9
History of using family planning method		
Yes	86	51.2
No	82	48.8
Duration of infertility diagnosis		
1–2 years	51	30.4
3–5 years	43	25.6
6–10 years	42	25.0
11 years and above	32	19.0
History of getting treatment to have a child		
Yes	127	75.6
No	41	24.4
Treatment methods for infertility		
Fertilization	100	59.8
In vitro fertilization	68	40.2

Table 4 Distribution of Religious Coping Scale, FAS, IDS and SWLS mean scores of women

Scales	Min–max scores possible	Min–max scores obtained	$X \pm$ SD
Religious Coping Scale			
Positive religious coping	7–28	7–28	26.23 ± 3.08
Negative religious coping	3–12	3–11	3.54 ± 1.46
Fertility Adjustment Scale Infertility	10–40	13–30	19.58 ± 3.96
Distress Scale	21–84	52–82	72.36 ± 5.82
Satisfaction With Life Scale	5–25	5–25	21.20 ± 3.70

Table 5 Correlation of Religious Coping Scale and FAS, IDS, SWLS mean scores of women

Scales	Religious coping scale	
	Positive religious coping	Negative religious coping
Fertility Adjustment Scale	r = −0.014; p = 0.860	r = 0.102; p = 0.186
Infertility Distress Scale	r = −0.186; p = 0.016*	r = 0.055; p = 0.481
Satisfaction With Life Scale	r = 0.068; p = 0.378	r = −0.126; p = 0.105

*$p < 0.05$

Table 6 Stepwise multiple regression analysis of women's infertility distress levels in terms of various variables

Variables	B	SE	ß	t	*p* value
Positive religious coping	0.317	0.131	0.168	2.419	0.017*
Negative religious coping	−0.076	0.279	-0.019	−0.273	0.785
Fertility adjustment	−0.531	0.100	−0.362	−5.300	0.000**
Satisfaction with life	0.425	0.108	0.270	3.943	0.000**
	$R=0.506$, $R^2=0.256$, $F=14.015$, $p=0.000$**				

*$p<0.05$;** $p<0.01$

relationships rather than a medical condition, especially due to the emotional problems it creates in women (Karaca & Unsal, 2015). The woman, who experiences intense stress, searches for a safe-haven where she can take shelter when she cannot overcome it and finds this security blanket in religion (Uysal et al., 2017). This study examined the relationship between religious coping and fertility adjustment, infertility distress, satisfaction with life in women with infertility and the findings were discussed in line with the literature.

Women with infertility use more than one religious coping method to cope with their stressful situations (Mirghafourvand et al., 2019; Roudsari et al., 2014). In our study, it was determined that women with infertility had high positive religious coping and low negative religious coping levels. This finding is in parallel with the literature (Aflakseir & Mahdiyar, 2016; Elgohail, 2017; Oti-Boadi & Asante, 2017; Singh, 2019). In a qualitative study conducted with Muslim women, it was found that some women coped with the problem of inability to have children by turning to religious beliefs and religious practices such as submitting themselves to Allah, reading the Quran and praying, while others questioned why the infertility problem happened to them and tried to find a reason (Karaca & Unsal, 2015). In a qualitative study conducted with Iranian and British women with infertility, it was determined that the majority of women with infertility used various positive religious and spiritual coping strategies such as participating in religious practices, seeking support from clergy, religious submission, belief in spiritual support, belief in miracles, and belief in the timing of having children (Roudsari et al., 2014). Similarly, in another study, it was reported that 79.3% of women with infertility used evaluative coping strategies such as praying and trusting God (Farzadi et al., 2007). In a study conducted with the majority of Christian (88%) women with infertility, it was found that women adhered to their religion to cope with their condition, most women (99%) prayed to cope with infertility, believed that it was God's will and thought that if God chose, they would eventually become pregnant, and 98% hoped for a miracle (Donkor and Sanndall 2009). In another study, it was found that 24% of women reported that they became more religious after the infertility problem occurred (Domar et al., 2005). In addition, in a study consisted of 69% Muslim and 31% Christian women with infertility in West Africa, women were found to adopt coping strategies such as seeking treatment with traditional and biomedical methods, adhering to religious beliefs and practices, and self-isolation (Hess et al.,

2018). These findings show that all Muslim women who were included in the study adopted intense religious practices in dealing with the infertility problem they experienced. This situation can be explained by the awareness of the necessity to adopt approaches such as patience, acceptance and submission in life events that are perceived as calamities or problems in Islam (Eryucel, 2013).

Infertility adjustment is a cognitive process in which the individual thinks and evaluates the possibility of having or not having a child (Arslan & Okumus, 2016). Women need to adjust to infertility and cope with any negativity that may occur. In this adjustment process, adopting positive coping behaviors, maintaining a positive attitude, and being comfortable while waiting for test results can increase the competence of individuals related to coping with psychological changes related to treatment (Ozan & Duman, 2018). In our study, it was determined that the fertility adjustment levels of women were relatively good; however, the religious coping style was not related to fertility adjustment. Contrary to our study findings, in a study conducted in Iran, it was found that active religious coping helped women with infertility to adjust to their situation. In the same study, it was emphasized that women took the necessary action in the process of infertility treatment by using active coping and left the result to Allah, so they were less likely to experience psychological health problems (Aflakseir & Mahdiyar, 2016).

Being religious can benefit women with infertility by providing them the feeling that they are not alone and by reducing social isolation. On the other hand, religious pressures emphasizing to have children can negatively affect psychology due to infertility (Domar et al., 2005; Mirghafourvand et al., 2019). In our study, it was determined that the level of psychological distress caused by infertility and the treatment process was high in women. However, as the level of positive religious coping increased, the level of infertility distress decreased. The fact that women experiencing infertility distress in Turkey turn to religious practices to relax may have had an artificial positive effect on women. Similarly, in another study, it was determined that there was a negative relationship between religiosity, spirituality and experiencing fertility problems in women with infertility, that is, as religiosity increased, psychological distress was experienced more due to low levels of infertility (Domar et al., 2005). In the literature, it is emphasized that religion can increase the level of infertility because some women use negative religious coping methods such as getting angry with God for their situation (Oti-Boadi & Asante, 2017). In line with these findings in the literature, prospective studies focused on religious coping may help to reveal the effects on infertility distress.

Life satisfaction is one of the basic elements that people should have in order to be happy and to have meaning in their lives (Dagli & Baysal, 2016). In addition to the benefits of religion in coping with challenging life events and forming a general life philosophy, it is also effective in leading a happy and fulfilled life (Ayten, 2013; Uysal et al., 2017). It is emphasized that obtaining support from God, which is a positive religious coping method, can improve satisfaction with life (Eryucel, 2013). In our study, it was determined that satisfaction with life levels of women were partially high, however, positive or negative religious coping was not associated with satisfaction with life. In other studies conducted in Turkey, it was found that satisfaction with life of women with infertility

decreased, especially in emotional, mental and physical areas (Kahyaoglu Sut & Balkanli Kaplan, 2015) and their overall health status was worse than fertile women (Sezgin et al., 2016).

In the literature, there was no study examining the relationship between satisfaction with life and religious coping styles of women with infertility. However, in a study conducted with healthy adults, it was found that there was a positive significant relationship between positive religious coping and satisfaction with life (Batan & Ayten, 2015). The study findings show that satisfaction with life is partially affected in women with infertility, and religious coping has no effect on the satisfaction with life of women with infertility.

In our study, it was determined that the importance women attached to positive religious coping, fertility adjustment and satisfaction with life explained 25.6% of the total variance in the level of infertility distress. Considering the studies in the literature, it is seen that positive religious coping has a positive effect on protecting and improving psychosocial health in women with infertility (Aflakseir & Mahdiyar, 2016; Domar et al., 2005; Elgohail, 2017; Oti-Boadi & Asante, 2017). The findings of the study show that positive religious coping, fertility adjustment and satisfaction with life are important determinants of infertility distress. This finding emphasizes the importance of addressing religious coping approaches in protecting psychosocial health by increasing the adjustment of women with infertility.

The study determined that women who were secondary school graduates, had been 11 years or more infertile and received treatment to have children before, had high levels of positive religious coping. In a study conducted in Ghana, it was found that age was a significant predictor of positive religious coping and explained 9.1% of the variance in positive religious coping, and infertility duration explained 7.5% of the variance in negative religious coping (Oti-Boadi & Asante, 2017). However, another study found that there was no relationship between religious coping and marriage age and duration of treatment (Singh, 2019). Although the findings of the study stem from the characteristics of the sample group, it shows that more studies are needed to determine other factors affecting religious coping in women with infertility.

Limitations

This study has some limitations. The study findings may be a limitation since the study was conducted with women who applied for infertility to a single university hospital at a certain time. Information about religious coping, fertility adjustment, being affected by infertility, and satisfaction with life is based on the self-report of women with infertility. In addition, the study findings may be specific to Turkish society due to cultural differences. However, this study was a cross-sectional study that involved a convenience sample of women with infertility and prospective studies are needed to determine whether positive religious coping is causally related to fertility adjustment, being affected by infertility, and satisfaction with life.

Conclusion

In this study, a negative correlation was found between women's positive religious coping levels and the level of psychological distress due to infertility. However, the study showed that there was no significant correlation between women's negative religious coping and their infertility adjustment, infertility distress, and satisfaction with life. This finding suggests that healthcare professionals should provide positive religious coping for women with infertility with a holistic approach. While giving this support, it is necessary to reveal existing coping methods or to help develop new coping methods. In this context, it is recommended to raise awareness about positive religious coping approaches, to provide psychoeducation by experts in the field of religious coping methods or to provide support for psychosocial counseling after the diagnosis of infertility. In addition, carrying out studies evaluating the effects of positive or negative religious coping methods adopted by women with infertility are recommended.

Author Contributions G.D., F.T.Y. and A.G.Y were responsible for study concept and design, acquisition of data and drafting of the manuscript. G.D. and F.T.Y were responsible for analysis and interpretation of data and critical revision of the manuscript for important intellectual content. G.D. was responsible for final approval of the version to be published and agreement to be accountable for all aspects of the work.

Funding This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declaration

Conflict of interest The authors declare that they have no competing interests.

Ethical Standards Before starting the study, written permission was obtained from the ethics committee of a university (decision no: 2020–06/01) and the institution where the research was conducted. In addition, written and verbal consent was obtained from women, who agreed to participate in the study, by providing information about the purpose and confidentiality of the study. All procedures in the studies were in accordance with the ethical standards of the institutional and national research committees, and with the 1964 Helsinki declaration and its later amendments.

References

Abu-Raiya, H., Pargament, K. I., Mahoney, A., & Stein, C. (2008). A psychological measure of Islamic religiousness (PMIR): Development and evidence for reliability and validity. *International Journal for the Psychology of Religion, 18*, 291–315. https://doi.org/10.1080/10508610802229270

Aflakseir, A., & Mahdiyar, M. (2016). The role of religious coping strategies in predicting depression among a sample of women with fertility problems in Shiraz. *Journal of Reproduction & Infertility, 17*(2), 117–122.

Akyuz, A., Gurhan, N., & Bakir, B. (2008). Development and validation of an infertility distress scale for Turkish women. *TAF Preventive Medicine Bulletin, 7*(6), 469–476.

Altıntop, I., & Kesgin, B. (2018). Level of anxiety, resilience and coping strategies of infertile individual in treatment. *The Journal of International Social Research, 11*(55), 755–768.

Arslan, I., & Okumus, H. (2016). Psychometric properties of the Turkish version of the fertility adjustment scale. *Turkiye Klinikleri Journal of Nursing Sciences, 8*(3), 224–231.

Ayten, A. (2013). Religion and health: A study on the relationship between individual religiosity, health behaviour and life satisfaction. *Journal of Academic Researches in Religious Sciences, 13*(3), 7–31.

Batan, S. N., & Ayten, A. (2015). A study on the relationship among psychological resilience, religious coping and life satisfaction. *Academic Research Journal of Religious Sciences, 15*(3), 67–92.

Centers for Disease Control and Prevention (CDC). (2014). *National public health action plan for the detection, prevention, and management of infertility.* Retrieved November 8, 2020 from https://www.cdc.gov/reproductivehealth/infertility/pdf/drh_nap_final_508.pdf

Dagli, A., & Baysal, N. (2016). Adaptation of the satisfaction with life scale into Turkish: The study of validity and reliability. *Electronic Journal of Social Scieces, 15*(59), 1250–1262.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.

Domar, A. D., Penzias, A., Dusek, J. A., Magna, A., Merarim, D., Nielsen, B., et al. (2005). The stress and distress of infertility: Does religion help women cope? *Sexuality, Reproduction and Menopause, 3*(2), 45–51.

Donkor, E. S., & Sandall, J. (2009). Coping strategies of women seeking infertility treatment in Southern Ghana. *African Journal of Reproductive Health, 13*(4), 81–93.

Eksi, H., & Sayin, M. (2016). *The adaptation of Religious Coping Scale into Turkish language: A study of bilingual equivalance, validity and reliability*. The AGP Humanities and Social Sciences Conference. Berlin: BAU International Berlin University.

Elgohail, M. (2017). *Religiosity, depression, and infertility-related stress in muslim women struggling with infertility and living in the West*. Dissertation. Master of Science in Psychology, Drexel University.

Eryucel, S. (2013). Life events and positive religious coping. *Mustafa Kemal University Journal of Social Sciences Institute, 10*(23), 251–271.

Farzadi, L., Mohammadi-Hosseini, F., Seyyed-Fatemi, N., & Alikhah, H. (2007). Assessment of stressors and coping strategies of women with infertility. *Journal of Medical Sciences, 7*(4), 603–608.

Glover, L., Hunter, M., Richards, J. M., Katz, M., & Abel, D. P. (1999). Development of the fertility adjustment scale. *Fertility and Sterility, 72*(4), 623–628.

Guneri, S. E. (2011). *An analysis of hope/hopelessness conditions of women with infertility on the basis of learned helplessness theory.* Dissertation. Doctorate Thesis in Health Sciences, Ege University.

Hess, R. F., Ross, R., & GililandJr, J. L. (2018). Infertility, psychological distress, and coping strategies among women in Mali, West Africa: A mixed-methods study. *African Journal of Reproductive Health, 22*(1), 60–72. https://doi.org/10.29063/ajrh2018/v22i1.6

Kahyaoglu Sut, H., & Balkanli Kaplan, P. (2015). Quality of life in women with infertility via the fertiqol and the hospital anxiety and depression scales. *Nursing and Health Sciences, 17*(1), 84–89.

Karaca, A., & Unsal, E. (2015). Psychosocial problems and coping strategies among Turkish women with infertility. *Asian Nursing Research, 9*, 243–250.

Karakas, C. A., & Koc, M. (2014). The relationship between religious coping and coping with stress methods: An analysis from various of variable. *Journal of the Human and Social Science Researches, 3*(3), 610–631.

Mirghafourvand, M., Azizeh Farshbaf-Khalili, A., & Ghanbari-Homayi, S. (2019). Marital adjustment and its relationship with religious orientations among Iranian infertile and fertile women: A cross-sectional study. *Journal of Religion and Health, 58*, 965–976. https://doi.org/10.1007/s10943-018-0566-6

Oti-Boadi, M., & Asante, K. O. (2017). Psychological health and religious coping of Ghanaian women with infertility. *BioPsychoSocial Medicine, 11*(20), 1–7. https://doi.org/10.1186/s13030-017-0105-9

Ozan, Y. D., & Duman, M. (2018). The relationship between fertility adjustment and self-efficacy of women in the period of infertility treatment. *The Journal of Gynecology - Obstetrics and Neonatology, 15*(2), 43–46.

Pargament, K. I., & Raiya, H. A. (2007). A decade of research on the psychology of religion and coping: Things we assumed and lessons we learned. *Psyke & Logos, 28*, 742–766.

Roudsari, R. L., Allan, H. T., & Smith, P. A. (2014). Iranian and English women's use of religion and spirituality as resources for coping with infertility. *Human Fertility, 17*(2), 114–123. https://doi.org/10.3109/14647273.2014.909610

Sezgin, H., Hocaoglu, C., & Guvendag-Guven, E. S. (2016). Disability, psychiatric symptoms, and quality of life in women with infertility: Cross-sectional study in Turkey. *Shanghai Archives of Psychiatry, 28*(2), 86–94.

Singh, D. (2019). Coping characteristics of women suffering from primary infertility. *International Journal of Contemporary Medical Research, 6*(6), 15–20. https://doi.org/10.21276/ijcmr.2019.6.6.44

Tural, N. G., & Celik, S. A. (2019). Determination of the relationship between the levels of psychological effects of infertility and social support perceived by primary women with infertility. *Journal of Health Science and Profession, 6*(1), 91–104.

Uysal, V., Goktepe, A. K., Karagoz, S., & Ilerisoy, M. (2017). A research about the relationships and interactions between religious coping, hope, life satisfaction and psychological resilience. *International Journal of Theological and Islamic Studies, 52*, 139–160.

Vizheh, M., Pakgohar, M., Rouhi, M., & Veisy, A. (2015). Impact of gender infertility diagnosis on marital relationship in infertile couples: A couple based study. *Sexuality and Disability, 33*(4), 457–468.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.