Original article

Is religion beneficial for mental health? A 9-year longitudinal study

Gabriele Prati

Department of Psychology, University of Bologna (Italy), Piazza Aldo Moro, 90, 47521 Cesena (FC), Italy

ABSTRACT

Background/Objective: This study aimed to investigate the within-person and between-person effects of religious variables on mental health and vice versa.

Method: Using a large sample of adults residing in Germany from the GESIS Panel study ($N = 8146$), the random intercept cross-lagged panel model was used. Data on six dimensions of religion (i.e., membership in a religious community; attendance at a place of worship; frequency of prayers; importance of religion in life; and participation in a religious organization) and three indicators of mental health (i.e., depression symptoms, happiness, and life satisfaction) were collected.

Results: The findings revealed that there is almost no evidence of lagged effects of religion on mental health and limited evidence regarding the role of mental health in influencing the dimensions of religion. Moreover, at the between-person level, there was some evidence of significant covariance between the trait-like components, indicating stable, trait-like differences between persons on religion and mental health.

Conclusions: The beneficial effect of religion on mental health may have been exaggerated in previous research.

Introduction

From a theoretical viewpoint, the relationship between religion and mental health has been explained by several theoretical models (e.g., Hood, Hill & Spilka, 2018; Koenig, 1997; Pargament, Maton & Hess, 1992; Schieman, Bierman & Ellison, 2013). In these models, the relationship between religious dimensions and mental health can be explained based on social and psychological mechanisms (e.g., George, Ellison & Larson, 2002; Levin & Chatters, 1998). Religion and especially religious attendance may influence mental health by providing or promoting social resources such as social cohesiveness, social interaction with community members (e.g., social networks), and social support (e.g., Hayward & Krause, 2014; Koenig et al., 1997). Religious practices and beliefs may benefit mental health through their influence on appraisals of and coping with major life stressors (Harrison et al., 2001; James & Wells, 2003; Pargament, Smith, Koenig & Perez, 1998). Several authors highlighted the mediating function of control beliefs, meaning-making, and self-regulation of religion that is thought to have a positive effect on mental health (e.g., James & Wells, 2003; Steger & Frazier, 2005). Finally, religion may influence mental health through the promotion of health-related behaviors (e.g., Levin & Chatters, 1998).

The religiosity-mental health literature, however, suffers from methodological limits and issues that make the study of causality and causal effects problematic and open to debate (e.g., VanderWeele, Jackson & Li, 2016). In the literature on religion and mental health, the strength of causal language might not correspond to the strength of causal inference (Prati, 2023). Previous meta-analyses revealed that greater religiousness is associated with better mental health (Hackney & Sanders, 2003; Hodapp & Zwingmann, 2019; Salsman et al., 2015; Sawatzky, Ratner & Chiu, 2005; Smith, McCullough & Poll, 2003; Yaden et al., 2022; Yonker, Schnabelrauch & DeHaan, 2012). However, the vast majority of the studies included in these meta-analyses had a cross-sectional design. It is well known that causal inference cannot be assumed from cross-sectional studies. For instance, the relationship between religion and mental health may be influenced by third variables (e.g., genetic or cultural factors) or subject to reverse causality (VanderWeele et al., 2016). There is evidence that depression leads to a lower frequency of subsequent religious service attendance (e.g., Li et al., 2016; Maselko et al., 2012; VanderWeele et al., 2016). From a theoretical point of view, it can be expected that people who have a diagnosis of major depressive disorder are less likely to attend religious services. It is thus very challenging to determine from these meta-analyses the actual strength of the causal inference.

To provide stronger evidence of causal relationships, a recent meta-analysis of longitudinal studies investigating the relationship between religion and mental health has been conducted (Garssen, Visser & Pool, 2021). This meta-analysis revealed a significant, albeit small, effect of religion on mental health. Among the eight religion predictors, only two

(i.e., importance of religion and attendance at religious services) were significantly related to mental health. According to this meta-analysis, the association between religion and mental health is of modest magnitude, and previous meta-analyses, including cross-sectional research, overestimate the potential effect of religion on mental health.

It should also be noted that previous meta-analyses may have been influenced by publication bias. Indeed, it is possible to hypothesize that publication bias could play a role in the reporting of statistically significant findings, overestimated effect sizes, and inflated rates of false positives. Consistent with this hypothesis, the findings of a recent study using three previously unpublished longitudinal data sets from publicly available sources revealed that the magnitude of the effect of religion on mental health was very small or negligible and questioned its practical significance (Prati, 2023).

A within-person theoretical perspective in the religion and mental health literature

To strengthen research on the relationship between religion and mental health, the use of a methodology to assess causal effects with longitudinal data has been advocated (e.g., VanderWeele et al., 2016). Longitudinal models of change offer the ability to disaggregate between-person (i.e., interindividual processes) and within-person (i.e., intraindividual processes) effects (Curran & Bauer, 2010). Between-person effects (e.g., "Do individuals reporting higher religious attendance have a lower risk of developing depressive symptoms compared to those with lower religious attendance?") are different from within-person effects (e.g., "When individuals report increased levels of religious attendance than usual, they will experience a subsequent decrease in depressive symptoms"). Many theories in the religion and mental health literature either implicitly or explicitly hypothesize processes on a within-person level. For instance, among the theoretical models of how prayer may promote mental health, it is postulated that prayer may promote mental health through physiological (e.g., induction of relaxation) and psychological (e.g., the provision of meaning and hope) changes (Breslin & Lewis, 2008). The underlying theory posits what should be the expected outcomes of praying for a given individual (i.e., within-person effect). However, if the theory posits that individuals are more likely to be less depressed after praying, this does not imply that people who pray more tend to have a lower likelihood of experiencing depression compared to people who pray less (i.e., the between-person effect). For instance, the signs of the associations at the within-person and between-person levels might be in opposite directions. Let's consider the case of praying as a coping strategy to relieve negative emotions. We may expect that a given individual is more likely to experience diminished negative emotions as a result of praying (i.e., the within-person effect), but at the same time, people experiencing greater negative emotions tend also to report a greater frequency of praying compared to people reporting fewer negative emotions (i.e., the between-person effect). Therefore, failing to recognize the distinction between the between-person effect (i.e., across a set of individuals) and the within-person effect (i.e., within a given individual) would be an error of inference (Curran & Bauer, 2010). It should be noted that the research conducted to investigate the theories that posit a positive within-person effect of religion on mental health often involves between-person data and analysis (e.g., Hood et al., 2018; Koenig, 1997; Pargament et al., 1992; Schieman et al., 2013).

Cross-sectional studies as well as longitudinal analyses that conflate within-person and between-person effects (e.g., analysis of covariance of the outcome with the baseline as a covariate) are poorly suited for investigating within-person effects (Curran & Bauer, 2010). Moreover, the approaches that allow the decomposition into within-person (e.g., within-person cross-lagged effects) and between-person (e.g., stable trait factors) effects are particularly suited from a causal inference perspective (e.g., Falkenström, Solomonov & Rubel, 2022; Hamaker, 2023, 2015; Lüdtke & Robitzsch, 2022). However, the decomposition into within-person and between-person components has rarely been employed in the religion-mental health literature.

Two studies investigated the within-person cross-lagged associations between religiosity and subjective well-being. In one study (Joshanloo, 2021), there were no significant within-person associations between religiosity and life satisfaction. One of the drawbacks of this study was that the assessment of general religiosity did not allow for the distinction of several dimensions of religious participation. In a subsequent study (Joshanloo, 2022), the relationships between religiosity and subjective well-being were trivial and nonsignificant. One of the limitations of these two current studies was the use of a long interval (up to ten years) between measurement points. It is possible that the cross-lagged associations between religiosity and subjective well-being may occur over a shorter time period (e.g., a few months rather than years) and disappear when using a long interval. Moreover, an additional limitation of these studies is that they focus on well-being and do not include measures of symptoms of psychopathology.

Purpose of the present study

The aim of the current study was to investigate the within-person reciprocal associations between religion and mental health. In this study, the focus is on potential within-person associations across a shorter (i.e., approximately six months) time interval than previous studies (Joshanloo, 2021, 2022). Based on the two continua model of mental health (Keyes, 2005), mental illness and well-being were included in the study because they are considered distinct (albeit related) domains of mental health. In addition, religion is considered a multidimensional construct (e.g., Hood et al., 2018; Koenig, 1997; Pargament et al., 1992; Schieman et al., 2013), and, thus, different dimensions of religion were included in the study.

Material and methods

Sample and procedure

Participants were panelists of the GESIS Panel study (Bosnjak et al., 2018; GESIS, 2023). Panelists of the GESIS Panel study are a representative sample of German-speaking adults residing in Germany. The GESIS Panel Study has been conducted every year since 2013. The informed consent has been obtained from participants.

The sample size for the current study was determined based on the availability of data on the variables of interest and the number of waves. Specifically, after excluding participants who had missing data on all study variables, the number of participants for the current study was 8146. In the current study, all available waves of data, beginning from the first wave to 2022 (Wave jb), were used. Given that mental health and religious variables were not assessed across all waves, the number of waves of data varied in each analysis.

Female respondents constitute 52.8 % of the sample. In the first wave of GESIS Panel study, the age of participants ranged from 18 to 70 years ($M = 44.52$; $SD = 14.67$). Most participants (95.3 %) were German citizens, while other participants were citizens of other European Union countries (EU 28; 2.5 %) and citizens of non-EU 28 countries (2.2 %). Respondents' highest level of education was, as follows: 1.2 % without a degree of lower secondary school; 20.6 % lower secondary school; 25.8 % secondary school; 1.3 % polytechnic secondary school GDR (Degree 8th or 9th grade); 8.0 % polytechnic secondary school GDR (Degree 10th grade); 9.3 % advanced technical college certificate; 32.7 % general qualification for university entrance; 0.7 % another degree, 0.5 % student. Information about formal diagnoses for the participants was not available. Table S1 displays the sociodemographic characteristics of the sample.

Membership in a religious community, religiosity, attendance at a place of worship, and frequency of prayers have been assessed every year in August or September in most of the waves. Importance of religion

in life and participation in a religious organization have been assessed every year in April or May in most of the waves. Life satisfaction, happiness, and depression have been assessed every year in and around March in most of the waves.

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Instrument

The eight-item Centre for Epidemiologic Studies Depression Scale (CES-d-8; Schlechter, Ford & Neufeld, 2022) was used to assess depression symptoms. Specifically, participants reported their experience of depressive symptoms using a six-point scale ranging from 1 = *never* to 6 = *always*. Cronbach's alpha ranged from α =0.86 to α = 0.88 across the waves. A mean score was computed (after accounting for the reverse-scored items) so that high scores represent higher levels of depression symptoms.

Two questions were used to measure happiness and life satisfaction. Specifically, participants were asked: "All things considered, how happy would you say you are at the moment?" and "All things considered, how satisfied are you with your current life?" For happiness, the response options ranged from 0 =*extremely unhappy* and 10 = *extremely happy*, whereas for life satisfaction, the response options ranged from 0 =*extremely dissatisfied* and 10 = *extremely satisfied*. Given that in the last waves, a 1-to-5 response option was used to measure life satisfaction and happiness, the responses collected from all the waves were standardized before the analysis.

Membership in a religious community was assessed using the following question, "Which church or religious community are you a member of?" Participants were provided with several response options. In the current study, the responses were recoded into a dummy variable with 0 = No religious community and 1 = Membership in a religious community.

Religiosity was measured through the following question, "How religious are you?" The responses were provided on a 4-point scale ranging from 1 = *Not religious at all* to 4 = *Very religious*.

Attendance at a place of worship was assessed using the question, "How often have you been in the church, mosque, synagogue or other place of worship for the last 12 months?" Respondents provided their responses using a 6-point scale ranging from 1 = *More than once a week* to 6 = *Never*. The answers were reverse-scored so that higher scores reflect a higher frequency of attendance at a place of worship.

Frequency of prayers was determined using this question: "How many times did you pray last month?" Participants were asked to provide the frequency using a 6-point scale ranging from 1 = *Several times a day* to 6 = *Never*. The answers were reverse-scored so that a higher score reflects a higher frequency of prayers.

Importance of religion in life was ascertained by asking participants to indicate the extent to which religion is important in their life. Participants provided their responses using a 4-point scale ranging from 1 = *Not at all important* to 4 = *Very important*.

Participation in a religious organization was assessed by asking respondents to indicate how often during the last 12 months they participated in a church or religious organization. Respondents provided their answers using a 4-point scale ranging from 1 = *Never* to 4 = *Often*.

Statistical analysis

The random intercept cross-lagged panel models (RI-CLPMs; Hamaker et al., 2015) were estimated including autoregressive lag-2 effects (Figure S1, Supplemental Online Material) to provide a stricter control of unmeasured confounding (Lüdtke & Robitzsch, 2022). Mplus and a robust weighted least squares (i.e., WLSMV) estimator were used for analyses. Multiple imputation ($N = 10$) was applied to handle missing data. In the case of an improper solution (e.g., model non-convergence, improper solution), the number of iterations or the convergence criterion was increased, and the autoregressive effects were constrained to be equal across waves, because such equality constraints lead to more parsimonious results, and facilitate proper convergence in the context of RI-CLPM (Mulder, 2023; Orth, Clark, Donnellan & Robins, 2021). The religious variables were right-skewed (i.e., religiosity; attendance at a place of worship; frequency of prayers; importance of religion in life; participation in a religious organization) or dichotomous (i.e., membership in a religious community) and thus modeled as ordered categorical variables. The relation between participation in a religious organization and mental health was assessed using a one-year time lag interval, while in the other models, a six-month time interval was used. The models with a six-month time interval between measurement of mental health and religion did not include residual (contemporaneous) covariances (the mental health and religion variables were not assessed at approximately the same measurement occasion). No covariates were added to the main analyses. Covariates were added in the robustness analysis. For each analysis, the waves of data included were those where all the main variables (i.e., religion and mental health) were assessed. Effect size for cross-lagged effects was evaluated using the guidelines of Orth et al. (2022). Specifically, they proposed 0.03, 0.07, and 0.12 as benchmark values for small, medium, and large effect, respectively.

Results

Descriptive statistics for study variables are presented in Table S2 (Supplemental Online Material). To evaluate whether the RI-CLPM indeed fit the data, fit indices were reported in Table S3. Tables S4-S6 show the number of waves included in each analysis. CFI, TLI and RMSEA suggest a good fit between observed data and the models (e.g., Hu & Bentler, 1998).

Depression

Table S4 shows the results (standardized coefficients along with their 95 % CI) from RI-CLPMs. The number after the variable abbreviation indicates the measurement occasion. There was also only one (out of four) significant and positive cross-lagged effect of membership in a religious community on depression (large effect size). Two out of four cross-lagged effects of religiosity on depression were statistically significant and positive (medium to large effect size). For the cross-lagged effects of importance of religion in life and participation in a religious organization influencing depression, only one (out of five and out of eight, respectively) effect was significant (large effect size). There were also two (out of four) and one (out of four) significant and positive cross-lagged effects of attendance at a place of worship and frequency of prayers, respectively, on depression (medium to large effect size). It should be noted that these significant effects of religion variables on depression were positive, thereby indicating a detrimental effect of religion. In summary, there was no evidence of the beneficial effect of religion on depression symptoms. There were also (1) one out of five significant and negative cross-lagged effects of depression on importance of religion in life, (2) two out of four (one positive and one negative) significant cross-lagged effects of depression on religiosity; and (3) two (out of four) significant and positive cross-lagged effect of depression on frequency of prayers, and (4) two (out of four) significant and positive cross-lagged effect of depression on attendance at a place of worship (medium to large effect sizes). Significant and negative correlations among random intercepts that imply associations at the between-individual level between depression and two religion variables were found (i.e., attendance at a place of worship and participation in a religious organization). Moreover, the findings revealed significant and positive associations at the between-individual level between depression and frequency of prayers, estimate = 0.07, 95 % CI [.02, 0.14],

religiosity, estimate = 0.08, 95 % CI [.03, 0.14], and attendance at a place of worship, estimate = 0.09, 95 % CI [.02, 0.15]. In other words, participants with higher levels of depression also reported a higher frequency of prayers and attendance at a place of worship and a lower participation in a religious organization.

Happiness

The findings from the RI-CLPMs are presented in Table S5. No significant cross-lagged paths were observed between life satisfaction and three religion variables (i.e., membership in a religious community and attendance at a place of worship). The findings also revealed (1) one (out of three) significant cross-lagged path from religiosity to happiness (medium effect size); (2) two (out of six) significant cross-lagged paths from participation in a religious organization to happiness (large effect size); and (3) two (out of five) significant cross-lagged path from importance of religion in life to happiness (large effect size). The sign of these three cross-lagged effects was negative, suggesting a detrimental effect of religion on happiness. Two out of three (one positive and one negative) significant cross-lagged effects of frequency of prayers on happiness were found. In summary, besides the contradictory findings reported in the preceding sentence, there was no evidence of the positive effect of religion on happiness. There was also one (out of three) significant and positive cross-lagged effect of happiness on religiosity (medium effect size). At the between-individual level, positive correlations among the random intercepts of happiness and five religion variables: attendance at a place of worship, estimate = 0.14, 95 % CI [.11, 0.18], religiosity, estimate = 0.08, 95 % CI [.05, 0.12], frequency of prayers, estimate = 0.06, 95 % CI [.02, 0.09], importance of religion in life, estimate = 0.11, 95 % CI [.07, 0.14], and participation in a religious organization, estimate = 0.16, 95 % CI [.12, 0.19], were found, such that participants with higher overall levels of happiness also reported higher frequency of prayers and higher levels of religiosity, importance of religion in life, participation in a religious organization, and attendance at a place of worship.

Life satisfaction

The results from the RI-CPLMs are displayed in Table S6. The cross-lagged effects between life satisfaction and three religion variables (i.e., membership in a religious community and frequency of prayers) were not significant. The results also revealed one (out of six, out of four, and out of three, respectively) significant and positive cross-lagged paths from life satisfaction to participation in a religious organization, attendance at a place of worship, and religiosity (medium to large effect size). Moreover, only one (out of five) significant and negative cross-lagged path from importance of religion to life satisfaction was found (large effect size). Finally, only one (out of three) significant and positive cross-lagged path from frequency of prayers to life satisfaction was found (large effect size). In summary, there was little and mixed evidence of the beneficial effect of religion on life satisfaction. At the between-individual level, positive and significant correlations among the random intercepts of life satisfaction and attendance at a place of worship, estimate = 0.16, 95 % CI [.12, 0.20], religiosity, estimate = 0.10, 95 % CI [.06, 0.13], frequency of prayers, estimate = 0.06, 95 % CI [.03, 0.10], importance of religion in life, estimate = 0.12, 95 % CI [.08, 0.16], and participation in a religious organization, estimate = 0.16, 95 % CI [.10, 0.21], were found, such that participants with higher overall levels of life satisfaction also reported higher involvement in religion.

Robustness analysis

Tables S7-S12 report the results of RI-CLPMs investigating the within-person association between religion and mental health (1) including age, gender, education, income, and citizenship as covariates to the models; and (2) without imputation (i.e., pairwise present

analysis). The results of these additional analyses substantially confirmed the main findings of the study. Specifically, they failed to find consistent beneficial effects of religion on different indicators of mental health. Moreover, these results revealed some—albeit limited—evidence of a detrimental effect of religion on mental health.

Discussion

The main aim of the current investigation was to determine if religion has a causal influence on mental health from the Granger causality perspective. Overall, the findings of the study revealed almost no evidence of a beneficial effect of religion on mental health. Moreover, in the few instances where a significant effect of religion on mental health was found, religion appears to play a detrimental rather than beneficial role. The large number of nonsignificant within-person associations between religion and mental health is noteworthy, bearing in mind that many between-person associations (covariance between the trait-like components) were statistically significant and in the expected direction. The discrepancy between within-person associations and between-person associations might reflect the influence of time-invariant confounders such as culture, genotype, or childhood experiences. In addition, the discrepancy between within-person associations and between-person associations might indicate that the associations between religion and mental health reported in previous research (Hackney & Sanders, 2003; Hodapp & Zwingmann, 2019; Salsman et al., 2015; Sawatzky et al., 2005; Smith et al., 2003; Yaden et al., 2022; Yonker et al., 2012) are spurious.

The findings of the current study are in line with those of previous research investigating within-person associations between religion/spirituality and subjective well-being (Joshanloo, 2021, 2022). The present study extends previous work by providing more comprehensive measures of mental health (i.e., by including not only subjective well-being but also psychopathology symptoms). Moreover, the present study is able to rule out the hypothesis that the effect of religion on mental health may unfold over a shorter time period (about six months to one year). The current study did not investigate the role played by religious coping, and such an investigation is recommended for future work. The theoretical conceptualization of positive and negative religious coping (Harrison et al., 2001; Pargament et al., 1998) is important because it provides a distinction between positive and negative forms of religion.

Overall, the findings of the current study contradict a large body of literature in psychology, psychiatry, and sociology that explicitly or implicitly assumes a beneficial effect of religion on mental health (e.g., Hood et al., 2018; Koenig, 1997; Pargament et al., 1992; Schieman et al., 2013). It should be noted that these assumptions have been questioned by highlighting issues related to the dark side of religion (e.g., Ellison & Lee, 2010; Exline, 2013; Krause, 2015). More recently, the practical relevance of the direct effect of religion on well-being has been seriously questioned by demonstrating that the strength of associations or effect size is negligible (Prati, 2023). Specifically, unpublished analysis of publicly available large datasets revealed that the strength of associations between a wide range of religious variables and well-being dimensions was very small or negligible. Therefore, publication bias and between-person stability (more religious people simultaneously report better mental health) may explain the discrepancies between the findings of the current study and many previous studies that reported a significant relationship between religion and mental health.

The findings obtained from this study need to be interpreted with consideration of the context. Germany is a country characterized by medium to high degrees of secularization (Joshanloo & Gebauer, 2020). Secularization might have affected the results. For instance, it is not possible to rule out the hypothesis that different findings would have been obtained in more religious cultures. It is important to note that the present findings are consistent with those of Joshanloo (2021) using data from U.S. participants. The United States is considered less secular

than Germany (Joshanloo & Gebauer, 2020).

Limitations

The present study had several limitations. First, participants were people living in Germany, and, therefore, the findings of the study need to be interpreted with caution regarding their generalizability to other countries worldwide. Second, this study focused only on depression, which is the most common mental disorder. Thus, the extent to which the current findings also apply to other mental disorders could not be inferred. Third, although the current study employed a set of six religious variables, there may be other religious variables such as religious strain, religious coping, and intrapersonal and interpersonal conflict that might be linked to mental health (e.g., Hill & Pargament, 2008), and their use in future studies is recommended. Fourth, intervals between measurement occasions were not equal in some instances. Moreover, religion and mental health variables were not assessed on the same measurement occasions. Although the collection of the predictor and criterion variables on different measurement occasions is likely to reduce common method bias, it is not possible to rule out the possibility that different effects would be obtained using equal or closer measurement occasions. Fifth, the findings of the current study are based on self-report measures, which might be subject to well-known biases (e.g., recall bias and social desirability). Sixth, the RI-CLPM is not without limitations (e.g., Lüdtke & Robitzsch, 2022; Sorjonen, Nilsonne, Melin & Ingre, 2023). Finally, the concept of Granger causality should be used when interpreting the findings of the current study. Experimental designs are required to make strong causal statements.

Conclusion

The findings of the current study indicate that religion does not have a consistent effect on mental health. This conclusion, if confirmed, does not mean that religion is not important. The study of religious faith, beliefs, and practices offers a fascinating opportunity to understand individuals and communities in their cultural contexts. Moreover, the findings of the current study do not imply that researchers interested in mental health and mental health professionals should not pay attention to religion and spirituality and that the incorporation of spiritual care into the medical care of patients (who request spiritual care services) is not useful or important (Balboni et al., 2022). Therefore, the current findings do not imply that health professionals should not incorporate religious content and issues into their work with their clients and patients. The findings of this study do not support the simplistic assumption that the role of religious faith, beliefs, and practices (whatever they may be) is beneficial for mental health and that "for patients who are already religious, service attendance might be encouraged as a form of meaningful social participation to alleviate depression" (Li et al., 2016, p. 883). For clients and patients who have a religious or spiritual life, health professionals may carefully assess and address the consequences and potential risks/benefits of their membership, beliefs, identity, and practices for mental health. There are many issues related to religion that may have relevance to mental health. For instance, the distinction between negative and positive religious coping (e.g., Ano & Vasconcelles, 2005; Park et al., 2018), the role of spiritual struggles (e.g., Exline, 2013), and the potential positive and negative social consequences (e.g., positive and negative forms of social support, positive and negative interactions) of religious service attendance (e.g., Nooney & Woodrum, 2002).

The quality and meaning of religious activities and experiences embrace a wide spectrum of forms, characteristics, and consequences (e. g., people discriminated against, privileged, or threatened based on their religion; people experiencing spiritual struggles; people who embrace the religious life with fanaticism, bigotry, and intolerance; people living a rich and fulfilling religious life). While not all religious experiences are the same, different individuals in different contexts have different

experiences. The identification of patterns of religious experiences and practices and their potential links to psychological outcomes is a fascinating topic for future research.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijchp.2024.100491.

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