

Psychology of Religion and Spirituality

Religious/Spiritual Struggles and Depression During COVID-19 Pandemic Lockdowns in the Global South: Evidence of Moderation by Positive Religious Coping and Hope

Laura E. Captari, Richard G. Cowden, Steven J. Sandage, Edward B. Davis, Andrea Ortega Bechara, Shaun Joynt, and Victor Counted

Online First Publication, May 5, 2022. <http://dx.doi.org/10.1037/rel0000474>

CITATION

Captari, L. E., Cowden, R. G., Sandage, S. J., Davis, E. B., Bechara, A. O., Joynt, S., & Counted, V. (2022, May 5). Religious/Spiritual Struggles and Depression During COVID-19 Pandemic Lockdowns in the Global South: Evidence of Moderation by Positive Religious Coping and Hope. *Psychology of Religion and Spirituality*. Advance online publication. <http://dx.doi.org/10.1037/rel0000474>

Religious/Spiritual Struggles and Depression During COVID-19 Pandemic Lockdowns in the Global South: Evidence of Moderation by Positive Religious Coping and Hope

Laura E. Captari¹, Richard G. Cowden², Steven J. Sandage¹, Edward B. Davis³, Andrea Ortega Bechara⁴, Shaun Joynt⁵, and Victor Counted⁶

¹ The Albert and Jessie Danielsen Institute, Boston University

² Human Flourishing Program, Institute for Quantitative Social Science, Harvard University

³ School of Psychology, Counseling, and Family Therapy, Wheaton College

⁴ Department of Psychology, Universidad del Sinú

⁵ Faculty of Theology and Religion, University of the Free State

⁶ School of Psychology and Counseling, Regent University

Physical and existential threats stemming from the coronavirus disease 2019 (COVID-19) pandemic may provoke religious/spiritual (R/S) struggles or exacerbate preexisting angst and questions. In the Global South, where pervasive social–structural disadvantages limit resource availability to mitigate psychosocial consequences, doubts about divine presence and purpose amidst suffering, loss, and uncertainty may be especially salient factors in spiritual and mental health. With two independent samples of Colombians and South Africans recruited during an early phase of lockdown in each country, the current set of studies (*N* Study 1 = 1,172; *N* Study 2 = 451) examined positive religious coping (Study 1) and state hope (Study 2) as potential resources that may support the mental health of people living in the Global South who experienced R/S struggles during the public health crisis. Results of hierarchical regression analyses across both studies revealed that R/S struggles were positively associated with depression. In Study 1, there was a two-way interaction between R/S struggles and positive religious coping, such that the relation between R/S struggles and depression was attenuated when positive religious coping was higher for both men and women. In Study 2, a three-way interaction emerged among R/S struggles, state hope, and gender; R/S struggles were associated with higher levels of depression when state hope was low in women and when state hope was high in men. We discuss the implications of these findings for promoting psychological and spiritual well-being in low- and middle-income countries during the COVID-19 pandemic.

Keywords: spiritual struggles, religious coping, psychological distress, well-being, resilience

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak has upended daily life, revealing the existential threats of illness and mortality, the tenuous nature of societal norms, and the limitations of human control (Fore, 2020). Unlike natural disasters that impact a localized region during a finite time, the coronavirus disease 2019 (COVID-19) pandemic has wreaked havoc on a global scale. As of April 2022, there have been more than 494 million confirmed cases and over 6.1 million COVID-related deaths worldwide (World Health Organization [WHO], 2022). Widespread economic shutdown and mandated physical isolation further contribute to the toll of the public health crisis,

occasioning secondary losses (e.g., food and housing insecurity, restricted access to social and spiritual support).


While the pandemic has had global reach, its consequences vary considerably by local and regional context. In economically vulnerable countries within the Global South, preexisting and pervasive social–structural disadvantages (e.g., inadequate health systems, high levels of unemployment, extreme poverty) have been magnified by the public health crisis (United Nations, 2020). Relative to Global North, the Global South often has fewer financial resources and less social–structural capacity to support the health, economic, and psychosocial needs of citizens. Against this backdrop, the current studies examined the relation between religious/spiritual (R/S) struggles and depression during the early lockdown phase of the pandemic in Colombia and South Africa—two countries within the Global South.


Religious/Spiritual Struggles During the COVID-19 Pandemic


The COVID-19 pandemic has set in motion a variety of physical and existential stressors that may interfere with goals, disrupt assumptions about the world, challenge theodicies, and violate religious aspects of individuals' meaning systems. When discrepancies arise between one's global meaning system and appraised

Laura E. Captari  <https://orcid.org/0000-0002-1188-2462>

Richard G. Cowden  <https://orcid.org/0000-0002-9027-4253>

Edward B. Davis  <https://orcid.org/0000-0003-4409-7759>

Shaun Joynt  <https://orcid.org/0000-0002-1966-6633>

Victor Counted  <https://orcid.org/0000-0003-0944-3775>

Correspondence concerning this article should be addressed to Laura E. Captari, The Albert and Jessie Danielsen Institute, Boston University, 185 Bay State Road, Boston, MA 02215, United States. Email: lcaptari@bu.edu

meanings related to the pandemic, a search for meaning may ensue as people attempt to reconcile previously held beliefs with lived experiences of hardship, trauma, and loss (Appel et al., 2020; Park, 2016). Although some forms of religious coping can support adaptive meaning-making processes (Captari et al., 2019; Park et al., 2018), negative life events can also be the context for tension, strain, or conflict concerning sacred matters (i.e., R/S struggles; Cowden et al., 2022). Amid lockdowns imposed during the COVID-19 pandemic, R/S struggles may take varied forms. People may feel abandoned by God (e.g., experiencing the divine as absent or untrustworthy), doubt their worldview (e.g., questioning the existence of a Higher Power in light of widespread turmoil), blame themselves or society (e.g., viewing COVID-19 as divine judgment or the result of demonic forces), begin to lose faith in humanity (e.g., feeling jaded by others' lack of commitment to public health and social justice), or passively defer to religion (e.g., disregarding health precautions and "putting it all in God's hands").

Religious Coping as a Potential Protective Factor

R/S struggles have often been considered at odds with salutary religious experience. However, growing empirical evidence through a developmental lens suggests that people's spiritual lives are complex and nuanced, frequently including dialectical tensions between spiritual seeking and spiritual dwelling, as well as coexistent strengths and struggles (Sandage et al., 2020). Periods of struggle described by some R/S traditions as a dark night of the soul may, over time, foster personal growth and catalyze spiritual and emotional well-being (Durà-Vilà & Dein, 2009). Thus, it is important to identify religious practices that buffer the psychological toll of struggles that may arise (Abu-Raiya et al., 2016). One such factor may be positive religious coping, which includes "seeking spiritual support, collaborative religious coping, spiritual connection, religious purification, and benevolent religious reappraisal" (Pargament et al., 1998, p. 710). Embodied practices such as prayer, meditation, and reading of sacred scriptures can create a transitional space or expansion of consciousness by which theological truths are viscerally experienced amidst suffering (Captari et al., 2019; Counted & Watts, 2019). Although rituals vary across tradition and culture, connection with the sacred through experiential means can reaffirm divine presence (e.g., the sacred as loving and attuned to human suffering) and divine purpose (e.g., God at work or in control) amidst stressors and losses (Davis, Kimball, Aten, Andrews, et al., 2019; Pargament et al., 2011). Additionally, seeing oneself as partnering with God for the betterment of the community in the midst of crisis can counter feelings of disorientation, hopelessness and despair, and elicit a sense of comfort, security, peace, and gratitude (Pirutinsky et al., 2020). Positive religious coping has been associated with less depression, psychological adjustment, and restored meaning following stressful events (Ano & Vasconcelles, 2005; Park et al., 2018) and has been investigated as a potential moderator between stress and indices of adjustment (Ahles et al., 2016; Cowden, Rueger, et al., 2021; Garcia et al., 2017).

Links Between R/S Struggles and Mental Health

In the face of extreme or prolonged exposure to suffering that represents significant meaning violations, R/S struggles can be part

of spiritual developmental processes of disorientation, mourning, questioning, and reconstructing one's view of the sacred. Thus, existential angst is not inherently pathological. When individuals are able to draw on positive religious coping strategies and contextual supports, R/S struggles may eventually lead to greater well-being through spiritual seeking, evolution, and formation (Sandage et al., 2020), but can also precipitate psychological distress when the struggle does not facilitate benevolent theodicies and salutary meaning (Currier et al., 2019; Pargament & Exline, 2021). Left unaddressed, R/S struggles have been associated with depression (Pirutinsky et al., 2011), suicidal ideation (Exline et al., 2000), and posttraumatic stress symptomology (Appel et al., 2020).

R/S struggles and accompanying distress may be more likely to become chronic in communities with fewer resources and mechanisms available to support meaning-making and positive adaptation (Pirutinsky et al., 2020). Conservation of resources theory (see Hobfoll, 2011) teases out the nuance of four types of resources that can be lost or accessed: *Material objects* (e.g., housing, belongings) serve as resources because of their physical nature and/or personal meaning. *Conditions* (e.g., companionship, social capital) are valuable to the degree they are accessible and beneficial. Multisystemic factors, such as social and religious supports, community infrastructure, and public health intervention, can be helpfully understood as conditions contributing to meaning-making (Walsh, 2020). *Personal characteristics* (e.g., hope, faith, sense of humor) are internal resources that can promote positive adaptation. Finally, *energies* (e.g., money, time) support the acquisition of other resources. Following Hurricane Katrina, R/S struggles partially explained the link between resource loss and psychological distress, whereas positive religious coping buffered resource loss effects (Cook et al., 2013). During the COVID-19 pandemic, however, resource loss evidenced a stronger positive association with suffering at higher levels of positive religious coping, suggesting a complex relationship that warrants further study (Cowden, Rueger, et al., 2021). Researchers are beginning to examine R/S struggle and adaptation in low- and middle-income contexts following disaster, including Colombia (Chen et al., 2021), Liberia (Ochu et al., 2018), the Democratic Republic of Congo (Snyder et al., 2020), and Botswana (Shannonhouse et al., 2019). Although empirical evidence suggests R/S struggles may lead to impaired psychological functioning, especially in the context of limited resources, less is known about factors that may support the mental health of those experiencing R/S struggles, particularly throughout the Global South.

The Salience of Cultivating Hope

Cultivating hope may be a salient psychological resource during the COVID-19 pandemic because it "reflects mature development capacities able to manage emotional tension, tolerate ambiguity . . . and make meaning out of the struggles" (Sandage & Morgan, 2014, p. 559). In contrast with wishful thinking or denial, realistic hope is a cognitive-motivational process involving the capacity to envision plausible pathways to achieve desired goals and the personal agency to use available pathways to accomplish goals successfully (Snyder et al., 2002). A hopeful state of mind also involves positive affective shifts, which have been shown to boost immune functioning (Brown et al., 2020; Wilson et al., 2017), something especially important amidst the public health crisis. Hope is associated with greater

self-regulation, mental health, relational maturity, and well-being (Ferrari et al., 2012; Sandage et al., 2014; Scioli et al., 2011) and has been found to moderate the psychological toll of negative life events (Griggs, 2017; Visser et al., 2013).

Gender-Based Responses to Stressors During the Pandemic

Gender-based roles, beliefs, and experiences may influence how men and women experience and cope with pandemic-related stresses uniquely. On average, women are more religious than men (Schnabel, 2018) and endorse higher levels of positive religious coping (Parenteau, 2017; Trevino et al., 2012). Although men and women tend to report similar levels of hope (Snyder et al., 2002), in some contexts, women may be more hopeful about the future (Wikström et al., 2018). Nevertheless, women are also disproportionately impacted by job loss (Jacobsen et al., 2014; Schmidt, 2020) and at greater risk for depression (Centers for Disease Control, 2018). Research has begun to explore intersectional risk for depression based on gender and social class in order to capture systemic inequalities (Patil et al., 2018). In the context of the COVID-19 pandemic, individuals employed in service-oriented or hourly positions and those relying on informal sector economics likely experienced greater financial vulnerability when stay-at-home orders were imposed, whereas those able to work remotely were shielded from this stress (Craig & Churchill, 2021). Furthermore, loss of childcare would be expected to disproportionately affect single-parent households and those with less vocational flexibility (Czymara et al., 2020; Waddell et al., 2020).

In times of stress, research suggests that women may be more likely than men to view God as relational, nurturing, and protective, rather than controlling or punitive (Flannelly et al., 2010; Hoffman, 2005). Nguyen and Zuckerman (2016) found that women who described the divine in such terms reported less depression, while this moderation effect was not evident in men. These findings suggest that gender differences in religious experience ought to be integrated into investigations involving R/S struggles and coping during the pandemic. Positive religious coping and a hopeful mindset might function differently for women and men in attenuating the link between R/S struggles and depression. As one possibility, it could be that women grappling with R/S struggles may be more likely to utilize positive religious coping by turning to the sacred as a comforting relational presence, which could help down-regulate emotional distress and mitigate the psychological strain of R/S doubts and questions. In contrast, men experiencing R/S struggles may be less apt to engage with religious coping strategies, and if they do, may not benefit in the same manner. Relatedly, little empirical work has explored how hope operates across gender amid stressful life events. In many societies, including Colombia and South Africa, patriarchal structures continue to impact daily life. Men traditionally hold more power in the public sector and are more likely to be a household's primary income source, while women are more likely to work part time and assume responsibility for childcare and household duties (Organisation for Economic Cooperation & Development [OECD], 2020; Parry & Gordon, 2021). Given the influence of sociocultural dynamics in shaping gender-based norms, roles, and priorities, men and women might experience distinct tension points and goal disruptions due to pandemic-related stay-at-home orders. In light of the potential for implications of the public

health crisis to vary by gender, the object and function of one's hope appear to be vital considerations. Hope that is directed toward unattainable or unrealistic goals may have the undesirable consequence of exacerbating distress (Buechler, 2013).

The Present Studies

We respond directly to Dein et al.'s (2020) call for research examining "factors that can cushion the effects of COVID-19 related religious struggles on subsequent distress and psychological problems" (p. 7) by proposing positive religious coping (Study 1) and state hope (Study 2) as potential resources that could support the mental health of people experiencing R/S struggles while under a lockdown imposed early on during the COVID-19 pandemic. Further, we explored gender effects to uncover whether conditional associations differ among men and women. We examined these relations in samples from Colombia (Study 1) and South Africa (Study 2), countries in the Global South where challenges associated with preexisting social-structural disadvantages (e.g., economic inequality, food insecurity) have been exacerbated by the public health crisis. These contexts offer a valuable opportunity to extend our understanding of the mental health consequences of R/S struggles amidst disaster beyond the boundaries of the Global North, where the bulk of existing evidence in both the psychology of R/S (Cowden et al., in press) and disaster (Aten et al., 2019) has been generated.

Study 1

In Study 1, we examined the relations between R/S struggles, positive religious coping, and depression among Colombian men and women during the country's initial COVID-19 lockdown. Consistent with existing evidence on the relation between R/S struggles and depression (Currier et al., 2019; Pirutinsky et al., 2011), we predicted that R/S struggles would be positively associated with depression. We also hypothesized that a three-way interaction of R/S struggles, positive religious coping, and gender would emerge. Based on evidence indicating a higher prevalence of positive religious coping in women (e.g., Parenteau, 2017; Trevino et al., 2012), we expected that higher levels of positive religious coping would be associated with a weaker relation between R/S struggles and depression in women. We did not hypothesize an interaction between R/S struggles and positive religious coping on depression in men.

Method

Participants

Sample characteristics are reported in Table 1. Participants ($N = 1,172$) included men (37.37%) and women (62.12%, unspecified = 0.51%) aged 18–61 years ($M_{\text{age}} = 21.70$, $SD = 3.96$). Most were affiliated religiously with Christianity (77.82%), were not in a romantic relationship (84.47%), and had completed high school or beyond (99.91%).

Procedure

The institutional review board at Universidad del Sinú granted ethical approval to conduct this study. All participants were students

Table 1
Sample Characteristics in Studies 1 and 2

Demographics	Study 1 (<i>N</i> = 1,172)	Study 2 (<i>N</i> = 451)
Age (years), <i>M</i> ± <i>SD</i> (range)	21.70 ± 3.96 (18–61)	33.54 ± 11.93 (18–74)
Gender, <i>n</i> (%)	1,166	451
Women	728 (62.12)	297 (65.85)
Men	438 (37.37)	154 (34.15)
Racial status ^a , <i>n</i> (%)	—	451
Black African	—	334 (74.06)
Colored	—	37 (8.20)
Indian/Asian	—	8 (1.77)
White	—	68 (15.08)
Other	—	4 (0.89)
Education level, <i>n</i> (%)	1,172	451
Less than high school	1 (0.09)	90 (19.96)
Completed high school	757 (64.59)	221 (49.00)
Postsecondary school certificate	—	32 (7.10)
Diploma or technical degree	261 (22.27)	68 (15.08)
Bachelor's degree	89 (7.59)	30 (6.65)
Postgraduate degree (e.g., Hons, MA, MD, PhD)	4 (0.34)	10 (2.28)
Other postsecondary education (e.g., professional education)	60 (5.12)	—
Marital status, <i>n</i> (%)	1,172	451
Married	26 (2.22)	89 (19.73)
Cohabiting	61 (5.20)	57 (12.64)
In a relationship	95 (8.11)	60 (13.30)
Single	981 (83.70)	209 (46.34)
Divorced	5 (0.43)	20 (4.43)
Separated	—	10 (2.22)
Widowed	4 (0.34)	6 (1.33)
Religious status, <i>n</i> (%)	1,172	451
Christian	912 (77.82)	374 (82.93)
Muslim	2 (0.17)	18 (3.99)
Taoism	1 (0.09)	—
Buddhist	4 (0.34)	0 (0.00)
Something else	44 (3.75)	6 (1.33)
Not religious	209 (17.83)	—
Ancestral, tribal, animist, or other traditional African religion	—	26 (5.76)
Hindu	—	2 (0.44)
Jewish	—	1 (0.22)
Atheist	—	1 (0.22)
Agnostic	—	1 (0.22)
Nothing in particular	—	5 (1.11)
Do not know	—	1 (0.22)
Prefer not to answer	—	16 (3.55)

Note. *M* = mean, *SD* = standard deviation. Percentages (%) are unweighted and may not add up to 100% due to missing values. Demographic characteristics that do not contain summary statistics were not assessed.

^aRace categories were adopted from Statistics South Africa (2016) to maintain consistency with general reporting practices on race in South Africa.

at a university in northern Colombia recruited from May 12 to 25, 2020, coinciding with the most stringent phase of nationwide lockdown instituted by the Colombian government in response to the COVID-19 outbreak. Students were recruited electronically using email, social media, and instant messaging. Prospective participants were directed to a secure website, where those interested provided electronic informed consent and completed the battery of measures in Spanish. Participants were entered in a raffle for a cash prize approximating \$100 USD.

Measures

Participants completed the following set of measures in Spanish, all of which had previously been validated for use with Spanish-speaking populations. Estimates of internal consistency for all measures are reported in Table 2.

Depression. Participants completed the six-item depression dimension of the Brief Symptom Inventory-18 (BSI-18; Derogatis, 2001, 2013). The measure assesses depressive symptoms in the last 7 days (e.g., “feeling no interest in things”). A 5-point response scale (0 = *not at all*; 4 = *extremely*) is used to rate each item, with responses aggregated for a total score.

Religious/Spiritual Struggles. Consistent with previous research (e.g., Rosmarin et al., 2014), the seven-item negative religious coping subscale of the Brief Religious COPE (RCOPE; García et al. 2021; Pargament et al., 1998) was used to measure R/S struggles. A 4-point response format (1 = *not at all*; 4 = *a great deal*) is used to rate each item (e.g., “questioned God’s love for me”). Responses are combined for a total score, with higher scores reflecting greater tension, pressure, confusion, and insecurity about the divine.

Positive Religious Coping. The remaining seven items of the Brief RCOPE assessed positive religious coping (García et al., 2021; Pargament et al., 1998). This subscale measures coping efforts that draw on the security of one’s relationship with the divine or sacred (e.g., spiritual support-seeking). Items (e.g., “sought God’s love and care”) are rated using a 4-point response (1 = *not at all*; 4 = *a great deal*), then combined for a total score.

Covariate. Given the high frequency of co-occurring symptoms of anxiety and depression (Cowden, Chapman, et al., 2021) and meta-analytic evidence indicating that anxiety symptoms are predictive of depressive symptoms (Jacobson & Newman, 2017), statistical analyses controlled for generalized symptoms of anxiety. Participants’ self-reported anxiety symptoms were assessed with the anxiety subscale of the BSI-18 (Derogatis, 2001).

Results

Preliminary Analyses

Statistical processing was performed in R (R Core Team, 2020). Item-level data were screened for missing values, none of which were found. To account for the ordinal response format of each measure, internal consistency reliability was estimated using ordinal omega total calculated with the *userfriendlyscience* package. Bivariate associations among the measures were estimated using Pearson correlations produced via the *apaTables* package.

Descriptive statistics, estimated reliability, and zero-order correlations are reported in Table 2. Internal consistency reliability values for all measures were $\geq .92$. Using Cohen’s (1992) interpretation guidelines of small (.10), medium (.30), and large (.50), bivariate associations varied from negligible to large ($r = 1.08-.84$) in effect. R/S struggles evidenced a moderate positive association with depression ($r = .44$). There was a small negative association between positive religious coping and depression ($r = -.17$).

Hierarchical Regression

A four-step multiple linear regression model was used to test for the three-way interaction of R/S struggles \times Positive religious

Table 2
Descriptive Statistics, Internal Consistency Estimates, and Bivariate Associations Among Variables in Study 1 (N = 1,172) and Study 2 (N = 451)

Variable	M ± SD (range)	(1)	(2)	(3)	(4)	(5)	(6)
Study 1							
(1) Depression	7.02 ± 5.92 (0–24)	.92					
(2) R/S struggles	13.30 ± 5.92 (7–28)	.44 [.39, .49]***	.94				
(3) Positive religious coping	23.24 ± 5.31 (7–28)	-.17 [-.23, -.12]***	.08 [.02, .14]**	.97			
(4) Anxiety	6.70 ± 5.90 (0–24)	.84 [.82, .85]***	.44 [.39, .48]***	-.08 [-.14, -.02]**	.93		
Study 2							
(1) Depression	9.15 ± 6.69 (0–24)	.90					
(2) R/S struggles	14.59 ± 6.24 (7–28)	.43 [.35, .50]***	.92				
(3) State hope	37.61 ± 7.98 (10–48)	-.10 [-.19, -.01]*	.01 [-.08, .10]	.85			
(4) Anxiety	8.26 ± 6.67 (0–24)	.83 [.80, .85]***	.39 [.31, .47]***	-.06 [-.15, .03]	.91		
(5) Subjective health complaints	10.27 ± 8.19 (0–32)	.40 [.32, .48]***	.26 [.17, .35]***	-.08 [-.17, .01]	.41 [.33, .48]***	.92	
(6) Sleep quality	56.10 ± 27.14 (0–100)	-.26 [-.34, -.17]***	-.13 [-.22, -.04]**	.17 [.08, .26]***	-.24 [-.32, -.15]***	-.40 [-.48, -.32]***	—

Note. M = mean, R/S = religious/spiritual, SD = standard deviation. 95% confidence intervals for Pearson correlations in brackets. Internal consistency values presented along diagonal.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

coping × Gender on depression. Variable entry order proceeded as follows: the five control variables of age, education level, marital status, religious status, and anxiety (Step one, base model); R/S struggles, positive religious coping, and gender (Step two, main effect model); the two-way interactions of R/S struggles × Positive religious coping, R/S struggles × Gender, and Positive religious coping × Gender (Step three, two-way interaction model); and the three-way interaction of R/S struggles × Positive religious coping × Gender (Step four, three-way interaction model). R/S struggles and positive religious coping were mean centered prior to model estimation. Modeling procedures and summary statistics were computed with the *stats*, *apaTables*, and *psychometric* packages. Cohen's f^2 was calculated to assist with evaluating the strength of global and local effects (Selya et al., 2012). Cohen's (1992) guidelines of small (.02), medium (.15), and large (.35) were used to classify the strength of f^2 values. Squared semipartial correlations (sr^2) were calculated to determine the amount of unique variance in the criterion variable attributable to each independent variable.

Prior to interpretation of model fit, assumptions of normality and homoscedasticity of residuals for the full model were visually assessed via a Wallyplot technique with the *MESS* package (see Ekstrøm, 2014). The sets of QQ plots and residual scatterplots suggested that assumptions of normality and homoscedasticity were upheld. Variation inflation factor (VIF) values computed with the *car* package did not reveal any multicollinearity concerns (all VIF values ≤ 2.29). A sensitivity analysis with an α of .05, sample size of $N = 1,166$, and power of .80 indicated that the smallest three-way interaction effect that can reliably be detected in the multiple regression analysis is $f^2 = .007$.

Results of the multiple regression analysis are reported in Table 3. The control variables included in Step one evidenced a large effect ($f^2 = 2.30$). When R/S struggles, positive religious coping, and gender were added to the model in Step two, there was a small improvement in model fit ($f^2 = .06$). Inclusion of the two-way interactions of R/S struggles × Positive religious coping, R/S struggles × Gender, and Positive religious coping × Gender in Step three yielded a negligible improvement in model fit ($f^2 = .00$). Entry of the three-way interaction of R/S struggles × Positive religious coping × Gender offered a negligible improvement in model fit ($f^2 = .00$). In the final model, R/S struggles were positively associated with depression ($sr^2 = .01$), whereas positive religious coping was associated negatively with depression ($sr^2 = .01$). The R/S struggles × Positive religious coping interaction reached statistical significance ($sr^2 = .00$), but the three-way interaction of R/S struggles × Positive religious coping × Gender did not ($sr^2 = .00$).

The two-way interaction between R/S struggles and positive religious coping on depression is displayed in Figure 1. A simple slopes analysis was performed by specifying low (one standard deviation below the mean) and high (one standard deviation above the mean) values for the moderator (i.e., positive religious coping). Results indicated that R/S struggles yielded a stronger positive association with depression when positive religious coping was low ($b = 0.15$, 95% CI [0.10, 0.20], $p < .001$) compared to when it was high ($b = 0.08$, 95% CI [0.03, 0.12], $p < .001$).

Overall, the findings provided mixed support for our predictions. Consistent with our expectation, R/S struggles were positively associated with depression. Although we expected that a weaker association between R/S struggles and depression would emerge at

Table 3
 Summary Statistics for Hierarchical Regression Analysis in Study 1 ($N = 1,166$)

Independent variable	Criterion variable = depression				
	b [95% CI]	sr^2 [95% CI]	F (df)	R^2 [95% CI]	ΔR^2
Step one: base model (controls only)			534.48 (5, 1,160)**	.697 [.668, .726]	—
(Intercept)	2.92 [1.74, 4.10]**				
Age	−0.03 [−0.08, 0.02]	.00 [−.00, .00]			
Education level	−0.25 [−0.66, 0.16]	.00 [−.00, .00]			
Marital status	−0.35 [−1.09, 0.38]	.00 [−.00, .00]			
Religious status	−0.35 [−0.86, 0.17]	.00 [−.00, .00]			
Anxiety	0.78 [0.74, 0.81]**	.46 [.42, .50]			
Step two: main effect model			362.42 (8, 1,157)**	.715 [.687, .742]	.018**
R/S struggles	0.12 [0.08, 0.16]**	.01 [.00, .01]			
Positive religious coping	−0.12 [−0.17, −0.07]**	.01 [.00, .01]			
Gender	−0.07 [−0.46, 0.31]	.00 [−.00, .00]			
Step three: two-way interaction model			264.50 (11, 1,154)**	.716 [.689, .743]	.001
R/S struggles × Positive religious coping	−0.01 [−0.02, −0.00]*	.00 [−.00, .00]			
R/S struggles × Gender	−0.01 [−0.08, 0.05]	.00 [−.00, .00]			
Positive religious coping × Gender	−0.02 [−0.09, 0.05]	.00 [−.00, .00]			
Step four: three-way interaction model			242.38 (12, 1,153)**	.716 [.689, .743]	.000
R/S struggles × Positive religious coping × Gender	0.00 [−0.01, 0.02]	.00 [−.00, .00]			

Note. R/S = religious/spiritual. Dummy codes for demographic variables are as follows: gender (0 = woman, 1 = man), education level (0 = other education level, 1 = postsecondary education), marital status (0 = other, 1 = married or cohabiting), religious status (0 = not religious, 1 = religious).

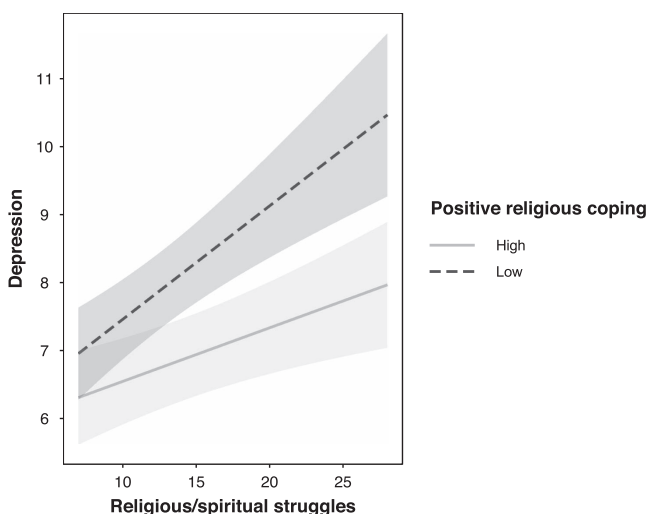
* $p < .05$. ** $p < .001$.

higher levels of positive religious coping among women but not men, there was no evidence of a three-way interaction of R/S struggles × Positive religious coping × Gender on depression. We did find support for a two-way interaction of R/S struggles × Positive religious coping on depression, which indicated that the relation between R/S struggles and depression attenuated at higher levels of positive religious coping among both gender groups.

Study 2

In Study 2, we sought to extend the findings of Study 1 by examining state hope as a moderator of the relation between R/S

Figure 1
 Two-Way Interaction of R/S Struggles × Positive Religious Coping on Depression



struggles and depression in South African men and women experiencing severe homebound restrictions. Consistent with Study 1, we expected R/S struggles to be positively associated with depression. Further, we predicted that a two-way interaction of R/S struggles and state hope on depression would emerge. We expected that the positive association between R/S struggles and depression would attenuate at higher levels of hope because stressful life events tend to evoke hope in survivors (Peterson & Seligman, 2003), religious survivors often draw on R/S to cultivate hope and thereby make redemptive meaning (Davis, Kimball, Aten, Hamilton, et al., 2019; Davis, Kimball, Aten, Andrews, et al., 2019), and this sense of enhanced hope can have a positive impact on mental health (Ai et al., 2013). Although we did not find evidence of a three-way interaction involving gender in Study 1, we explored whether the interaction of R/S struggles and state hope on depression might vary between men and women.

Method

Participants

Sample characteristics are reported in Table 1. Participants ($N = 451$) included men (34.15%) and women (65.85%) aged 18–74 years ($M_{age} = 33.54$, $SD = 11.93$). A majority identified as Black African (74.06%), were affiliated religiously with Christianity (82.93%), were not in a romantic relationship (54.32%), and had completed high school or beyond (80.04%).

Procedure

The institutional review boards at the University of Pretoria and the University of the Free State granted ethical approval to conduct this study. Participant recruitment took place from April 3 to 30, 2020. This period of data collection coincided with the most

stringent level five phase of the nationwide lockdown imposed by the South African government on March 27, 2020, during which strict stay-at-home and physical distancing restrictions were implemented. Recruitment was conducted via nationally representative consumer email databases. Prospective participants were directed to a secure website, where those interested provided electronic informed consent and completed the battery of measures in English. Participants were entered in a raffle to win one of 25 e-gift cards valued at \$10 USD each.

Measures

Participants completed the following set of measures in English. Estimated internal consistency for all multi-item measures is reported in Table 2.

Depression and Religious/Spiritual Struggles. We used the depression subscale of the BSI-18 (Derogatis, 2001) and the negative religious coping subscale of the Brief RCOPE (Pargament et al., 1998) from Study 1 to measure depression and R/S struggles, respectively.

State Hope. The Adult State Hope Scale (ASHS; Snyder et al., 1996) was used to assess state hope and contains six items (e.g., “there are lots of ways around any problem that I am facing now”) that measure pathways and agency with regard to goal-directed thinking. An 8-point response format (1 = *definitely false*; 8 = *definitely true*) is used to rate each item. Responses are aggregated for a total state hope score.

Covariates. Participants completed the single-item sleep quality scale (Snyder et al., 2018) and the eight-item Giessen Subjective Complaints List (Kliem et al., 2017), included as covariates to control for subjective health issues precipitated by pandemic-related stressors. Similar to Study 1, the six-item anxiety subscale of the BSI-18 (Derogatis, 2001) was administered to statistically control for symptoms of anxiety.

Results

Preliminary Analyses

An initial screening of the measures indicated that there were no missing values at the item level. Descriptive statistics, estimated reliability, and zero-order correlations are reported in Table 2. Ordinal omega total values for the multi-item measures were $\geq .85$. Pearson correlations revealed that associations among measures were negligible to large ($r = .101-.831$) in effect size. Depression evidenced small negative associations with state hope and sleep quality ($r = -.10$ to $-.26$). Associations of depression with R/S struggles, anxiety, and subjective health complaints were positive and moderate to large in effect ($r = .40-.83$).

Hierarchical Regression

A four-step multiple linear regression model was used to test the hypothesized two-way interaction of R/S struggles \times State hope on depression and explore whether the conditional effect varied by gender (i.e., three-way interaction of R/S struggles \times State hope \times Gender on depression). Variable entry order proceeded as follows: the eight control variables of age, racial status, education level, marital status, religious status, anxiety, subjective health complaints,

and sleep quality (Step one, base model); R/S struggles, state hope, and gender (Step two, main effect model); the two-way interactions of R/S struggles \times State hope, R/S struggles \times Gender, and State hope \times Gender (Step three, two-way interaction model); and the three-way interaction of R/S struggles \times State hope \times Gender (Step four, three-way interaction model). Modeling procedures were performed after mean centering the R/S struggles and state hope variables. Sets of Wallyplots indicated that the residuals for the full model were approximately normal in distribution, so homogeneity of variance could reasonably be assumed. VIF values for the final model did not reveal any multicollinearity concerns (all VIF values ≤ 1.93). A sensitivity analysis with an α of .05, sample size of $N = 451$, and power of .80 indicated that the smallest three-way interaction effect that can reliability be detected in multiple regression analysis is $f^2 = .017$.

The multiple regression results are displayed in Table 4. Inclusion of the control variables in Step one yielded a large effect ($f^2 = 2.33$). The addition of R/S struggles, state hope, and gender in Step two yielded a small improvement in model fit ($f^2 = .06$). A negligible improvement in the overall fit of the model was found when the two-way interactions of R/S struggles \times State hope, R/S struggles \times Gender, State hope \times Gender were entered in Step three ($f^2 = .00$). The inclusion of the three-way interaction of R/S struggles \times State hope \times Gender provided a small improvement in model fit ($f^2 = .03$). In the final model, the main effect of R/S struggles was associated positively with depression ($sr^2 = .01$), and there was a significant two-way interaction of R/S struggles \times State hope ($sr^2 = .00$) on depression. There was also evidence in support of the three-way interaction of R/S struggles \times State hope \times Gender on depression ($sr^2 = .01$).

The three-way interaction between R/S struggles, state hope, and gender on depression is displayed in Figure 2. Simple slopes analysis revealed that R/S struggles were positively associated with depression among women when state hope was low ($b = 0.21$, 95% CI [0.08, 0.34], $p = .001$) but not when state hope was high ($b = 0.03$, 95% CI [-0.06, 0.12], $p = .505$). Among men, R/S struggles were positively associated with depression when state hope was high ($b = 0.18$, 95% CI [0.06, 0.31], $p = .003$) but not when state hope was low ($b = -0.06$, 95% CI [-0.24, 0.12], $p = .496$).

The findings of Study 2 largely supported our hypotheses. We found evidence corroborating the positive association between R/S struggles and depression found in Study 1. As expected, we also found a two-way interaction of R/S struggles \times State hope on depression. Our exploration of whether this conditional effect varied by gender revealed that the interaction of R/S struggles and state hope on depression differed between men and women. Specifically, a weaker association between R/S struggles and depression was found at higher levels of state hope among women. In contrast, there was evidence of a stronger association between R/S struggles and depression at higher levels of state hope among men.

Discussion

Our findings add to the growing body of research examining R/S struggles, meaning-making processes, and mental health. While the empirical understanding of R/S struggles has been developed

Table 4Summary Statistics for Hierarchical Regression Analysis in Study 2 ($N = 451$)

Independent variable	Criterion variable = depression				
	b [95% CI]	sr^2 [95% CI]	F (df)	R^2 [95% CI]	ΔR^2
Step one: base model (controls only)			128.55 (8, 442)***	.699 [.654, .745]	—
(Intercept)	4.53 [2.13, 6.94]***				
Age	-0.01 [-0.05, 0.02]	.00 [-.00, .00]			
Racial status	-1.09 [-2.16, -0.02]*	.00 [-.00, .01]			
Education level	-0.09 [-0.82, 0.65]	.00 [-.00, .00]			
Marital status	-0.76 [-1.54, 0.02]	.00 [-.00, .01]			
Religious status	-0.53 [-2.03, 0.97]	.00 [-.00, .00]			
Anxiety	0.75 [0.69, 0.81]***	.41 [.35, .48]			
Subjective health complaints	0.06 [0.01, 0.11]*	.00 [-.00, .01]			
Sleep quality	-0.01 [-0.02, 0.01]	.00 [-.00, .00]			
Step two: main effect model			100.52 (11, 439)***	.716 [.673, .759]	.016***
R/S struggles	0.12 [0.05, 0.19]**	.01 [-.00, .01]			
State hope	-0.04 [-0.10, 0.01]	.00 [-.00, .01]			
Gender	1.14 [0.40, 1.88]**	.01 [-.00, .01]			
Step three: two-way interaction model			78.66 (14, 436)***	.716 [.674, .759]	.001
R/S struggles \times State hope	-0.01 [-0.02, -0.00]**	.00 [-.00, .01]			
R/S struggles \times Gender	-0.06 [-0.18, 0.06]	.00 [-.00, .00]			
State hope \times Gender	0.02 [-0.07, 0.11]	.00 [-.00, .00]			
Step four: three-way interaction model			76.42 (15, 435)***	.725 [.683, .766]	.009***
R/S struggles \times State hope \times Gender	0.03 [0.01, 0.04]***	.01 [-.00, .02]			

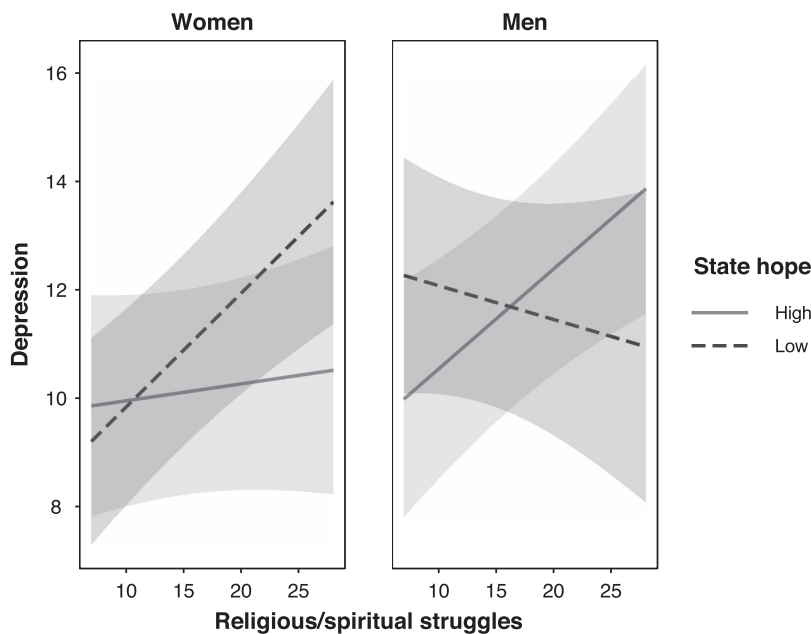
Note. R/S = religious/spiritual. Dummy codes for demographic variables are as follows: gender (0 = woman, 1 = man), racial status (0 = White, 1 = non-White), education level (0 = other education level, 1 = postsecondary education), marital status (0 = other, 1 = married or cohabiting), religious status (0 = not religious, 1 = religious).

* $p < .05$. ** $p < .01$. *** $p < .001$.

largely based on Western, educated, industrialized, rich, and democratic (WEIRD) samples (Rad et al., 2018), less is known about R/S struggles in other parts of the world. We build on recent attention to the distinct roles of religious practice and experience in the Global South at individual, familial, and community levels (Di Nicola,

2020; Hasan, 2017; Rogers & Konieczny, 2018). Further, because R/S struggles are thought to frequently occur in the context of stressful events, people's lived experiences during a public health crisis warrant further investigation. We examined R/S struggles early in the COVID-19 pandemic, a period during which many

Figure 2
Three-Way Interaction of R/S Struggles \times State Hope \times Gender on Depression



people have been grappling with existential questions as they are faced with the realities of human frailty, suffering, and death, the limitations of modern medicine and economic policies, and disruptions in daily life (e.g., work, school, religious services) that can alter support and meaning networks.

To our knowledge, the studies reported herein are the first investigations of R/S struggles and depression experienced during stringent lockdown orders imposed by national governments to control the spread of SARS-CoV-2 within the emerging economies of the Global South. In both Colombian and South African populations, R/S struggles during the public health crisis were positively associated with depression. From the perspective of embodied or place spirituality, believers' relationship to the sacred is rooted within the physical world, and often, a religious community (Captari et al., 2019; Counted & Zock, 2019). It follows, then, that the COVID-19 pandemic may have significant impacts on individuals' subjective experience of divine presence, exacerbating preexisting R/S struggles or precipitating new questions and doubts. Stay-at-home orders and health precautions have changed the landscape of religious practice and precluded the ways believers might typically cope with R/S struggles. Parishioners have not been able to gather in sacred spaces (e.g., churches, temples, mosques, synagogues) and engage with embodied communal practices (e.g., worship, prayer, lament, healing touch, feasting) that provide containing, affect-regulating functions and facilitate transcendence amidst suffering (Counted et al., 2021). That physical places long relied on for comfort and coping have become potential contexts for exposure to illness presents a complex predicament. In low- and middle-income contexts, technological infrastructure challenges (e.g., limits on local internet access) may restrict opportunities for religious adherents to virtually or digitally connect with their faith-based communities while under lockdown. During the COVID-19 pandemic, parishioners who lack access to such technologies may experience a compounded sense of disconnection from spiritual support networks that leaves them psychologically vulnerable.

We found evidence that the association between R/S struggles and depressive symptoms is multidimensional. In Study 1, positive religious coping emerged as a moderator, such that Colombians who were able to reframe R/S struggles in the context of divine presence and purpose reported slightly fewer depressive symptoms. This finding expands previous research which suggests that positive religious coping and benevolent theodicies may buffer against psychological distress following resource losses related to natural disasters (McElroy-Heltzel et al., 2018; Shannonhouse et al., 2019) and armed conflicts (Chen et al., 2021). People who experienced R/S struggles during the lockdown, but were able to turn to the sacred as a refuge and source of support amidst their doubts and questions, appeared more likely to "balance out" the negative impact of R/S struggles on their mental health by engaging adaptive religious resources. Some evidence suggests that stressful life events may propel survivors to strengthen their connection with the sacred (Davis, Kimball, Aten, Andrews, et al., 2019; Davis, Kimball, Aten, Hamilton, et al., 2019). Drawing on religion to cope in the midst of struggle could involve meditation, intercession, or spiritual surrender (e.g., placing trust in God for protection and provision), as well as collaborating with the divine and one's faith community to negotiate practical challenges. Theodicies of God as loving and attuned to one's suffering, struggles, and loneliness can provide a

restoration of meaning, emotional comfort, and promote altruistic and pro-social behaviors like forgiveness and concern for others (Ochu et al., 2018; Sandage & Morgan, 2014; Worthington & Cowden, 2017). Salutary meaning can also be made through reframing the pandemic as an opportunity to address health disparities, develop solidarity with others, reevaluate values and goals, and grow personally and spiritually.

In Study 2, state hope also emerged as a moderator of the association between R/S struggles and depression during the COVID-19 pandemic in South Africa. However, this effect varied by gender, such that the positive association between R/S struggles and depression attenuated at higher levels of hope among women but not men. Although research has been mixed about gender differences with regard to hope, women may be more open to exploring diverse ways of dealing with stressful life events (Wikström et al., 2018). Considering that we operationalized hope as having the self-efficacy to achieve personal goals and flexibly envision pathways to goal completion (Snyder et al., 2002), women who experienced R/S struggles may have been more likely to shift and broaden their goals when faced with pandemic-related barriers. For example, women may be more likely to consider relational goals (e.g., having more time with their partner or children if confined to home) in addition to career pursuits (Jankowski & Sandage, 2011; Sandage et al., 2014).

In contrast to women, the positive association between R/S struggles and depression strengthened at higher levels of hope among men. This finding could be reflective of societal norms that tend to conflate being a "real man" with being in control, autonomous, and financially successful (Munsch et al., 2018). When men experienced R/S struggles during the pandemic, they may have continued attempting to pursue the same goals and pathways as beforehand. For example, high motivation to find employment could leave men feeling like they are "beating their head against the wall" in a frozen economy. Particularly in contexts where local economies are fragile, poverty is rife, and opportunities for employment are limited, men may have more difficulty dealing with R/S struggles when their hope is oriented toward goals that would be incredibly difficult, if not impossible, to achieve during the lockdown. Social pressures may make it harder for men to "pivot" or broaden their focus to other goals (e.g., social relationships) that could serve as sources of personal agency during the pandemic, in which case staying hopeful might be helpful.

Clinical Implications

R/S concerns are far from insignificant amidst the COVID-19 public health crisis in Colombian and South African cultures and can be the context for both struggle and resilience during stay-at-home lockdowns in the Global South. People's lived experiences of hardship and loss during the pandemic may constitute spiritual or religious violations of meaning-making frameworks (Park et al., 2017), and limited access to resources can exacerbate this. Thus, we recommend that mental health practitioners, clergy, and spiritual care providers connecting with people via technological means (e.g., videochat, phone, texting) during periods of lockdown attend to, listen for, and express curiosity about implicit or explicit theodicies within believers' pandemic narratives. In areas within the Global South where technological limitations preclude access to these

supports, families, households, and informal networks can support the emergence of adaptive meaning at systemic levels through turning toward the sacred and utilizing spiritual practices to cultivate a sense of hope. Positive religious coping can support believers by easing the psychological burden of spiritual doubts and angst that is associated with depression. While the measure used in this study specifically focused on drawing on the security of one's relationship with the divine, positive religious coping in clinical practice and spiritual care can take diverse forms, based on culture and spiritual tradition. Coping through religion may facilitate a transcendent perspective by reinforcing theodicies of God's goodness, providence, and ultimate control, which can help regulate existential anxieties, provide a context for working through moral dilemmas, and promote resilience amidst struggle (Yang, 2020).

Our findings build on previous research which suggests that helping individuals reflect on and integrate benevolent theodicies with their lived experiences can protect against psychological distress (Davis, Kimball, Aten, Andrews, et al., 2019; McElroy-Heltzel et al., 2018). Religion can also be a positive source of coping by restoring coherence and a future orientation as believers "put their faith into action" by caring for vulnerable others while taking health precautions (Koenig, 2020, p. 1). Finally, there is no "one-size-fits-all" approach to navigating R/S struggles. Gender differences in religious beliefs, experiences, and coping processes need to be considered, especially in low- and middle-income contexts. Although cultivating hope may be a valuable resource that contributes to offsetting the depression risk associated with R/S struggles, the object and function of one's hope appear to make a significant difference. Hope that is directed toward grounded and flexible goals could provide solace from R/S struggles by cultivating appropriate expectations of relief, future meaning, and positive change. In contrast, rigid or relentless hope "based on an illusory sense of control" could be a psychological vulnerability (Buechler, 2013, p. 39), aggravating the negative effects of R/S struggles on psychological well-being.

Limitations and Future Research Directions

There are several methodological limitations to acknowledge. First, our findings are based on cross-sectional data. Longitudinal research is required to establish causal inferences about relations between R/S struggles, positive religious coping, hope, and depression during the COVID-19 pandemic. Second, study samples were not entirely representative of the populations from which they were drawn. Although most participants in both studies were adherents of a religious tradition (primarily Christianity), indicating that both samples were suitable for examining R/S struggles experienced during the pandemic, caution should be used in generalizing findings. Third, we did not capture the diversity of religious experience represented within Christianity, and future studies should inquire about denomination and other affiliation characteristics. Fourth, we assessed R/S struggles using the negative religious coping subscale of the Brief RCOPE, which is narrower in scope than measures that capture multiple domains. Broader assessment in future studies may help identify whether specific domains of R/S struggle during the public health crisis are more strongly associated with psychological distress than others. More generally, research is needed to better understand risks for experiencing R/S struggles during the

pandemic, what types of struggles are most common, and how struggles impact meaning-making processes and adjustment over time.

Conclusion

In two cross-sectional studies, we examined the mental health implications of R/S struggles experienced by people living in the Global South during a period of strict national lockdown imposed in response to the SARS-CoV-2 outbreak. Overall, the findings suggest that positive religious coping (across both genders) and state hope (for women) may support the mental health of people living in the Global South who experience R/S struggles during the COVID-19 pandemic. Research that is sensitive to culture and context is likely to facilitate a more holistic understanding of psychospiritual resources that can promote meaning-making and resilience during the public health crisis.

References

- Ahles, J. J., Mezulis, A. H., & Hudson, M. R. (2016). Religious coping as a moderator of the relationship between stress and depressive symptoms. *Psychology of Religion and Spirituality*, 8(3), 228–234. <https://doi.org/10.1037/rel0000039>
- Ai, A. L., Richardson, R., Plummer, C., Ellison, C. G., Lemieux, C., Tice, T. N., & Huang, B., (2013). Character strengths and deep connections following Hurricanes Katrina and Rita: Spiritual and secular pathways to resistance among volunteers. *Journal for the Scientific Study of Religion*, 52(3), 537–556. <https://doi.org/10.1111/jssr.12043>
- Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, 61(4), 461–480. <https://doi.org/10.1002/jclp.20049>
- Abu-Raiya, H., Pargament, K. I., & Krause, N. (2016). Religion as problem, religion as solution: Religious buffers of the links between religious/spiritual struggles and well-being/mental health. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 25(5), 1265–1274. <https://doi.org/10.1007/s11136-015-1163-8>
- Appel, J. E., Park, C. L., Wortmann, J. H., & van Schie, H. T. (2020). Meaning violations, religious/spiritual struggles, and meaning in life in the face of stressful life events. *The International Journal for the Psychology of Religion*, 30(1), 1–17. <https://doi.org/10.1080/10508619.2019.1611127>
- Aten, J. D., Smith, W. R., Davis, E. B., Van Tongeren, D. R., Hook, J. N., Davis, D. E., Shannonhouse, L., DeBlaere, C., Ranter, J., O'Grady, K., & Hill, P. C. (2019). The psychological study of religion and spirituality in a disaster context: A systematic review. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(6), 597–613. <https://doi.org/10.1037/tra0000431>
- Brown, R. L., Shahane, A. D., Chen, M. A., & Fagundes, C. P. (2020). Cognitive reappraisal and nasal cytokine production following experimental rhinovirus infection. *Brain, Behavior, & Immunity—Health*, 1, Article 100012. <https://doi.org/10.1016/j.bbih.2019.100012>
- Buechler, S. (2013). *Clinical values: Emotions that guide psychoanalytic treatment*. Routledge. <https://doi.org/10.4324/9780203767221>
- Captari, L. E., Hook, J. N., Aten, J. D., Davis, E. B., & Tisdale, T. C. (2019). Embodied spirituality following disaster: Exploring intersections of religious and place attachment in resilience and meaning-making. In V. Counted & F. Watts (Eds.), *The psychology of religion and place* (pp. 49–79). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28848-8_4
- Centers for Disease Control. (2018). *Prevalence of depression among adults aged 20 and over*. <https://www.cdc.gov/nchs/products/databriefs/db303.htm>

- Chen, Z. J., Bechara, A. O., Worthington, E. L., Jr., Davis, E. B., & Csikszentmihalyi, M. (2021). Trauma and well-being in Colombian disaster contexts: Effects of religious coping, forgiveness, and hope. *The Journal of Positive Psychology, 16*(1), 82–93. <https://doi.org/10.1080/17439760.2019.1663254>
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. <https://doi.org/10.1037/0033-2909.112.1.155>
- Cook, S. W., Aten, J. D., Moore, M., Hook, J. N., & Davis, D. E. (2013). Resource loss, religiousness, health, and posttraumatic growth following Hurricane Katrina. *Mental Health, Religion & Culture, 16*(4), 352–266. <https://doi.org/10.1080/13674676.2012.667395>
- Counted, V., & Watts, F. (2019). A space of transition and transaction: A rejoinder to selected commentaries on place spirituality. *Archiv für Religionspsychologie, 41*(1), 43–52. <https://doi.org/10.1177/0084672419832673>
- Counted, V., Cowden, R., & Ramkissoon, H. (2021). *Place and post-pandemic flourishing: Disruption, adjustment, and healthy behaviors*. Springer. <https://doi.org/10.1007/978-3-030-82580-5>
- Cowden, R. G., Chapman, I., & Houghtaling, A. (2021). Additive, curvilinear, and interactive relations of anxiety and depression with indicators of psychosocial functioning. *Psychological Reports, 124*(2), 627–650. <https://doi.org/10.1177/0033294120918809>
- Cowden, R. G., Pargament, K. I., Chen, Z. J., Davis, E. B., Lemke, A. W., Glowiak, K. J., Rueger, S. Y., & Worthington, E. L., Jr. (2022). Religious/spiritual struggles and psychological distress: A test of three models in a longitudinal study of adults with chronic health conditions. *Journal of Clinical Psychology, 78*(4), 544–558. <https://doi.org/10.1002/jclp.23232>
- Cowden, R. G., Rueger, S. Y., Davis, E. B., Counted, V., Kent, B. V., Chen, Y., VanderWeele, T. J., Rim, M., Lemke, A. W., & Worthington, E. L., Jr. (2021). Resource loss, positive religious coping, and suffering during the COVID-19 pandemic: A prospective cohort study of US adults with chronic illness. *Mental Health, Religion & Culture*. Advance online publication. <https://doi.org/10.1080/13674676.2021.1948000>
- Cowden, R. G., Worthington, E. L., Jr., & Laher, S. (in press). South Africa: The psychology of religion up to 2020. In K. L. Ladd, J. Basu, V. DeMarinis, Ü. Ok, & W. Zangari (Eds.), *Cambridge international handbook of the psychology of religion*. Cambridge University Press.
- Counted, V., & Zock, H. T. (2019). Place spirituality: An attachment perspective. *Archiv für Religionspsychologie, 41*(1), 12–25. <https://doi.org/10.1177/0084672419833448>
- Craig, L., & Churchill, B. (2021). Dual-earner parent couples' work and care during COVID-19. *Gender, Work and Organization, 28*(S1), 66–79. <https://doi.org/10.1111/gwao.12497>
- Currier, J. M., Foster, J. D., Witvliet, C. V. O., Abernethy, A. D., Root Luna, L. M., Schnitker, S. A., VanHam, K., & Carter, J. (2019). Spiritual struggles and mental health outcomes in a spiritually integrated inpatient program. *Journal of Affective Disorders, 249*, 127–135. <https://doi.org/10.1016/j.jad.2019.02.012>
- Czymara, C. S., Langenkamp, A., & Cano, T. (2020). Cause for concerns: Gender inequality in experiencing the COVID-19 lockdown in Germany. *European Societies, 23*(sup1), 1–14. <https://doi.org/10.1080/14616696.2020.1808692>
- Davis, E. B., Kimball, C. N., Aten, J. D., Hamilton, C., Andrews, B., Lemke, A., Hook, J. R., Captari, L., Granqvist, P., Hook, J. N., Davis, D. E., Van Tongeren, D. R., Cattrell, E. L., Cuthbert, A. D., & Chung, J. (2019). Faith in the wake of disaster: A longitudinal qualitative study of religious attachment following a catastrophic flood. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(6), 578–587. <https://doi.org/10.1037/tra0000425>
- Davis, E. B., Kimball, C. N., Aten, J. D., Andrews, B., Van Tongeren, D. R., Hook, J. N., Davis, D. E., Granqvist, P., & Park, C. L. (2019). Religious meaning making and attachment in a disaster context: A longitudinal qualitative study of flood survivors. *The Journal of Positive Psychology, 14*(5), 659–671. <https://doi.org/10.1080/17439760.2018.1519592>
- Dein, S., Loewenthal, K., Lewis, C. A., & Pargament, K. I. (2020). COVID-19, mental health and religion. *Mental Health, Religion & Culture, 23*(1), 1–9. <https://doi.org/10.1080/13674676.2020.1768725>
- Derogatis, L. R. (2001). *Brief Symptom Inventory (BSI)-18: Administration, scoring and procedures manual*. NCS Pearson.
- Derogatis, L. R. (2013). *Inventario Breve de 18 Síntomas. Manual*. Pearson Educación.
- Di Nicola, V. (2020). The global south: An emergent epistemology for social psychiatry. *World Social Psychiatry, 2*(1), 20–26.
- Durà-Vilà, G., & Dein, S. (2009). The Dark Night of the Soul: Spiritual distress and its psychiatric implications. *Mental Health, Religion & Culture, 12*(6), 543–559. <https://doi.org/10.1080/13674670902858800>
- Ekstrøm, C. T. (2014). Teaching “instant experience” with graphical model validation techniques. *Teaching Statistics: An International Journal for Teachers, 36*(1), 23–26. <https://doi.org/10.1111/test.12027>
- Exline, J. J., Yali, A. M., & Sanderson, W. C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology, 56*(12), 1481–1496. [https://doi.org/10.1002/1097-4679\(200012\)56:12<1481::AID-1>3.0.CO;2-A](https://doi.org/10.1002/1097-4679(200012)56:12<1481::AID-1>3.0.CO;2-A)
- Ferrari, J. R., Stevens, E. B., Legler, R., & Jason, L. A. (2012). Hope, self-esteem, and self-regulation: Positive characteristics among men and women in recovery. *Journal of Community Psychology, 40*(3), 292–300. <https://doi.org/10.1002/jcop.20509>
- Flannelly, K. J., Galek, K., Ellison, C. G., & Koenig, H. G. (2010). Beliefs about God, psychiatric symptoms, and evolutionary psychiatry. *Journal of Religion and Health, 49*(2), 246–261. <https://doi.org/10.1007/s10943-009-9244-z>
- Fore, H. H. (2020). A wake-up call: COVID-19 and its impact on children's health and well-being. *The Lancet Global Health, 8*(7), e861–e862. [https://doi.org/10.1016/S2214-109X\(20\)30238-2](https://doi.org/10.1016/S2214-109X(20)30238-2)
- García, F. E., Oyanedel, J. C., Páez, D., & Arias, P. R. (2021). Psychometric properties of the Brief Religious Coping Scale (Brief-RCOPE) in Chilean adults exposed to stressful events. *Journal of Religion and Health, 60*, 475–487. <https://doi.org/10.1007/s10943-019-00976-7>
- García, F. E., Páez, D., Reyes-Reyes, A., & Álvarez, R. (2017). Religious coping as moderator of psychological responses to stressful events. *Religions, 8*(4), 62–74. <https://doi.org/10.3390/rel8040062>
- Griggs, S. (2017). Hope and mental health in young adult college students: An integrative review. *Journal of Psychosocial Nursing and Mental Health Services, 55*(2), 28–35. <https://doi.org/10.3928/02793695-20170210-04>
- Hasan, R. (2017). *Religion and development in the global south*. Springer. <https://doi.org/10.1007/978-3-319-57063-1>
- Hobfoll, S. E. (2011). Conservation of resources theory: Its implication for stress, health, and resilience. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 127–147). Oxford University Press.
- Hoffman, L. (2005). A developmental perspective on the God image. In R. H. Cox, B. Ervin-Cox, & L. Hoffman (Eds.), *Spirituality and psychological health* (pp. 129–147). Colorado School of Professional Psychology Press.
- Jacobsen, B., Lee, J., Marquering, W., & Zhang, C. Y. (2014). Gender differences in optimism and asset allocation. *Economic Behavior & Organization, 107*(Pt. B), 630–651. <https://doi.org/10.1016/j.jebo.2014.03.007>
- Jacobson, N. C., & Newman, M. G. (2017). Anxiety and depression as bidirectional risk factors for one another: A meta-analysis of longitudinal studies. *Psychological Bulletin, 143*(11), 1155–1200. <https://doi.org/10.1037/bul0000111>
- Jankowski, P. J., & Sandage, S. J. (2011). Meditative prayer, hope, adult attachment, and forgiveness: A proposed model. *Psychology of Religion and Spirituality, 3*(2), 115–131. <https://doi.org/10.1037/a0021601>
- Kliem, S., Lohmann, A., Klatt, T., Möble, T., Rehbein, F., Hinz, A., Beutel, M., & Brähler, E. (2017). Brief assessment of subjective health

- complaints: Development, validation and population norms of a brief form of the Giessen Subjective Complaints List (GSB-8). *Journal of Psychosomatic Research*, 95, 33–43. <https://doi.org/10.1016/j.jpsychores.2017.02.003>
- Koenig, H. G. (2020). Maintaining health and well-being by putting faith into action during the COVID-19 pandemic. *Journal of Religion and Health*, 59, 2205–2214. <https://doi.org/10.1007/s10943-020-01035-2>
- McElroy-Heltzel, S. E., Davis, E. B., Davis, D. E., Aten, J., Hook, J. N., Van Tongeren, D. R., & Hwang, J. (2018). Benevolent theodicies protect against PTSD following a natural disaster. *Journal of Psychology and Christianity*, 37(1), 6–16. https://link.gale.com/apps/doc/A550014219/AONE?u=mlln_b_bumml&sid=googleScholar&xid=d5dde4b6
- Munsch, C. L., Weaver, J. R., Bossom, J. K., & O'Connor, L. T. (2018). Everybody but me: Pluralistic ignorance and the masculinity contest. *Journal of Social Issues*, 74(3), 551–578. <https://doi.org/10.1111/josi.12282>
- Nguyen, T. V. T., & Zuckerman, M. (2016). The links of God images to women's religiosity and coping with depression: A socialization explanation of gender difference in religiosity. *Psychology of Religion and Spirituality*, 8(4), 309–317. <https://doi.org/10.1037/rel0000060>
- Ochu, A. C., Davis, E. B., Magyar-Russell, G., O'Grady, K. A., & Aten, J. D. (2018). Religious coping, dispositional forgiveness, and posttraumatic outcomes in adult survivors of the Liberian civil war. *Spirituality in Clinical Practice*, 5(2), 104–119. <https://doi.org/10.1037/scp0000163>
- Organisation for Economic Cooperation and Development [OECD]. (2020). *Gender equality in Colombia: Access to justice and politics at the local level*. OECD Publishing. <https://doi.org/10.1787/b956ef57-en>
- Parenteau, S. C. (2017). Religious coping and substance use: The moderating role of sex. *Journal of Religion and Health*, 56(2), 380–387. <https://doi.org/10.1007/s10943-015-0166-7>
- Pargament, K. I., & Exline, J. J. (2021). Religious and spiritual struggles and mental health: Implications for clinical practice. In A. Moreira-Almeida & B. P. Mosquero (Eds.), *Spirituality and mental health across cultures*. Oxford University Press.
- Pargament, K., Feuille, M., & Burdzy, D. (2011). The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions*, 2(1), 51–76. <https://doi.org/10.3390/rel2010051>
- Pargament, K., Smith, B., Koenig, H., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37(4), 710–724. <https://doi.org/10.2307/1388152>
- Park, C. L. (2016). Meaning making in the context of disasters. *Journal of Clinical Psychology*, 72(12), 1234–1246. <https://doi.org/10.1002/jclp.22270>
- Park, C. L., Currier, J. M., Harris, J. I., & Slattery, J. M. (2017). *Trauma, meaning, and spirituality: Translating research into clinical practice*. American Psychological Association. <https://doi.org/10.1037/15961-000>
- Park, C. L., Holt, C. L., Le, D., Christie, J., & Williams, B. R. (2018). Positive and negative religious coping styles as prospective predictors of well-being in African Americans. *Psychology of Religion and Spirituality*, 10(4), 318–326. <https://doi.org/10.1037/rel0000124>
- Parry, B. R., & Gordon, E. (2021). The shadow pandemic: Inequitable gendered impacts of COVID-19 in South Africa. *Gender, Work and Organization*, 28(2), 795–806. <https://doi.org/10.1111/gwao.12565>
- Patil, P. A., Porche, M. V., Shippen, N. A., Dallenbach, N. T., & Fortuna, L. R. (2018). Which girls, which boys? The intersectional risk for depression by race and ethnicity, and gender in the U.S. *Clinical Psychology Review*, 66, 51–68. <https://doi.org/10.1016/j.cpr.2017.12.003>
- Peterson, C., & Seligman, M. E. (2003). Character strengths before and after September 11. *Psychological Science*, 14(4), 381–384. <https://doi.org/10.1111/1467-9280.24482>
- Pirutinsky, S., Cherniak, A. D., & Rosmarin, D. H. (2020). COVID-19, mental health, and religious coping among American Orthodox Jews. *Journal of Religion and Health*, 59, 2288–2301. <https://doi.org/10.1007/s10943-020-01070-z>
- Pirutinsky, S., Rosmarin, D. H., Pargament, K. I., & Midlarsky, E. (2011). Does negative religious coping accompany, precede, or follow depression among Orthodox Jews? *Journal of Affective Disorders*, 132(3), 401–405. <https://doi.org/10.1016/j.jad.2011.03.015>
- R Core Team. (2020). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org/>
- Rad, M. S., Martingano, A. J., & Ginges, J. (2018). Toward a psychology of Homo sapiens: Making psychological science more representative of the human population. *Proceedings of the National Academy of Sciences of the United States of America*, 115(45), 11401–11405. <https://doi.org/10.1073/pnas.1721165115>
- Rogers, M., & Konieczny, M. E. (2018). Does religion always help the poor? Variations in religion and social class in the west and societies in the global south. *Palgrave Communications*, 4(1), 1–11. <https://doi.org/10.1057/s41599-018-0135-3>
- Rosmarin, D. H., Malloy, M. C., & Forester, B. P. (2014). Spiritual struggle and affective symptoms among geriatric mood disordered patients. *International Journal of Geriatric Psychiatry*, 29(6), 653–660. <https://doi.org/10.1002/gps.4052>
- Sandage, S. J., Crabtree, S., & Schweer, M. (2014). Differentiation of self and social justice commitment mediated by hope. *Journal of Counseling and Development*, 92(1), 67–74. <https://doi.org/10.1002/j.1556-6676.2014.00131.x>
- Sandage, S. J., & Morgan, J. (2014). Hope and positive religious coping as predictors of social justice commitment. *Mental Health, Religion & Culture*, 17(6), 557–567. <https://doi.org/10.1080/13674676.2013.864266>
- Sandage, S. J., Rupert, D., Stavros, G., & Devor, N. G. (2020). *Relational spirituality in psychotherapy: Healing suffering and promoting growth*. American Psychological Association. <https://doi.org/10.1037/0000174-000>
- Schmidt, S. (May 2020). Women have been hit hardest by job losses in the pandemic. And it may only get worse. *The Washington Post*. <https://www.washingtonpost.com/dc-md-va/2020/05/09/women-unemployment-job-loss-coronavirus/>
- Schnabel, L. (2018). More religious, less dogmatic: Toward a general framework for gender differences in religion. *Social Science Research*, 75, 58–72. <https://doi.org/10.1016/j.ssresearch.2018.06.010>
- Scioli, A., Ricci, M., Nyugen, T., & Scioli, E. R. (2011). Hope: Its nature and measurement. *Psychology of Religion and Spirituality*, 3(2), 78–97. <https://doi.org/10.1037/a0020903>
- Selya, A. S., Rose, J. S., Dierker, L. C., Hedeker, D., & Mermelstein, R. J. (2012). A practical guide to calculating Cohen's f^2 , a measure of local effect size, from PROC MIXED. *Frontiers in Psychology*, 3, Article 111. <https://doi.org/10.3389/fpsyg.2012.00111>
- Shannonhouse, L. R., Bialo, J. A., Majuta, A. R., Zeligman, M. R., Davis, D. E., McElroy-Heltzel, S. E., Aten, J. D., Davis, E. B., Van Tongeren, D. R., & Hook, J. N. (2019). Conserving resources during chronic disaster: Impacts of religious and meaning-focused coping on Botswana drought survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(2), 137–146. <https://doi.org/10.1037/tra0000420>
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In C. R. Synder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257–276). Oxford University Press.
- Snyder, C. R., Simpson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology*, 70(2), 321–335. <https://doi.org/10.1037/0022-3514.70.2.321>
- Snyder, E., Cai, B., DeMuro, C., Morrison, M. F., & Ball, W. (2018). A new single-item sleep quality scale: Results of psychometric evaluation in patients with chronic primary insomnia and depression. *Journal of*

- Clinical Sleep Medicine*, 14(11), 1849–1857. <https://doi.org/10.5664/jcsm.7478>
- Snyder, J. D., Boan, D., Aten, J. D., Davis, E. B., Van Grinsven, L., Liu, T., & Worthington, E. L. Jr. (2020). Resource loss and stress following conflict in Africa: Conservation of resources theory in the Eastern Democratic Republic of the Congo. *Journal of Traumatic Stress*, 33(3), 227–237. <https://doi.org/10.1002/jts.22448>
- Statistics South Africa. (2016). *Community Survey 2016 in brief*. http://cs2016.statssa.gov.za/wp-content/uploads/2017/07/CS-in-brief-14-07-2017-with-cover_1.pdf
- United Nations. (2020). *COVID-19 and the least developed countries*. <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-66-covid-19-and-the-least-developed-countries/>
- Trevino, K. M., Archambault, E., Schuster, J., Richardson, P., & Moye, J. (2012). Religious coping and psychological distress in military veteran cancer survivors. *Journal of Religion and Health*, 51, 87–98. <https://doi.org/10.1007/s10943-011-9526-0>
- Visser, P. L., Loess, P., Jeglic, E. L., & Hirsch, J. K. (2013). Hope as a moderator of negative life events and depressive symptoms in a diverse sample. *Stress and Health*, 29(1), 82–88. <https://doi.org/10.1002/smi.2433>
- Waddell, N., Overall, N., Chang, V., & Hammond, M. (2020). *Gendered division of labour during a nationwide COVID-19 lockdown: Implications for relationship problems and satisfaction*. <https://psyarxiv.com/kqb9m/>
- Walsh, F. (2020). Loss and resilience in the time of COVID-19: Meaning making, hope, and transcendence. *Family Process*, 59(3), 898–911. <https://doi.org/10.1111/famp.12588>
- Wikström, B. M., Lorentzen, B., & Lorentzen, S. (2018). Gender differences in hope and its relevance to depression symptoms among Norwegian adolescents. *Open Journal of Nursing*, 8(2), 157–169. <https://doi.org/10.4236/ojn.2018.82014>
- Wilson, T. E., Weedon, J., Cohen, M. H., Golub, E. T., Milam, J., Young, M. A., Adedimeji, A. A., Cohen, J., & Fredrickson, B. L. (2017). Positive affect and its association with viral control among women with HIV infection. *Health Psychology*, 36(1), 91–100. <https://doi.org/10.1037/hea0000382>
- World Health Organization. (2022). *WHO coronavirus disease (COVID-19) dashboard*. <https://covid19.who.int>
- Worthington, E. L., Jr., & Cowden, R. G. (2017). The psychology of forgiveness and its importance in South Africa. *South African Journal of Psychology*. *Suid-Afrikaanse Tydskrif vir Sielkunde*, 47(3), 292–304. <https://doi.org/10.1177/0081246316685074>
- Yang, M. (2020). Resilience and meaning-making amid the COVID-19 epidemic in China. *Journal of Humanistic Psychology*, 60(5), 662–671. <https://doi.org/10.1177/0022167820929215>

Received October 8, 2020

Revision received March 2, 2022

Accepted March 2, 2022 ■