

Religious coping and young adult's mental well-being during Covid-19: Testing a double moderated mediation model

Archive for the Psychology of Religion
2022, Vol. 44(3) 158–174
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DOI: 10.1177/00846724221121685
journals.sagepub.com/home/prj



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Abstract

The literature describes religious coping as an important predictor of mental well-being. Present study is aimed at extending this knowledge by assessing whether specific religious coping regulates specific cognitive emotional responses to improve well-being during Covid pandemic, an extreme international event with significant impacts on individuals and communities. A sample of young adults responded to self-report measures of negative and positive religious coping, positive reappraisal, self-blaming, and mental well-being. Results revealed that positive religious coping was a positive predictor of mental well-being and positive reappraisal mediated this positive link. Also, gender and physical health status significantly interacted with positive reappraisal to predict mental well-being in these mediational associations. More specifically, indirect effects of positive reappraisal were positive and significant for men and for participants with better physical health compared with women and those with poor physical health. However, negative religious coping was not a significant correlate of mental well-being but a positive correlate of self-blame. Results suggest that positive religious coping facilitates positive regulation of emotions for improved mental well-being in young adults and particularly young men.

Keywords

Mental well-being, positive reappraisal, religious coping, self-blaming

Religion is an integral part of lives of many individuals. Generally, religion and mental health have been considered as allies (Hackney & Sanders, 2003) yet the connection between both is not a simple one. The empirical and review studies present that earlier findings have generally favored the positive association of religion and spirituality with mental health (Jibeen et al., 2018; Koenig

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et al., 2001). However, upon the introduction of concepts of religious strain and negative religious coping, the researchers have found that strenuous connection with divine can lead to decreased mental health and well-being (Pargament et al., 2005). Pargament et al. (2005) describe religious coping as a use of religion in seeking strength and counseling in difficult times to reduce distress and avoid unpleasant thinking associated with distress. However, religious coping is not a unidirectional construct and is divided into positive and negative coping. Positive religious coping defined as developing a secure connection with God involves positively appraising the situation. Conversely, negative religious coping translates to an insecure connection with deity and involves appraising the unpleasant situation as a consequence of divine punishment. Positive religious coping provides duly needed comfort in times of distress while negative religious coping is generally associated with mental distress.

Mental well-being, an integral part of health, has been defined as a state which enables an individual to realize his abilities, cope with routine stressors, and work productively to contribute to community (WHO, 2018). Being a state-dependent phenomenon, mental well-being is greatly influenced by situational and environmental stressors. The Covid crisis, being an extremely negative and highly unpredictable event, undoubtedly fits the criteria for being a stressor. At the same time, the pandemic is unique in that it is an intensive global health-related event which has brought sizable costs for societies across the globe. During this crisis, maintaining mental well-being has become a significant challenge as the pandemic has brought about many changes and associated challenges including social and economic crisis, social distancing, and elevated fear which have greatly impacted individuals' physical and mental health (Mumtaz, 2020; Shaukat et al., 2020). Research data from various countries has highlighted various mental and physical health issues associated with the pandemic (Thomas & Barbato, 2020). There is an accumulating evidence indicating that humans have a tendency to turn to religion to benefit from religious coping when dealing with unpredictable natural disasters and crises such as Covid-19, which is rather more intensive and unpredictable compared with earlier global crises (Bentzen, 2019, 2021; Oles & Wozny, 2017; Pirutinsky et al., 2020). Similarly, during the pandemic, increasing uncertainty and stress have increased religious interests in individuals (Thomas & Barbato, 2020).

Another stream of evidence has highlighted religion as a protective resource likely to decrease the likelihood of mental illnesses and to improve the probability of well-being among youth (e.g. Fatima et al., 2018). Specifically, religious coping offers further mental health benefits to deal effectively with critical life events and to cope with distress (Nouman & Benyamini, 2016; Pargament et al., 2005; Pieper & Van Uden, 2007; Pirutinsky et al., 2020). Among followers of different religions, literature supports positive effects of positive religious coping on well-being and adjustment in general (e.g. Abu-Raiya & Pargament, 2015; Fallahchai et al., 2021; Fatima et al., 2018) and during the current pandemic in particular (Thomas & Barbato, 2020). On the contrary, negative religious coping is associated with anxiety, depression, and mental health problems (Francis et al., 2019).

Religious coping, cognitive emotion regulation, and mental well-being: proposed mediational link

Given the importance of religious coping in unpredictable and stressful situations, a further question arises; how does religious coping predict well-being? Vishkin et al. (2014) propose that cognitive evaluations and emotional components may account for greater well-being in religious individuals. The researchers assert that religion being a unique cultural system influences experiences, expressions, and regulation of emotions. They explain in detail that religion shapes aspects of emotion regulation by setting emotional goals well aligned with religious values, by influencing

intrinsic processes such as self-regulation skills and emotional beliefs, and by influencing extrinsic processes to support and facilitate emotion regulation. By shaping emotion regulation, religion eventually promotes well-being. Hence, religion may promote well-being by effectively regulating cognitions and emotions in stressful situations. Hence, it is proposed that cognitive emotion regulation may explain the religious coping and mental well-being link because religious coping serves a significant role in reframing, interpreting, and reappraising the life situations with a positive or negative frame of mind and emotional valence, which eventually predicts mental well-being. Cognitive emotion regulation refers to deliberate balancing of cognitions and emotions in reaction to stressful stimuli, rather than expressing extreme positive or negative emotions (Oles & Wozny, 2017). Regulation of emotions is essential for optimal functioning and mental well-being while dysfunctional emotional regulation is perceived as counterproductive and leads to adverse consequences such as poor mental well-being (Gross & Thompson, 2007). Cognitive emotion regulation involves positive and negative strategies (Garnefski & Kraaij, 2007). Generally, positive emotion regulation strategies bring about generative and prolific outcomes while negative strategies result in unpleasant outcomes (Sheppes et al., 2011). However, people use both of these coping strategies as some strategies are adaptive in some conditions and others are adaptive in other conditions.

The current study focuses on positive reappraisal and self-blame—the first one as a positive regulation strategy and the latter one as a negative regulation strategy—as two potential mediators. Focus on the two specific emotion regulation strategies has been theoretically, empirically, and pragmatically supported. Theoretical support comes from Lazarus and Folkman's (1984) perspective that considers appraisal as central to the stress management as well as from Vishkin et al.'s (2014) perspective. Lining up with these perspectives and considering the intensive stressful Covid context, it is proposed that positive religious coping would help in positively reappraising the Covid situation eventually leading to better stress management and improved well-being. Recent empirical evidence also supports the mediating role of positive reappraisal linking positive religious coping with mental health (Doclos et al., 2021). Thomas and Savoy (2014) propose that some forms of religious coping are highly similar to specific forms of emotion regulation. Consistent with the proposition by Thomas and Savoy (2014) and given the similarity between positive religious reappraisal and positive cognitive reappraisal and the similarity between negative religious coping (incorporating elements of self-blame and self-guilt) and self-blame, it seems pragmatic to propose that the two specific emotion cognitive strategies are the part of mechanisms explaining the specific religious coping–well-being links.

Despite theoretical, empirical, and pragmatic support for the potential mediating roles of two specific emotion regulation strategies linking religious coping and mental well-being, most available literature is based on Christian samples overwhelmingly drawn from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies. As Nielsen et al. (2017) have noted, studying WEIRD samples without appreciating variability across populations is a very serious limitation in understanding mental health. Regarding the focus of the current investigation, it is known that Pakistan is a Muslim country with a collectivistic and patriarchal sociocultural system. Although emotion regulation is a universal process, it is highly sensitive to cultural differences (Ford & Mauss, 2015). Some studies on emotion regulation have been conducted with Pakistani Muslim samples (Jabeen et al., 2013; Zafar et al., 2021); however, these have focused on parenting practices as predictors of emotion regulation or have linked emotion regulation with psychopathological tendencies. Another study from the same cultural context has analyzed cognitive reappraisal as a mediator linking executive cognitive functioning with Machiavellian adjustment (Fatima & Shahid, 2020). To the best of our knowledge, no study with Pakistani adults to date has explored the mediating roles of positive reappraisal and self-blaming explaining the specific association of positive and negative religious coping with well-being. Hence, it has been proposed that

positive reappraisal would explain, to some degree, the positive religious coping–mental well-being link and self-blaming would explain, to some degree, the negative religious coping–mental well-being link during the pandemic.

Physical health and gender as moderators

While literature indicates that positive emotion regulation serves to enhance well-being and negative emotion regulation plays its role in mental health problems (Fatima et al., 2018; Francis et al., 2019), the question remains whether and how, emotion regulation interacts with personal factors to predict mental well-being. The study focuses on two personal factors, physical health and gender, which likely moderate the emotion regulation–mental well-being link. The role of physical health cannot be ignored in mental health during the Covid pandemic. Evidence supports that fear and uncertainties associated with the pandemic have impacted individuals' physical health alongside mental health (Shaukat et al., 2020). Given the evidence for the strong cross-sectional associations between physical and mental health even after controlling for confounding variables (Ohrnberger et al., 2017), it is likely that good physical health of young adults may serve as a protective factor in promoting their mental health by positively regulating their emotional responses when dealing with the intensive and stressful Covid crisis. In search of primary research examining the hypothesized interactive associations, one cross-sectional study could be identified. The study by Hughes and Gullone (2011) observed interactive effects of body image concerns and emotion regulation strategies on psychological symptomatology with more symptoms in those reporting frequent body image concerns and more dysfunctional negative emotion regulation strategies. Therefore, it is assumed that physical health would buffer the association between cognitive emotion regulation and mental well-being of young adults during the pandemic.

Gender is another significant individual and socio-cultural factor affecting cognitive emotion regulation and well-being (Evans et al., 2011; Goubet & Chrysikou, 2019). Despite major research interests regarding gender differences in emotion regulation, it is still not clear whether differences in use of specific cognitive emotion regulation strategies differently relate to well-being in both genders. Among the most pervasive gender differences in the realm of emotion regulation is women's increased proneness toward development of mental health problems and decreased well-being (e.g. Steel et al., 2014). Over the years, this difference in susceptibility to mental health problems has been attributed to gender differences in frequency and efficiency of regulation strategies that show up in behavioral and neuroimaging studies (Perchtold et al., 2019; Stevens & Hamann, 2012). While this invites assumptions that poor mental health in women may partly originate from less frequent or less efficient use of cognitive reappraisal and better well-being in men may relate to more efficient use of emotion regulation, available data are sparse and inconsistent. Few studies report that men endorse more positive reinterpretation (Öngen, 2010) and women use more self-blame (Goubet & Chrysikou, 2019), while others report no gender differences in use of cognitive reappraisal (Fatima & Shahid, 2020; Perchtold et al., 2019). Despite several appeals for investigating gender differences in men's and women's mental well-being in relation to their capacity to positively or negatively regulate emotions, few studies have been conducted in this regard. In an effort to discover a clearer picture, Perchtold et al. (2019) using a performance test to generate reappraisals found that reappraisal capacity negatively predicted fewer depressive daily life experiences in men only, despite the absence of gender differences in basic capacity of reappraisal.

Current study in the Covid context in Pakistani culture

Drawing on the literature, religious coping and emotion regulation are important predictors of mental health in traumatic and stressful situations. Also, religious coping and cognitive emotion

regulation are important interrelated factors that help people cope with distress and improve internal positive states enhancing well-being, yet whether emotion regulation explains the religious coping-well-being link remains unclear. In addition, the mainstream literature on the psychology of religion is mainly based on Christian samples from WEIRD communities generally selected from Western countries. A little research on religiosity has been conducted with Asian Muslims in spite of the documented importance of Islamic religiosity in this population. Theorists argue that conceptualization of prayer and religiosity adopted in Western faith traditions cannot be applied to Eastern faith traditions (Ladd et al., 2016). Similarly, Cohen and Johnson (2017) while reviewing the Western research on religion and well-being suggest studying well-being in other religious groups. Hence, the present study proposes that positive and negative religious coping would differently predict mental well-being during the Covid pandemic (H1) and selective cognitive emotion regulation strategies—positive reappraisal and self-blaming—would explain the religious coping-well-being link (H2).

Examining these questions in the Covid context is imperative because the pandemic is unique from other exceptionally challenging and traumatic situations in several ways. Primarily, it is an extremely intensive global challenge with significant impacts on individuals' lives around the global communities. In addition, it has far-reaching impacts on nearly all aspects of life (such as education, economy, industry, global market, agriculture, human health, etc.) compared with many other stressors and challenges with limited impact on specific life aspects and on specific individuals such as victims. Most importantly, in addition to social isolation and restrictions on social mobility, it has sizable mental health consequences including but not limited to depression, anxiety, fear, death anxiety, obsessive-compulsive disorder symptoms associated with frequent hand washing, and uncertainties. Moreover, widespread and inevitable use of technology and social media multiplied mental health consequences by unprepared switching from physical to online modes of interaction in educational and occupational settings, on one hand, and by spreading false and unauthenticated fearful rumors about Covid through social media, on the other hand. Several appeals particularly from World Health Organization (WHO) for investigating, controlling, and mitigating the mental health consequences of Covid emphasize the significance of the research questions under study (WHO, 2020).

Apart from the universal effects of Covid, the situation in developing countries like Pakistan with weak economic structure and health care systems is particularly worse (Ali et al., 2020). Given that the individuals with low immunity and compromised physical health are more vulnerable and stress response can weaken the immune response to infection (Peters et al., 2021), it becomes essential to assess the interactive effects of physical health and emotion regulation on mental health during the pandemic particularly in the context of Pakistan with poor health care infrastructure and high Covid-related fear and stress (Meher et al., 2022).

Pertaining to the moderating role of gender during Covid in this cultural context, assumed gender differences in well-being in relation to emotion regulation may be attributed to the patriarchal and collectivistic cultural context in light of social role theory (Eagly & Wood, 2016). In Pakistan, in-house chores are considered the responsibility of women irrespective of their out of home assignments such as studentship or job-related tasks (Cerrato & Cifre, 2018). During the pandemic lockdown, mostly servants were left off leading to added burden of housekeeping on women, alongside online performing their study or job assignments. By the same token, the collectivistic Pakistani culture places more emotion regulation demands on part of women who are expected to deal with multiple interdependent relationships along with multiple family obligations (Fatima & Shahid, 2020). Empirical evidence from the same cultural context has shown gender differences in emotion regulation difficulties and its association with psychopathology. Specifically, adolescent girls compared with boys scored lower on limited access to effective emotion regulation and this variable positively predicted psychopathology in girls only (Zafar et al., 2021). Moreover, Fatima

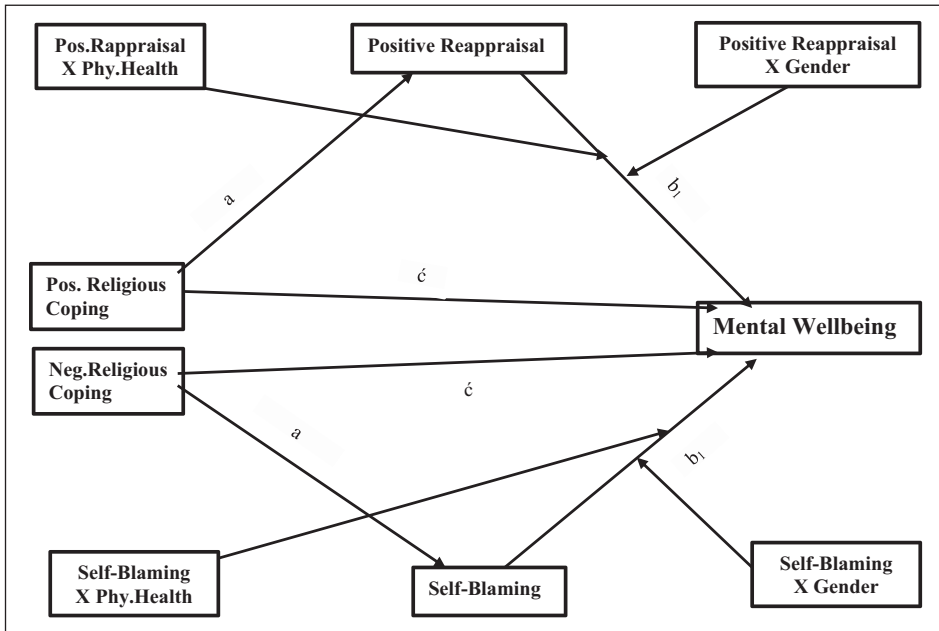


Figure 1. Conceptual model showing mediating roles of positive reappraisal and self-blaming and moderating roles of physical health and gender in association between specific religious coping and mental well-being.

and Shahid (2020) found that mediated links between cognitive functioning, cognitive reappraisal, and Machiavellian adjustment were stronger for women compared with men. Despite the presence of empirical support for gender differences in psychopathology in relation to cognitive reappraisal, empirical support for gender differences in relating positive reappraisal and self-blaming to mental well-being is sparse in this culture. Thus, assumptions that gender differences in mental well-being may be attributed to gender differences in the use of positive reappraisal and self-blaming remain rather speculative to date. This, alongside increasing recognition that emotion regulation is culturally sensitive and that frequent use of positive reappraisal is at the core of mental well-being (Ford & Mauss, 2015), highlights the need for more in-depth assessment of gender differences in relating positive reappraisal and self-blaming to mental well-being in the non-WEIRD population from Pakistan. Hence, it has been proposed that physical health would interact with selected cognitive emotion regulation strategies to predict mental well-being from specific religious coping (H3a) and gender would interact with emotion regulation strategies to predict mental well-being from religious coping (H3b). Conceptualized model has been presented in Figure 1.

Method

Sample

The sample were 200 young adults in age range 19–36 years (M age = 21.43, SD = 2.96) recruited through online survey during the first wave of Covid-19 pandemic. The Google Forms link was publicized through emails, social media apps, and smartphone applications including Whatsapp, Twitter, Instagram, and Facebook. The first page of the form stated the introductory

note describing that respondents are required to answer few questions religiosity, emotion regulation, and well-being during the pandemic. Inclusion criteria was also mentioned on the first page stating that adults in age range 19–40 years, men and women, Muslims, and those who were able to read and understand English language to respond to statements were eligible to participate. Next page required participants to endorse informed consent. The only participants who consented to participate were able to access the subsequent form requiring participants' responses to demographic information and study measures. Participant's confidentiality was assured and maintained by keeping their identity anonymous.

All participants were young Muslims from South Asian ethnic background. The sample included women (59%) and men (41%). Most of the participants were living in urban areas (89%), belonged to middle socioeconomic status (92%; self-reported), and were financially dependent on others (71%). The mean reported education level of participants was 12.48 ($SD = 4.15$) years of completed education.

Instruments

In addition to a demographic sheet, participants were assessed on self-report measures of religious coping, cognitive emotion regulation, and mental well-being. On demographic form, participants responded to open-ended items asking age, gender, and education in years; as well as religious affiliation (Muslims or non-Muslims), financial status (two categories: independent or dependent on others), and perceived socioeconomic status (three categories: lower middle, higher). They responded to a closed ended question asking their overall physical health with five response options from very poor (1) to very good (5). In addition, the respondents were assessed on valid and reliable measures of Brief RCOPE, Cognitive Emotion Regulation Questionnaire, and The Warwick–Edinburgh Mental Well-Being Scale.

Brief RCOPE. The Brief RCOPE (Pargament et al., 2011), a 14-item scale, assessed use of religious coping while experiencing psychological or emotional distress. The scale comprised two subscales, namely, positive and negative religious coping. The items were scored on a 4-point response format ranging from 0 (not at all) to 3 (a great deal). First seven items assessed positive use of religious coping, whereas the last seven items assessed negative use of religious coping. Composite subscale scores for both dimensions were obtained by summing the item scores on the relevant subscales with higher scores representing the higher use of each religious coping strategy. Alpha reliabilities of subscales in the current research were .88 and .75 for negative and positive religious coping, respectively.

Cognitive Emotion Regulation Questionnaire. Two subscales, namely, self-blaming and positive reappraisal, were taken from Cognitive Emotion Regulation Questionnaire (Garnefski & Kraaij, 2007) to assess the use of specific regulation strategies in reaction to stressful situations pertaining to Covid pandemic. The introductory statement was reworded in relation to Covid situation. It stated as 'Keeping in mind the Covid situation, rate these items.' The responses on the two subscales were obtained on a 5-point Likert-type scale ranging from 1 (almost never) to 5 (almost always). Two composite scores of self-blaming and positive reappraisal were calculated by adding the scores on individual items comprising the subscales. The higher scores likely to be ranged from 4 to 20 on each of these subscales represented more frequent use of each particular emotion regulation strategy. Internal consistencies of the subscales in the study were very good that is, .85 for self-blaming and .81 for positive reappraisal.

The Warwick–Edinburgh Mental Well-Being Scale. The Scale (Tennant et al., 2007) comprising 14 items was used to assess mental well-being. All items were phrased positively and focused on positive characteristics of mental well-being. The items were scored on a 5-point response format from 1 (none of the time) to 5 (all of the time). Composite score obtained by adding item scores (likely ranged = 14–70) showed a very good internal consistency in the present study ($\alpha = .87$).

Procedure

Initially, the study obtained ethical approval for the study from the Ethical Review Board, COMSATS University Islamabad, Lahore Campus. Keeping in view the Covid pandemic, an online data collection mode was adopted. The nature, purpose, and eligibility criteria for the study were explained in the introductory statements. The confidentiality of their data was assured to participants. The participants were able to complete the form only if they consented to participate in the study. Before proceeding to complete the form, written instructions were provided. Also, email address and a Whatsapp number was provided in the Google form to address further queries related to the study. The order of scales was counterbalanced in Google form across participants. The form completion procedure was not made time bound. In the end, the respondents were cordially appreciated for their voluntary participation in the study.

Data analyses

Descriptive statistics of study variables were generated (see Table 2). Inferential statistics were computed to analyze group differences, correlations, and moderated mediated associations. Independent sample *t* test compared men and women on study variables. Then, bivariate correlations between positive and negative religious coping, self-blaming, positive reappraisal, physical health, and mental well-being were calculated for the full sample. Next, mediation and double moderated mediation models were computed through regression analyses by analyzing Models 4 and 16, respectively in Process software (Preacher & Hayes, 2008). Prior to analyzing these models, raw scores on all study variables were standardized with $M = 0$ and $SD = 1$ and 5000 bootstrapped samples were generated. Model 4 was analyzed to test the mediating role of two cognitive emotion regulation strategies in association between religious coping and mental well-being. Model 4 provided regression weights for the direct and indirect effects as well as the significance of indirect effects. Finally, the data were analyzed by calculating double moderated mediation model (Model 16 in Process) with a specific emotion regulation strategy as a mediator of the religious coping–mental well-being link, and physical health (a continuous moderator) and gender (a categorical moderator) as two moderators of the mediated associations. Model 16 provided the significance of the two interaction terms as well as conditional indirect effects of the mediator across levels of the two moderators.

Results

Descriptive statistics (means, standard deviations, and alpha reliabilities) of two religious coping variables, two emotion regulation variables, and mental well-being were calculated (see Table 2). Table 2 indicates good reliability coefficients for all study variables, ranging from .75 to .88. Results from between group *t* tests showed significant gender differences with men scoring higher on negative religious coping, mental well-being, and physical health compared with women (see Table 1).

Table 1. Descriptive statistics of study variables.

Variables	Full sample (N = 200)	α	Range	Men (n = 82)	Women (n = 116)	t value
	M (SD)			M (SD)	M (SD)	
Age	21.43 (2.96)	–	19–40	21.07 (3.14)	21.75 (2.79)	–1.59
Education	12.48 (4.17)	–	10–18	12.34 (4.26)	12.58 (4.13)	–.39
Religious coping (P)	18.25 (2.69)	.75	11–21	18.18 (2.93)	18.27 (2.53)	–.23
Religious coping (N)	10.70 (6.11)	.88	0–21	12.10 (6.41)	9.68 (5.65)	2.81**
Self-blaming	12.89 (4.27)	.85	4–20	13.45 (4.14)	12.51 (4.26)	1.54
Positive reappraisal	16.43 (3.19)	.81	6–20	16.20 (3.80)	16.57 (2.69)	–.80
Mental well-being	50.70 (9.86)	.87	21–70	52.96 (9.60)	48.91 (9.74)	2.91**
Physical health	3.53 (.89)	–	1–5	3.82 (.91)	3.31 (.81)	4.11***

Religious coping (P): positive; religious coping (N): negative.

** $p < .01$; *** $p < .001$.

Table 2. Correlation between religious coping, cognitive emotion regulation, and mental well-being.

Variables	2	3	4	5	6	7	8
1. Age	.36***	.01	–.12	–.10	–.09	.06	.01
2. Education	–	–.03	–.10	–.03	.08	.03	.02
3. Positive religious coping		–	–.04	.09	.45***	.21**	.06
4. Negative religious coping			–	.39***	–.15*	.00	–.04
5. Self-blaming				–	.24**	.09	–.05
6. Positive reappraisal					–	.27***	.17*
7. Mental well-being						–	.34***
8. Physical health							–

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

Correlations between study variables were calculated and presented in Table 2. Results showed that positive but not negative religious coping significantly correlated with mental well-being. In addition, positive religious coping was the positive correlate of only positive reappraisal while negative religious coping was the negative correlate of positive reappraisal and positive correlate of the self-blaming. Of two emotion regulation strategies, only positive reappraisal significantly and positively correlated with mental well-being. Good physical health was a positive correlate of positive reappraisal mental well-being.

Only positive religious coping from the two religious coping strategies and only positive reappraisal from two emotion regulation strategies were significantly correlated with mental well-being. Therefore, mediation and moderated mediation models were calculated only for positive reappraisal as a mediator of the association between positive religious coping and mental well-being and to assess the moderating roles of physical health and gender in these mediated links. The results from Regression Equations 1 and 2 (Model 4; Table 3) showed that positive religious coping positively predicted positive reappraisal and mental well-being. In Regression Equation 3 (Model 4), when positive reappraisal was added as a predictor of mental well-being, the total regression weight of positive religious coping was reduced from $B = 0.21$ to $B = 0.11$, and

Table 3. Conditional mediated associations between positive religious coping, positive reappraisal, and mental well-being across gender and levels of physical health.

Predictors	Outcome							
	Model 4				Model 16			
	Reg 1		Reg 2		Reg 3		Reg 4	
	Positive reappraisal		Mental well-being		Mental well-being		Mental well-being	
	B	SE	B	SE	B	SE	B	SE
Positive religious coping	.45***	.06	.21**	.07	.11	.07	.08	.07
Positive reappraisal	–	–	–	–	.22**	.07	.68**	.19
Physical health							.30***	.06
Gender							–.23	.13
Positive Reappraisal × Physical Health							.18**	.06
Positive Reappraisal × Gender							–.31*	.13
R ²	.20		.05		.09		.27	
Model fit <i>F</i> (<i>df</i>)	49.76***(1, 198)		9.51**(1, 198)		9.61***(2, 197)		11.84***(6, 191)	
Total effect	.21**(.07)							
Direct effect	.11(.07)							
Indirect effect	.10**(.04)							
Sobel z test	2.67**							
Conditional indirect effects at levels of physical health	Physical health (–1.00): Men = .09(.05); Women = –.05(.05) Physical health (.00): Men = .17(.04); Women = .03(.05) Physical health (1.00): Men = .24(.06); Women = .11(.06)							

Model 4 was calculated in process; values shown are regression weights; raw scores were standardized before calculating mediation in process; number of bootstrap samples for bias corrected confidence interval was 5000. PR = positive reappraisal; PRC = positive religious coping.
p* < .05, *p* < .01, ****p* < .001.

resulted in a significant indirect effect of *B* = 0.10. The significant Sobel z value (2.67, *p* < .001) revealed that positive reappraisal significantly mediated the positive religious coping–mental well-being link. Model 16 tested the conditional mediating effect of positive reappraisal in positive religious coping–mental well-being link across levels of physical health and gender. The results from moderated mediation model showed that conditional indirect effects of positive reappraisal were significant for both moderators, namely, physical health and gender (see Figure 2). Further interpretation of the findings revealed that conditional indirect effects were stronger for young men and participants with better physical health compared with young women and those with poor physical health.

Discussion

The objectives of the present study were to assess the direct, indirect, and conditional indirect associations between religious coping, emotional regulation, and mental well-being in young adults during Covid moderated by physical health and gender. To achieve the objectives, two

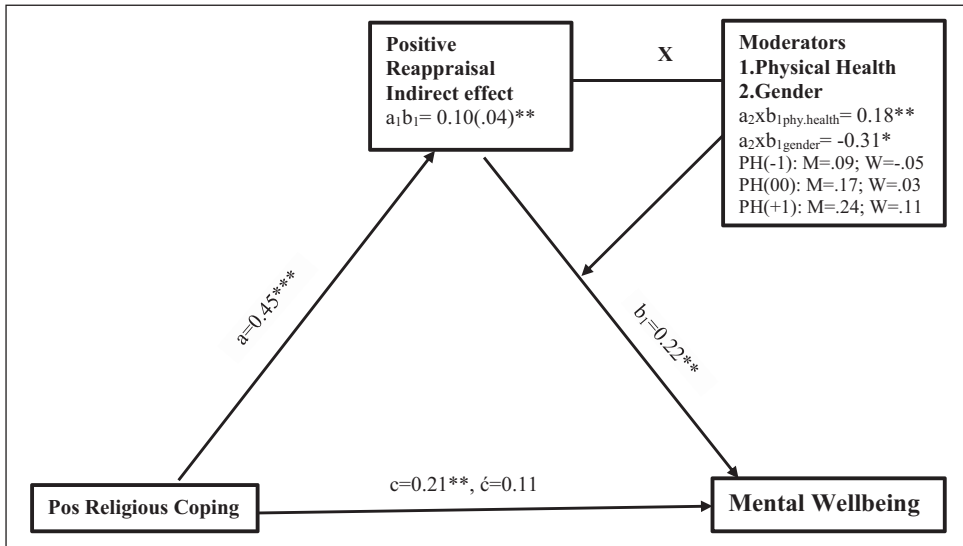


Figure 2. Resulting moderated mediation model showing conditional indirect associations between positive religious coping, positive reappraisal, and mental well-being across levels of physical health and gender.

Values shown are regression weights. *c*: total effect; \hat{c} : direct effect; a_1b_1 : indirect effect; $a_2 \times b_{1\text{phy.health}}$: interaction between positive reappraisal and physical health; $a_2 \times b_{1\text{gender}}$: interaction between positive reappraisal and gender. * $p < .05$, ** $p < .01$, *** $p < .001$.

indices of religious coping were assessed: positive religious coping and negative religious coping. Similarly, two specific cognitive emotional regulation strategies, namely, self-blaming and positive reappraisal, were assessed. The findings showed that positive religious coping was a significant positive predictor of mental well-being but negative religious coping was not a significant predictor of mental well-being but of self-blaming. Moreover, positive reappraisal significantly mediated the positive religious coping-mental well-being link, and the conditional indirect effects of positive reappraisal were significant for both moderators, physical health and gender, with stronger effects for young men and respondents with better physical health compared with young women and those with poor physical health.

Religious coping, emotion regulation, and mental well-being

The findings of the present study revealed a positive correlation of positive religious coping with mental well-being among young adults. Although this particular finding aligns with findings from Fatima et al. (2018) who have reported positive religious coping as a positive predictor of psychological well-being in the same cultural context, it is unique in that it has assessed positive religious coping in relation to mental well-being during the intensive international health-related Covid crisis. Also, lining up with Bentzen (2019), the result seems justified in that intense uncertainty associated with instigation of lockdown and being stuck at home during the pandemic may have boosted individuals' religious attachment and use of positive religious coping. Religion in turn may have provided individuals the strength to cope with the stress associated with apprehensive viral infection and the solace for mental wellness. Literature supports that such positive coping brings about salutary effects on mental well-being of adults (Pirutinsky et al., 2020). During the

pandemic, positive religious coping and a strong positive connection with God may have reduced internal feelings of fear and enhanced a sense of protection leading to improved sense of mental well-being (Abu-Raiya et al., 2018; Pirutinsky et al., 2020). Contrarily, negative religious coping did not predict mental well-being. This null prediction is somewhat counterintuitive but agrees with the earlier findings describing negative religious coping to be a correlate of mental health problems (Francis et al., 2019) instead of mental well-being. Hence, the present findings indicate that positive religious coping has more strength compared with negative religious coping in promoting well-being.

Also, the findings revealed that positive religious coping was a positive predictor of positive reappraisal—an adaptive strategy—and negative religious coping was a negative predictor of positive reappraisal as well as a positive predictor of self-blaming—a maladaptive regulation strategy. Parallel support for this empirical finding is present in extant theoretical and empirical literature which describes that religion increases the likelihood of emotion regulation by using emotion focused coping when confronting the fear of death (Vishkin & Tamir, 2020). The results reveal interesting but unsurprising relationships between types of religious coping and emotion regulation where positive religious coping predicts a higher use of positive regulation and negative religious coping predicts a higher use of negative emotion regulation. This could be due to the concurrence of coping mechanisms underlying similar types of religious coping and emotion regulation. Mirroring the previous evidence for the use of religious coping during the pandemic (e.g. Mahamid & Bdier, 2021), the study's findings are particularly important because it has assessed the role of negative alongside positive religious coping in emotion regulation and well-being during the stressful pandemic situation when a little work is available on the role of religious coping in emotion regulation. Also, in correlation analysis, negative religious coping was strongly positively associated with self-blame but weakly negatively associated with positive reappraisal, similar to another study conducted on a Malaysian sample which concluded that negative religious coping was associated with maladaptive emotional regulation leading to dysphoric and distressing emotional states (Lee et al., 2013).

Religious coping, positive reappraisal, and mental well-being: indirect links

Regarding the mediation hypothesis, positive reappraisal partially explained the link between positive religious coping and mental well-being. In agreement with the predictions based on the findings from Abu-Raiya and Jamal's (2019) study, the findings lend support to the proposition that when passing through a stressful situation, people start finding strength and support in their association with God, which may lead them to positively reappraise the stressful situation and find mental solace and tranquility. Although earlier findings have found an association between positive religious coping and positive reappraisal (Vishkin et al., 2016), the direct support for the mediating role of positive reappraisal is not available in empirical literature. Theoretical literature, however, somewhat supports the mediating role of positive reappraisal in religious coping–well-being link by explaining that religion being a unique cultural system enhances well-being by promoting a better cognitive emotion regulation in multiple ways (Vishkin et al., 2014). Vishkin et al. (2014) explain that religion shapes emotion regulation by setting emotional goals congruent with religious values as well as by influencing intrinsic and extrinsic processes related to emotion regulation. Importantly, the findings are worth discussing in the study's context which assessed these objectives on a sample of young adults during the pandemic situation compared with most studies using elderly samples (e.g. Agli et al., 2015). Positive reappraisal is an adaptive emotion regulation strategy that involves cognitive abilities which peak during young adulthood years. Enhanced cognitive abilities may enable young adults to better regulate their emotions and use positive reappraisal in

response to stressors (Fatima & Shahid, 2020). Well-developed cognitive capacities may assist mature judgment (Fatima et al., 2020) by positively re-evaluating the threat and seeking religious strength, thus enabling young adults better adapt the transformations of their life stage and uncertainties associated with Covid. Hence, positive reappraisal serves an adaptive function and eventually results in enhanced well-being.

Physical health and gender: moderators between positive religious coping and mental well-being

Supporting the final hypothesis, the results from moderated mediation analyses revealed that physical health and gender buffered the mediating effect of positive reappraisal in association between positive religious coping and mental well-being. Specifically, conditional indirect effects of positive reappraisal were significant for both moderators with stronger indirect effects for respondents with better physical health compared with those with poor physical health and for young men compared with women. Better physical health and male gender significantly boosted the indirect effect of positive reappraisal in positive religious coping-mental well-being link. To explain, it is stated that positive reappraisal strongly explained the positive religious coping-mental well-being link in young men with better physical health compared with young women with poor physical health. It is explained that young men with better physical health were more likely to translate their positive religious coping into positive reappraisal to maintain optimal well-being during Covid pandemic. Direct support from empirical studies is not present for the finding; however, the findings are worth discussing from several angles. First, good physical health may work as a force to convert religious coping mechanisms to positively reappraising the stressful situations leading to better mental health outcomes. It seems justified because individuals with weak physical health and low immunity may less likely translate positive reappraisal into mental well-being because of underlying stress response associating compromised health with increased susceptibility to infection and its prolonged repercussions. The low likelihood of underlying stress associated with decreased vulnerability in individuals with good physical health may help them better translate positive reappraisal into mental well-being. Second, the fifth regression equation, compared with earlier four equations when the two interaction terms were added, explained a large amount of variance in mental well-being. It indicated that better physical health and male gender pronouncedly enhanced the likelihood of benefiting from positive religious coping by translating it into positive reappraisal to enhance mental well-being. Finally, positive reappraisal, an adaptive emotion regulation strategy, not only turned out a significant independent positive predictor of mental well-being, but also its effects were dependent and increased manifolds when combined with good physical health and male gender. Although the moderating role of physical health is justified in the Covid context, the study more clearly presents it as an area that requires further research to fully understand.

Cultural explanation for the moderating role of gender is also likely. The interactive associations of gender on well-being may be attributed to Covid context and interpreted in the light of social role theory in the patriarchal and collectivistic cultural context (Eagly & Wood, 2016). In Pakistan, in-house chores are considered the responsibility of women irrespective of their out-of-home assignments such as studentship or job-related tasks (Cerrato & Cifre, 2018). During the pandemic lockdown period, mostly servants were left off leading to added burden of housekeeping on women, alongside online performing their study or job assignments. By the same token, the collectivistic Pakistani culture places more emotion regulation demands on part of women who are expected to deal with multiple interdependent relationships along with multiple family obligations.

Strengths, limitations, and recommendations

The study has contributed some significant findings to the existing literature. First, the study assesses the conditional indirect effects of positive reappraisal in the positive religious coping-mental well-being link in young adults representing the South Asian population. The inclusion of positive reappraisal as a mediating variable is a unique feature of the study which has never been assessed earlier to explain the religiosity-mental well-being link. Second, the study has assessed these objectives during Covid—an extreme international health-related event, when uncertainty, fear, stress, and life style transitions are at peak—when people need internal self-regulatory resources in the absence of external supporting factors to cope with the circumstances for maintaining their optimal wellbeing. Finally, building on the studies conducted by Thomas and Barbato (2020) and Pirutinsky et al. (2020) in the context of Covid, the current study adds to the literature the examination of negative religious coping, which was not included in Thomas and Barbato (2020) and provides extension of literature to an underrepresented Asian population in a global stressor.


The study is not devoid of limitations. The cross-sectional nature of this study renders our ability to draw causal inferences and allowed at best the associative patterns. As order effects and common method bias are common limitations in cross-sectional studies, several steps have been taken to control these biases as per recommendations in the literature (e.g. Podsakoff, 2003). First, counterbalancing of scales and items was used to control order effect, priming effect, item contextualized mood states, and other biases related to the question context or items embeddedness. Then, to control common method bias, statistical control method was adopted using Harman's single factor test in SPSS which resulted in a total variance for a single factor to be 17.78% (desirably less than 50%). In addition, to avoid assessment bias due to instruments, it was ensured that all three assessment measures had been validated and frequently used in the same cultural context with the same population (e.g. Khan & Watson, 2006; Riaz et al., 2021; Waqas et al., 2015).

In conclusion, the study not only supported but further explained the religiosity and well-being link by providing initial evidence that specific emotion regulation strategy, positive reappraisal, explained the positive religious coping-mental well-being link in Young Muslim adults. Also, the study concluded that good physical health and male gender status further bolstered this positive link.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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