ARTICLE

The mediating effect of positive and negative religious coping, compassion and resilience on the relationship between negative life events and wellbeing among women in Kenya, the Philippines, Nicaragua and Spain

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Abstract: The current study explores the mediating effect of positive and negative religious coping on the relationship between negative life events and wellbeing, via its link with compassion and resilience among women who are involved in women's empowerment programs run by a US faith-based non-profit humanitarian and disaster relief organisation, Convoy of Hope. The sample includes women from four countries (N = 1041), Kenya, the Philippines, Nicaragua and Spain, who took part in a digital survey. A mediation analysis was used, and the results revealed a full mediation effect, so that the number of negative life events was linked to wellbeing via an increase in both positive and negative religious coping strategies, compassion and then resilience. It also revealed other mediation paths via religious coping and resilience. Positive religious coping was linked to higher resilience and then higher wellbeing, whereas negative religious coping was linked to lower resilience and then lower wellbeing. The results highlight the role of compassion in adaptive religious coping and delineate the overall benefits of religious coping in the context of adversity.

Keywords: negative life events, wellbeing, resilience, compassion, religious coping

1. Introduction

The prevalence of traumatic events worldwide has been highlighted by Aten et al. (2019), who noted that since 1970 there have been over 13,000 natural disasters, 8,000 technological disasters, and 150,000 incidents of terrorism/mass-violence worldwide. In a large-scale survey across 24 countries, Benjet et al. (2016) reported that 70% of their cross-countries sample has experienced at least one traumatic event in their lives. Nevertheless, the risk of experiencing a traumatic event is not equal across different groups in society. Ford, Grasso, Elhai, and Courtois (2015) note that some individuals and communities who are in a position of financial, social, or cultural disadvantage are more likely to be exposed to traumatic events and to the negative effects of cumulative trauma (Kira et al., 2011). This increased risk is explained by ongoing exposure to stressors such as stigma, discrimination, poverty, political environment (e.g., regional wars or armed conflicts), and catastrophic disasters (e.g., drought; Dean & Stain, 2010; Peres, Moreira-Almeida, & Nasello, 2007; Ford et al., 2015). There is also a recognition of gender disparities in life opportunities (e.g., education, career prospects) and gender-based violence which put women in a particularly vulnerable position (Kristof & WuDunn, 2009), especially when

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considering intersectionality and its cumulative impact. In line with Pearlin's (1989) and later on Kubiak's (2005) theories, an individuals' position within intersecting social identity systems (e.g., gender, age, socioeconomic status (SES), race/ethnicity) will impact their potential exposure to trauma, so that the more oppressed identities one has, the greater their potential exposure to trauma (Ford et al., 2015). The current study looks at how women in various disadvantaged communities, who have been attending empowerment courses across four sites of activity in Kenya, the Philippines, Nicaragua and Spain, cope with cumulative adverse and traumatic experiences. More specifically, it examines how negative and positive religious coping strategies mediate the relationship between adverse life experiences and wellbeing, through compassion and resilience (see Baker & Cohen, 2023; for further background to the project).

In the aftermath of adverse and traumatic experiences, individuals often start a process of meaning-making (Park, 2010). In that context, religiosity and spirituality, with their transcendent existential frameworks of meaning and life, can become integral to the coping processes (Peres et al., 2007). This process is often referred to as religious coping, defined as a specific mode of coping derived from religious beliefs, practices, experiences, emotions, or relationships (Abu-Raiya &Pargament, 2015).

While religion can be used as a coping strategy, Aten et al. (2019) rightly noted that stressful/traumatic events pose a significant challenge to one's religious and faith systems by violating expectations (or basic assumptions, Janoff-Bulman, 1989) about the world and ourselves. This process can disrupt beliefs about the divine and disturb social support networks, suggesting that religion or spirituality may not be exclusively positive when coping with adversity (Abu-Raiya & Pargament, 2015; Campbell & Bauer, 2021). For example, in an early review, Pargament (1997) found that while religion, broadly defined, was a significant stress buffer in 34% of the studies reviewed, it worsened stress in 4%. Similarly, O'Brien et al. (2018) note that religious coping is not always related to better outcomes, and when looking at research on the impact of religion and faith on coping with negative or negative life events, mixed findings do emerge. When reviewing empirical findings, some studies reveal a link between religion (e.g., Henslee et al., 2015; Green & Elliott, 2010; McElroy-Heltzel et al., 2018; Moreira-Almeida, Lotufo Neto, & Koenig, 2006; Zeligman, Majuta, & Shannonhouse, 2020) or spirituality (Wachholtz & Sambamoorthi, 2011; Walker et al., 2010) and successful coping and physical health and psychological well-being after trauma. Others (e.g., Amer, Hovey, Fox, & Rezcallah, 2008; Khan & Watson, 2006) found either no relationship between religious coping and mental health (e.g., depression and anxiety) or even a positive relationship between religious coping and distress (Bryant-Davis et al., 2011; Khan et al., 2009). Abu-Raiya and Pargament (2015) observed that, similar to other methods of coping, religious coping can be either constructive or destructive, depending on how and in what contexts they are used. Within this context, a categorization of positive religious coping, which is linked to adjustment, and dysfunctional negative religious coping, which is linked to greater distress (Pargament, Koenig, & Perez, 2000), emerged and is now widely used. Positive religious coping includes strategies such as seeking God's love and care, reframing difficult situations as opportunities for growth, and partnering with God in times of distress to find strength and relief (Zeligman et al., 2020) seeking support, finding meaning, and partnering with the divine during stressors. Negative religious coping, which is sometimes referred to as spiritual crisis or struggle (O'Brien et al., 2018), can include doubting God's love, seeing the traumatic experience as a form of punishment, and feeling abandoned by God and their community of faith (Pargament, Feuille & Burdzy, 2011). Van Hook (2014; 2016) noted that following trauma, spirituality/faith can contribute to resilience but can also intensify pain and distress.

Across numerous studies, positive religious coping was related to better psychological and physical outcomes following negative life events (Ano & Vasconcelles, 2005; Chapman & Steger, 2010, Koenig et al., 2001; Pargament et al., 2004; Park, Smith, Lee, Mazure, McKee & Hoff, 2017; Smith et al., 2000). Pargament et al. (2000) state that positive religious coping can help individuals gain a sense of control, provide a source of comfort, and help with changes. Negative religious coping, on the other hand, has been linked with poor psychological, physical outcomes, and overall poor adjustment (Ano & Vasconcelles, 2005; Pargament et al., 2000). It should be noted, however, that positive and negative religious coping are not perceived as mutually exclusive. They can both be present at different stages of the coping process. Campbell and Bauer (2021), for example, apply Lazarus and Folkman's (1984) concept of reappraisal and Caplan's (1964) classic crisis theory and claim that in situations of ongoing stress, as negative events increase, individuals start to reappraise their relationship with God. If stress continues increasing, negative religious coping may take the place of positive coping (e.g., religious commitment and hope) which had) mitigated the negative impact of religious and spiritual struggles.

Schaefer, Howell, Schwartz, Bottomley and Crossnine (2018) claim that religious coping has implications for an individual's ability to overcome traumatic events and their general levels of resilience. Resilience refers to one's ability to minimize negative outcomes when exposed to adversity or risk (Lee & Cranford, 2008; Masten, 2001; Rutter, 1990) or to recover or even grow from adversity (Leipold & Greve, 2009; Zautra, Hall, & Murray, 2010). Resilience can be seen as a trait (i.e., a stable personal consolation/personality quality; Block & Block, 1980; Connor & Davidson, 2003) or as a process that changes according to circumstances (Luthar et al., 2000). Manning et al. (2019) defined resilience as a process of growth that accumulates over the lifespan and not a fixed concept. Taking a slightly different perspective on resilience, Ungar (2012) focuses on the ability of individuals to utilize resources (psychological, social, and cultural) to sustain well-being or promote positive adjustments following negative life events. Consistent with this approach, mediation studies (Chen, 2016; Satici, 2016) reveal that adaptive and effective coping strategies enhance resilience, which then leads to positive psychological outcomes.

Indeed, research demonstrates that resilience is linked to a plethora of positive psychological outcomes, including well-being, self-esteem, and mental health (Armstrong et al., 2005; Friedli, 2009; Liu et al., 2013; Collishaw et al., 2016; Cosco et al., 2017) and is negatively linked to negative outcomes such as PTSD, depression, and anxiety (Agaibi & Wilson, 2005; Beasley et al., 2003; Campbell-Sills et al., 2006; Konaszewski et al., 2021; Surzykiewicz et al., 2022; Tamura et al., 2021). In relation to religious coping, in general, it has been linked to resilience (e.g., Gall, Basque, Damasceno-Scott, & Vardy, 2007, on childhood trauma). Although in some studies (e.g., Lee, Choi & Ryu, 2019; Surzykiewicz et al., 2022), this relationship varied between positive and negative religious coping, so that resilience was negatively linked to negative religious coping but not to positive religious coping. The relationship between religious coping and resilience can be seen as bi-directional. When looking at negative religious copings, Surzykiewicz et al. (2022) noted that those who are less resilient use coping strategies focused on negative emotions and discharging them. However, studies on resilience in other areas (e.g., Cohen & Jones, 2002) reveal how coping styles can impact individuals' resilience. More specifically to religious coping, Van Hook (2016) reveals how religious coping, in general, can facilitate resilience and recovery from trauma, and Campbell and Bauer (2021) alongside other related studies (Knabb & Grigorian-Routon et al., 2014; Proffitt et al., 2007; Surzykiewicz et al., 2022) show how both internal resources (e.g., belief systems) and related resources (e.g., religious communities) contribute to resilience. In this context, it is important to note that in their scoping review, Campbell and Bauer

(2021) found that resilience characteristics included pro-social concepts like cultural and community connections and forgiveness, both of which can be linked to compassion.

Compassion is seen as a cognitive process that involves a deep acknowledgment and understanding of another's suffering and a wish/motivation to alleviate the suffering. Compassion is closely linked with empathic actions, taken in order to reduce the suffering of others (Adiguzel & Okanl, 2023). While some studies imply a reduction in pro-social activities and engagement after trauma and adversity due to difficult mental health states and a decrease in the belief in a just and benevolent world (see Lim & DeSteno, 2016, for further details), others (Monforte, 2020; Staub & Vollhardt, 2008; Vollhardt & Staub, 2011) imply an increase in altruistic actions and interest in the welfare among trauma survivors and high levels of compassion among those who live in daily strains and hardship (Kaniasty, 2012; Stellar et al., 2011). Indeed, in a survey, Lim and DeSteno (2016) found that traumatic experiences led to increased compassion through enhanced empathic concerns and meaning-making activities, and that this increased compassion was then linked to increased charitable contributions. Similarly, in a large-scale survey, Moore et al. (2015) found that older adults who have experienced a higher number of significant life events report the most compassion.

While there is an intuitive link between compassion, religious practice, and values, there is a surprisingly modest number of studies in the area. Nevertheless, a positive link between religious commitment and compassion was found (e.g., Krause & Hayward, 2015; Steffen & Masters, 2005), revealing that people who are more committed to their faith are more likely to feel compassion towards others (Krause et al., 2018). In terms of religious coping and compassion, Ahles, Mezulis, and Hudson's (2016) correlation analysis showed a small but statistically significant positive correlation between both positive and negative religious coping and religious commitment, and Eisenberg et al. (2011), in their longitudinal study with young men, found that high and stable religious coping was linked to higher ratings of pro-social behaviour.

The link between compassion and resilience/recovery from difficulties was more widely explored. Moore et al. (2015), for example, found a positive relationship between resilience and motivation to help others. They interpreted that relationship in a way that implied that resilience impacts the ability to demonstrate compassion, noting that those who are less resilient may be less hopeful about recovery from adversity and therefore will be less motivated to help. However, this positive relationship can be seen differently when considering the link between compassion and pro-social activities. Lim and DeSteno (2016), therefore, in line with others (Crocker & Canevello, 2008; DeSteno, 2015; Goetz, Keltner, & Simon-Thomas, 2010), link compassion to pro-social behaviours that lead to increased social capital and support. In that context, compassion can be seen as a positive contributor for successful coping because of its pro-social nature that leads to pro-social activities (Condon & DeSteno, 2011; Valdesolo & DeSteno, 2011), which then lead to increased opportunities for social support (Eisenberg & Fabes, 1990; Schutte et al., 2001; Sprecher & Fehr, 2005; Van Doesum et al., 2013; DeSteno, 2015). However, as Adiguzel and Okanl (2023) observe, there is a considerable gap in the literature when looking at the link between compassion and psychological resilience in this context (Gündüzoğlu et al., 2019).

Taking together the literature on religious coping, compassion, resilience, and well-being in the context of negative life events, the current study looked at how positive and negative religious coping and compassion mediate the relationship between adversities and well-being through increasing levels of resilience. More specifically, we hypothesize that:

1. As the use of religious coping in relation to adverse and traumatic life events is widely recorded (e.g., Abu-Raiya & Pargament, 2015; Park, 2010; Peres et al., 2007), we would expect a positive link between exposure to traumatic events and the use of religious

coping and therefore hypothesise that negative life events will be linked to a higher level of both negative and positive religious coping.

2. In line with consistent findings that link positive outcomes to positive religious coping (e.g., Ano & Vasconcelles, 2005; Chapman & Steger, 2010, Koenig et al., 2001; Pargament et al., 2004; Park, Smith, Lee, Mazure, McKee & Hoff, 2017; Smith et al., 2000) and previously found positive links with resilience (Lee, Choi & Ryu, 2019; Surzykiewicz et al., 2022), we can hypothesise that positive religious coping will be positively linked to resilience and well-being.

3. In line with previous findings which reveal negative outcomes to negative religious coping (Ano & Vasconcelles, 2005; Pargament et al., 2001) and a negative link with resilience (Lee, Choi & Ryu, 2019; Surzykiewicz et al., 2022), we can hypothesise that negative religious coping will be negatively linked to resilience and well-being.

4. While evidence in relation to compassion is relatively limited, previous studies found a positive link between compassionate behaviours and successful coping after stressful life events (Condon & DeSteno, 2011; Valdesolo & DeSteno, 2011) and compassionate motivations (e.g. motivation to help others) and resilience. We can therefore hypothesise that compassion will be positively linked to resilience and well-being.

5. Considering the above previous findings about a negative link between negative life events and wellbeing (e.g., Dean & Stain, 2010; Peres, Moreira-Almeida, & Nasello, 2007), positive link between negative life events and negative or positive religious coping (e.g., Abu-Raiya and Pargament, 2014; Park, 2010; Peres et al., 2007), the links between positive and negative religious coping with both resilience (e.g., Gall, Basque, Damasceno-Scott, & Vardy, 2007) and compassion (Ahles, Mezulis, &Hudson, 2016)), and the links between successful coping with stressful events and resilience (Armstrong et al., 2005; Friedli, 2009; Liu et al., 2013; Collishaw et al., 2016; Cosco et al., 2017) and compassion (Condon & DeSteno, 2011; Valdesolo & DeSteno, 2011), we can therefore hypothesise that there will be a negative relationship between negative life events and well-being, which will be mediated by religious coping, compassion, and resilience.

2. Method

2.1 Procedure

The study took place during 2023 as part of a larger study looking at the impact of the activities of a US faith-based non-profit humanitarian and disaster relief organisation , Convoy of Hope (CoH) As part of this evaluation, an online survey was created in English ($N = 274$) and then translated by the local teams in CoH into using 5 other languages: Spanish ($N = 263$), Tagalog ($N = 260$), Ukrainian ($N =207$), Swahili ($N = 29$) and Bulgarian ($N = 8$). Translations of the survey were carried out by professional translators employed by CoH and were then checked by the local team for accuracy and applicability. Any issues arisen from this process were discussed with the research team and revisions were made, where needed. No issues were raised in relation to the translations of the translation or application of the measures included in this study. Women participating in empowerment programs across four countries: Nicaragua, Philippines, Kenya and Spain, were invited to take part in the survey. Following informed consent, women were able to fill in the survey independently by using a digital link or with a support of a local team member in CoH centres who provided electronic devices to the women so that they can fill in the survey. Overall, 1107 women took part in the survey. However, 66 women (5.9%) failed to complete the survey and so the final sample included 1041 women.

2.2 Participants

The age of the women who participated in the survey ranged from 18 to 86 (M = 38.59, Sd = 12.1). While there was some variation in age across the sites, the only statistically significant difference was between Kenya which has the youngest sample of women and Philippines who had the oldest one ($M_{difference}$ = -4.6, p < 0.0001). Across all sites, the majority of women were married. In Spain, there was a somewhat higher proportion of women who were single (26.98%), in comparison to the other locations (4.78%-18.32%). However, when comparing the overall proportions of married women in comparison to those who were not, there was a statistically significant difference across the sites ($\chi2$ = 42.36, p < 0.0001), with Nicaragua having the smallest relative proportion of married women (64.1%), followed by Spain (67.4%), Kenya (79.5%) and then finally the Philippines (86.1%) which had the highest proportion of married women. In terms of educational background, there were clear and statistically significant variations across the various sites (F = 354.26, p < 0.0001). The women in Kenya reported lower levels of formal education, with the majority (87.45%) reporting no formal schooling or levels up to High School level with no diploma), whilst those in Spain (90.7%) reported higher levels (with the majority exporting achieving High School Diploma level or and above), in comparison to other sites. Education levels in Nicaragua and the Philippines reflected lower levels of formal education up to High School education and High School Diploma (87.22% and 83.27 % respectively).

Women's relative income was calculated in relation to the average income of their respective national site. Each woman's reported annual income was assessed against her country's average income and was then classified on a five-level scale ranging from 37.5% below the average income/lower up to 25% above the average income/higher. There were clear and statistically significant variations in income levels across the various sites (F = 44.21, p < 0.0001), with the majority of women in Kenya (77.86%) reporting the lowest level of relative income, while in the Spanish-run programme, several women reported either the highest level on income (44.8%%) or the lowest one (33.6%). In the Philippines and Nicaragua, the majority of women reported below average income (86.85% and 74.2%, respectively).

Most of the women in the study were Christian. However, specific denominations were distributed across the various sites, with the majority of women in Kenya identifying as Christian under the mission of CoH (46.97%) followed by Evangelical Christian (30.59%) and then "Other" category (13.16%), which included mostly (80.56%) Kenya Assemblies of God participants. The majority of women in Nicaragua identified as Evangelical (58.4%), followed by Christian under the mission of CoH (15.27%) and then Catholic (9.92%) and no religion (5.73%). In the Philippines, the majority of women identified as Catholic (55.38%), followed by Christian under the mission of CoH (37.05%) and a small proportion as Evangelical Christian under other missions (3.19%) or "Other" category (3.59%), which included mainly Seventh Day Adventist adherents (27.27%) and the Church of Christ (27.27%). Finally, in Spain most women identified as Evangelical (38.9%) or Evangelical Christian under other missions (36.49%), followed by the "Other" category (19.43%), which included Pentecostal (11.52%), Baptist (9.62%), Orthodox (9.6%) and Protestants (9.61%). A small minority of women in the Spanish sample (3.79%) identified as Christian under the mission of CoH.

Regarding exposure to negative life events, there was a significant difference in the number of traumatic experiences across sites (F = 25.44, p < 0.0001). Post-hoc comparisons revealed that the difference was primarily due to the higher number of traumatic experiences reported by women in Kenya compared to all other sites ($M_{differences}$ ranging between 1.25 to 1.43, p < 0.001 for all comparisons). For further details on the distribution of the negative life events please see Table 2.

2.3 Measurement

2.3.1 Demographic questionnaire

This questionnaire included general background questions about participants such as age, religion, household income and marital status.

2.3.2 Negative Life Events Scale (NLES; Kowal, Gunthorpe & Bailie, 2007)
The scale measures exposure to negative and traumatic life events (e.g., serious illness, accident, death of a close person). Respondents answer 'yes/no' to each item, only negative events are listed, and no weighting or subjective rating of event impact are included. Overall score was calculated by summing the 'yes' answers. The distribution of Negative Life Experiences across the sample can be found in Table 1

Table 1. *Percentage of Experiencing Negative Life Events (N=1041)*

Serious illness	27.47%	(*n* = 286)
Serious accident	5.76%	(*n* = 60)
Death of family member or close friend	32.37%	(*n* = 337)
Divorce or separation	10.09%	(*n* = 105)
Not able to get a job	27.19%	(*n* = 283)
Lost job	23.05%	(*n* = 240)
Alcohol related problems	9.03%	(*n* = 94)
Drug related problems	3.46%	(*n* = 36)
Seeing fights or people beaten up	29.59%	(*n* = 308)
Abuse or violent crime (including physical violence)	12.58%	(*n* = 131)
Trouble with the police	4.13%	(*n* = 43)
Gambling problem	3.17%	(*n* = 33)
Member of family sent to jail	4.80%	(*n* = 50)
Overcrowding at home	28.34%	(*n* = 295)
Discrimination/Racism	15.27%	(*n* = 159)
Vandalism or Malicious damage to property	11.34%	(*n* = 118)
Children not able to continue with schooling	23.05%	(*n* = 240)
Losses from natural disaster	22.38%	(*n* = 233)
Hunger in the family	24.11%	(*n* = 251)

2.3.3 Religious Coping (RCOPE, Pargament et al., 1998)

The Brief RCOPE is a 14-item scale measuring religious coping across two subscales: positive religious coping and negative religious coping. Positive religious coping methods reflect a secure relationship with a transcendent force, a sense of spiritual connectedness with others, and a benevolent world view. Negative religious coping methods reflect underlying spiritual tensions and struggles within oneself, with others, and with the divine (Pargament, Feuille, & Burdzy, 2011). Each item was rated on a 4-point Likert scale, ranging from 0 'not at all' to 3 'a great deal'. The scale score was calculated as the overall mean of ratings. In a review of its reliability, Pargament et al. (2011) report that the highest Cronbach's alpha for PRC was 0.94 and that the median Cronbach's alpha reported for the NRC scale was 0.81. In the current study, Cronbach's alpha for PRC was 0.74 and for NRC 0.87.

2.3.4 The Santa Clara Brief Compassion Scale (SCBCS, Hwang, Plante & Lackey, 2008)

The scale is a five-item questionnaire measuring compassion and pro-social feelings and behaviours (e.g., "I tend to feel compassion for people, even though I do not know them") on a 7 Likert scale ranging from "not at all true of me" (0) to" very true of me" (7). The scale score was calculated as the overall mean of ratings. The SCBCS is extracted from the 21-item Compassionate Love Scale (CLS; Sprecher & Fehr, 2005) and Cronbach's alpha was reported by Hwang et al. (2008) to be 0.90. In the current study, Cronbach's alpha for this scale was 0.79.

2.3.5 The CD-RISC 10 (Campbell-Sills & Stein, 2007)

The CD-RISC 10 is a shortened version of the original 25-item CD-RISC (Conner & Davidson, 2003) and is intended to measure resilience. Participants are asked to rate the extent to which statements (e.g., "I am able to adapt when changes occur") apply to them on a Likert scale ranging from 0 = not true at all to 4 = true nearly all the time. The scale score was calculated as the overall mean of ratings. The Cronbach's alpha in Xiaofan et al. (2023) of 0.9. Cronbach's alpha in the current sample was 0.86.

2.3.6 Satisfaction with Life Scale (SWLS, Diener, Emmons, Larsen, and Griffin, 1985)

The scale includes five statements about one's life (e.g., ''In most ways my life is close to my ideal'') on a Likert scale ranging from 1 (''strongly disagree'') to 7 (''strongly agree''). The scale score was calculated as the overall mean of ratings. The SWLS showed highly favourable psychometric properties (Diener et al., 1985; Pavot and Diener, 1993). Cronbach's alpha for SWLS usually exceeds 0.80 and in the current study it was 0.86.

3. Results

Before carrying out the hypothesis testing, distributions for all the study variables were tested for normality. It was found that two variables, Positive Religious Coping and Psychological Wellbeing had a positive Kurtosis > 3. The two variables were transformed by using Box-Cox transformation before they were entered into the analyses. All other variables adhered to within the acceptable range of normal distribution. Descriptive statistics were collected for all study variables and are presented in Table 2.

Table 2. *Study variables' descriptive statistics*

	Negative Life Events (N = 1041)	Positive Religious Coping (N = 1038)	Positive Religious Coping (N = 1034)	Compassion (N = 1040)	Psychological Wellbeing (N = 1037)
Mean	3.17	3.67	2.02	3.56	6.47
Std. Deviation	2.56	0.41	0.88	0.46	0.87
Minimum	.00	1.57	1.00	1.60	1.00
Maximum	14.00	4.00	4.00	4.00	8.00

In order to examine our hypotheses, first a correlation matrix was calculated. The results of the Correlation analyses appear in Table 3.

Table 3. *Pearson Correlation Matrix across the study variables (N = 1032-1041)*

	Positive Religious Coping	Negative Religious Coping	Negative Life Events	Compassion	Resilience
Positive Religious Coping					
Negative Religious Coping	.169**				
Negative Life Events	.064*	.242**			
Compassion	.239**	.119**	.011		
Resilience	.211**	-.267**	-.167**	.222**	
Satisfaction With Life	.256**	.057	-.062*	.309**	.233**

As depicted in Table 3 and as our hypotheses predicted, there was a significant positive relationship between negative life events and both positive and negative religious coping, although the coefficient size of the positive religious coping was relatively small. There was also a significant positive relationship between compassion and both positive and negative religious coping. Finally, there was a positive relationship between positive religious coping and resilience and satisfaction with life, and a negative significant relationship between negative life events and resilience. There was no significant relationship between negative life events and satisfaction with life. Hypotheses 1-4 were mostly supported.

In order to test Hypothesis 5, two mediation analyses were carried out looking at the relationship between the number of negative life events and the two measurements of wellbeing (Satisfaction with Life Scale and Number of Good Days per Week) as mediated by positive/negative religious coping, compassion and resilience. The analyses were done through SPSS Process (Hayes, 2018). The results of the analyses appear in Model 1 and Model 2.

Model 1. *Mediation analysis of the relationship between Negative Life Events and Satisfaction with Life by Events and Positive Religious Coping, Compassion and Resilience*
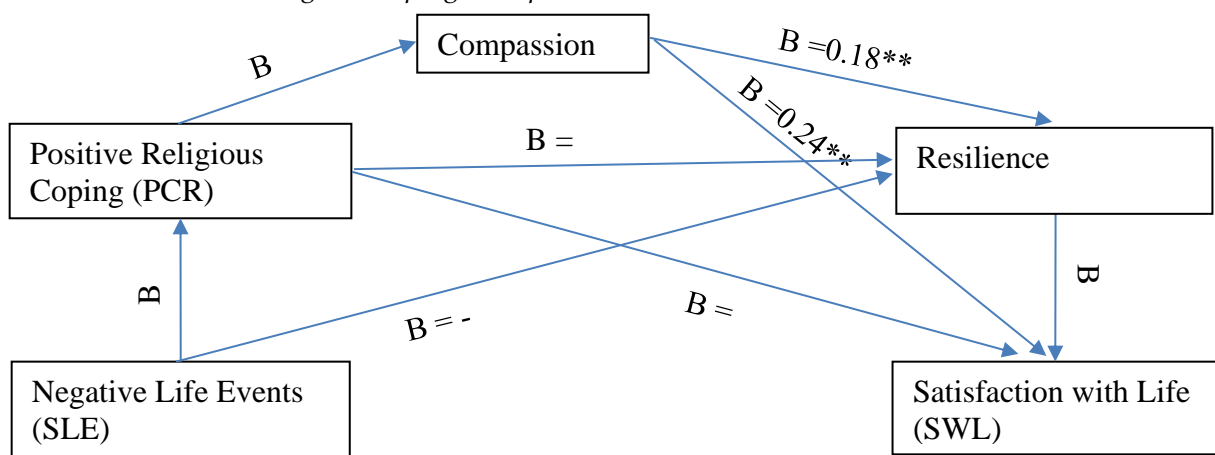
Note. Only significant coefficients are included. Overall direct standardised effect of SLE was -0.062 (*p* = 0.04); with indirect standardised effects of SLE – PRC – Compassion – Resilience – SWL = 0.0004 (LLCI = 0.00 and ULCI = 0.0009). * *p* < 0.05; ** *p* < 0.001
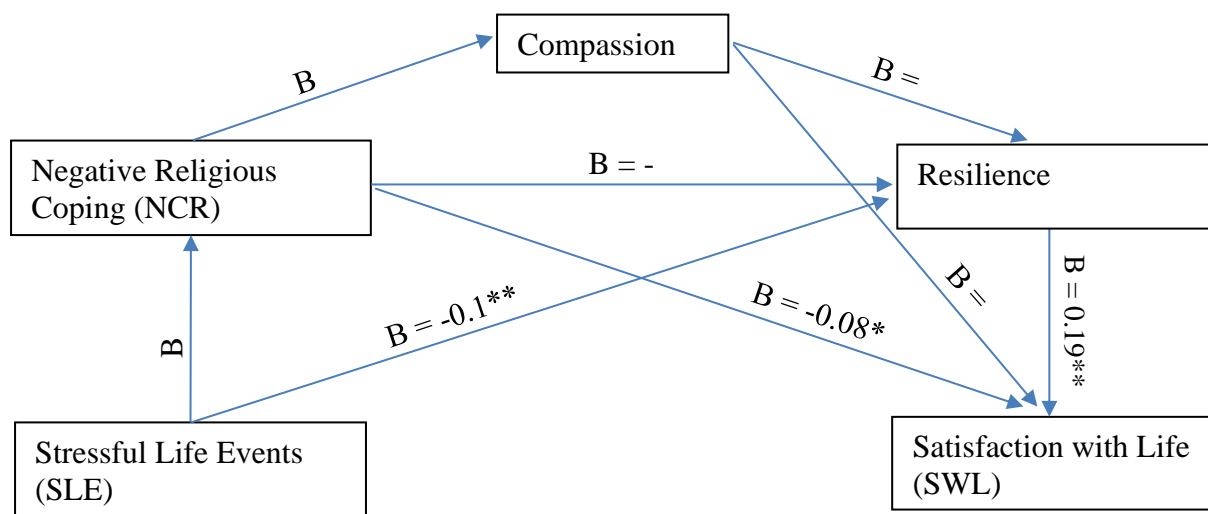
Table 4. *The relationship between Negative Life Events (X) and Satisfaction With Life (Y) mediated by Positive Religious Coping (M¹), Compassion (M²) and Resilience (M³)*

	Model 1 Positive Religious coping			Model 2 Compassion			Model 3 Resilience			Model 4 Satisfaction with Life		
	B (SD)	β	P	B (SD)	β	P	B (SD)	β	P	B (SD)	β	P
Constant	3.62 (0.02)		0.00	2.45 (0.14)		0.00	1.85 (0.24)		0.00	2.75 (0.29)		0.00
Negative Life Events	0.01 (0.00)	0.07	0.03	-0.00 (0.01)	-0.00	0.89	-0.05 (0.01)	-0.18	0.00	-0.02 (0.01)	-0.05	0.06
Positive Religious Coping (M¹)				0.30 (0.04)	0.24	0.00	0.35 (0.06)	0.18	0.00	0.43 (0.07)	0.18	0.00
Compassion (M²)							0.27 (0.05)	0.18	0.00	0.44 (0.06)	0.24	0.00
Resilience (M ³)										0.16 (0.04)	0.13	0.00
F	4.52*			30.729**			41.66**			47.53**		
R²	0.004			0.056			0.11			0.16		

Direct Effect (X → Y): -0.019; 95% BI = [0.06, -0.04]
Indirect Effect (X →M¹ → Y) : 0.012; 95% BI = [-0.0003, 0.0256]
Indirect Effect (X →M² → Y) : -0.001; 95% BI = [-0.016, 0.014]
Indirect Effect (X →M³ → Y) : -0.024; 95% BI = [-0.038, -0.012]
Indirect Effect (X →M¹ →M² → Y) : 0.004 ; 95% BI = [-0.0001, 0.008]
Indirect Effect (X →M¹ →M³ → Y) : 0.002 ; 95% BI = [0.000, -0.004]
Indirect Effect (X →M² →M³ → Y) : -0.0001 ; 95% BI = [-0.002, 0.015]
Indirect Effect (X →M¹→ M² →M³ → Y) : 0.0004 ; 95% BI = [0.000, 0.001]

*p < 0.05 ; ** p < 0.001

Model 2. *Mediation analysis of the relationship between Negative Life Events and Satisfaction with Life by Events and Negative Religious Coping, Compassion and Resilience*

Note. Only significant coefficients are included. Overall direct effect of SLE was -0.02 (*p* = 0.06); with indirect standardised effects of SLE – NRC – Compassion – Resilience – SWL = 0.0015 (LLCI = 0.0006 and ULCI = 0.0026). * *p* < 0.05; ** *p* < 0.001

Table 5. *The relationship between Negative Life Events (X) and Satisfaction With Life (Y) mediated by Negative Religious Coping (M^1), Compassion (M^2) and Resilience (M^3)*

	Model 1 Negative Religious coping			Model 2 Compassion			Model 3 Resilience			Model 4 Satisfaction with Life		
	B (SD)	β	P	B (SD)	β	P	B (SD)	β	P	B (SD)	β	P
Constant	1.75 (0.04)		0.00	3.44 (0.04)		0.00	3.11 (0.16)		0.00	3.73 (0.23)		0.00
Negative Life Events	0.08 (0.01)	0.25	0.03	-0.00 (0.01)	-0.00	0.61	-0.03 (0.01)	-0.1	0.00	-0.02 (0.01)	-0.06	0.06
Negative Religious Coping (M^1)				0.07 (0.02)	0.13	0.00	-0.22 (0.02)	-0.27	0.00	0.09 (0.03)	0.09	0.01
Compassion (M^2)							0.39 (0.04)	0.25	0.00	0.48 (0.06)	0.26	0.00
Resilience (M^3)										0.23 (0.04)	0.19	0.00
F	65.87**			7.65**			58.49**			39.48**		
R^2	0.06			0.015			0.15			0.13		

Direct Effect (X → Y): -0.019; 95% BI = [0.06, -0.04]
Indirect Effect (X →M^1 → Y) : 0.02; 95% BI = [-0.006, 0.039]
Indirect Effect (X →M^2 → Y) : -0.004; 95% BI = [-0.022, 0.013]
Indirect Effect (X →M^3 → Y) : -0.019; 95% BI = [-0.034, -0.008]
Indirect Effect (X →M^1 →M^2 → Y) : 0.008 ; 95% BI = [0.004, 0.012]
Indirect Effect (X →M^1 →M^3 → Y) : -0.013 ; 95% BI = [-0.019, -0.007]
Indirect Effect (X →M^2 →M^3 → Y) : -0.001 ; 95% BI = [-0.004, 0.003]
Indirect Effect (X →M^1→ M^2 →M^3 → Y) : 0.002 ; 95% BI = [0.001, 0.003]

*p < 0.05 ; ** p < 0.001

The results show that both models reveal several paths of mediation between negative life events and satisfaction with life and for both the mediation was a full mediation as there was no significant direct effect (DE) between negative life events and satisfaction with life (DE$_{(Model 1)}$ = -0.018, p = 0.062; DE$_{(Model 2)}$ = -0.019, p = 0.059).

Both Model 1 and Model 2 support Hypothesis 5 so that, in both models, higher negative life events were linked to more religious coping, either positive or negative, which were positively linked to compassion, which was then positively linked to resilience. Resilience was then positively linked to life satisfaction (IE: 0.0004; LLCI = 0.00, ULCI = 0.0009 for Model 1; IE = 0.0005; LLCI = 0.0002, ULCI = 0.0009 for Model 2). A similar path was found in Model 2 through compassion only, i.e., negative life events increased negative religious coping which in turn was linked to more compassion which was then linked to higher satisfaction with life (IE = 0.0079; LLCI = 0.004, ULCI = 0.0124).

Both models also revealed a mediation path which involved religious coping and resilience (without compassion). However, the direction of the mediation was different. In Model 1, those who had experienced more distressful events revealed higher levels of positive religious coping which was linked to higher levels of resilience which in turn was linked to higher life satisfaction (IE: 0.0016; LLCI = 0.00, ULCI = 0.0038). In Model 2, those with more distressful events revealed higher levels of negative religious coping. However, this coping was then negatively linked to resilience, so that those who showed higher levels of negative coping showed lower levels of

resilience and then also lower levels of life satisfaction (IE = - 0.0127; LLCI = -0.0195, ULCI = -0.0073). For negative religious coping, there was one additional a significant path where negative life events increased negative religious coping which was then directly linked to lower satisfaction with life (IE = 0.0217; LLCI = 0.0061, ULCI = 0.0324). Finally, while not involving religious coping, both models revealed a significant mediation path linking negative life events directly to reduced resilience and then lower satisfaction with life. (IE = -0.024; LLCI = -0.038, ULCI = -0.012 for Model 1; IE = -0.0339; LLCI = -0.0076, ULCI = -0.012 for Model 2).

4. Discussion

The present study aimed to investigate the influence of religious coping on the relationship between negative life events and well-being, considering the roles of compassion and resilience. The study focused on women involved in women's empowerment programmes run by Convoy of Hope, a US faith-based non-profit humanitarian and disaster relief organisation (with a strong Christian ethos) in sites in Kenya, the Philippines, Nicaragua, and Spain.

Consistent with expectations and prior research (Abu-Raiya & Pargament, 2014; Campbell & Bauer, 2021) and in line with Hypothesis 1, the study found a positive association between negative life events and increased religious coping, encompassing both positive and negative coping. Notably, the connection between negative religious coping and negative life events appeared stronger than that with positive coping, aligning with earlier research findings (Lee et al., 2019; Surzykiewicz et al., 2022). The findings also provided support for Hypothesis 2 andHypothesis 3, with a significant positive link between positive religious coping and resilience. These findings echo previous ones (e.g., Ano & Vasconcelles, 2005; Chapman & Steger, 2010, Koenig et al., 2001; Lee, et al. 2019; Pargament et al., 2004; Park, et al., 2017; Smith et al., 2000; Surzykiewicz et al., 2022). Hypothesis 4, however, was only partially supported, as (?) correlation analyses revealed that negative religious coping was significantly negatively linked to resilience, as hypothesised and in line with previous findings (Lee, Choi & Ryu, 2019; Surzykiewicz et al., 2022), but not to wellbeing, which contradict previous findings (Ano & Vasconcelles, 2005; Pargament et al., 2001). These findings highlight that while negative life events can lead to an increase in both positive and negative religious coping, the potential outcomes of each of these types of coping may vary when it comes to resilience and wellbeing.

Interestingly, however, and contrary to the correlation analysis, in the mediation analysis, negative religious coping's negative relationship with both resilience and wellbeing was significant. It may be, therefore, that negative religious coping is a complex construct that may involve a mixture of positive and negative outcomes. Moreover, similar to Campbell and Bauer (2021), the study observed a positive correlation between negative and positive religious coping, suggesting an overarching religious coping structure drawing on faith to confront adversity. This general structure may also account for the findings that both negative and positive religious coping were positively related to an increase in compassion.

While limited in scope, previous research has found similar results (see Ahles et al., 2016). While a link between positive religious coping and compassion seems more intuitive, the positive link between negative religious coping and compassion may be related to religious commitment and to the pro-social benefits of compassion. Negative religious coping, characterized by internal turmoil and punitive aspects (O'Brien et al., 2018; Pargament, Feuille & Burdzy, 2011), does not necessarily indicate lower religious commitment. People who use negative religious coping can still be as committed to their religion and faith as those who use more positive coping mechanism. Prior research has established a positive relationship between religious commitment and higher levels of compassion (Krause et al., 2018). Additionally, negative religious coping, particularly

within a Christian framework, may heighten the need for repentance, potentially increasing compassionate acts. This positive association between negative religious coping and compassion is noteworthy, especially as our mediation analyses reveal that it has the ability to enhance wellbeing; and thus create a path where negative religious coping can still, in part lead to effective coping.

Support was also provided to Hypothesis 4 as findings revealed a positive link between compassion and wellbeing. This finding adds to the relative limited body of research on compassion and is in line with previous findings which have suggested that prosocial activities and motivations can lead to receiving more support after adverse life events, and therefore to lead to better coping (e.g., Condon & DeSteno, 2011; Valdesolo & DeSteno, 2011) as well as higher levels of resilience.

Finally, in support of Hypothesis 5, our mediation analyses demonstrated that negative life events were linked to life satisfaction through religious coping, operating via compassion and resilience to enhance well-being. While previous studies established links between religious coping and well-being (Ano & Vasconcelles, 2005; Chapman & Steger, 2010; Koenig et al., 2001; Pargament, Koenig, Tarakeshwar, & Hahn, 2004; Park et al., 2017), religious coping and resilience (Knabb & Grigorian-Routon et al., 2014; Proffitt et al., 2007; Surzykiewicz et al., 2022; Van Hook, 2016), and, to a lesser extent, religious coping and compassion (Ahles et al., 2016), the current study extends these findings, emphasizing the interconnected effects of these constructs on well-being and their potential significance in coping successfully.

Furthermore, the introduction of compassion to the model elucidated the complexity of the negative religious coping structure concerning well-being. Previous studies (Ahles et al, 2016) revealed mixed results with regard to negative religious coping. The current study suggests that while, directly, negative religious coping reduces both resilience and wellbeing levels, it simultaneously enhances compassion levels. An increase in compassion can therefore counteract the direct and indirect adverse impact of negative religious coping and moderate it. Future studies will be able to explore this moderating impact more directly.

It is essential to acknowledge the study's limitations. The diverse sample represented women from four distinct cultures, and inherent differences among the sites could have influenced the results, especially concerning exposure to negative life events, as women will be more or less likely to be exposed to various negative events, depending on their socio-cultural and geo-political context. Additionally, the sample comprised only women actively involved in the programmes being run by a US faith-based non-profit humanitarian and disaster relief organisation. Previous studies present mixed findings regarding gender differences in religious coping (e.g., Krause et al., 2018; Dedmari, 2021), while others (e.g., Ghorbani et al., 2017) suggest variations in positive and negative religious coping according to faith. Therefore, in order to be able to confidently generalise across gender and faiths, further investigations in a wider variety of settings are required.

Despite these limitations, the study contributes new and valuable insights into religious coping, emphasizing the importance of compassion within this context. It underscores the overall complexity of religiosity and faith, wherein cognitive, affective, and social facets interact, potentially impacting successful coping differentially. As such, it reveals even when employed in a psychologically adaptive manner, faith and religion, through their intrinsic community-facing, pro-social, and compassionate values and activities, can positively contribute to well-being in the face of adversity.

The current study also highlights the well documented role of resilience as a mediator between strategies employed to cope with adversity and wellbeing. The role of compassion in

this equation is exciting as it has practical as well as theoretical implications, promoting the exploration of pro-social cognitions and activities in enhancing wellbeing and successful recovery from trauma and difficult life circumstances. This is linked to previous research on compassion and resilience (Campbell & Bauer; 2021) and promotes the idea that wellbeing should be considered from both an individual and a community/relational perspective.

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Conflict of interest statement

The authors report no conflicts of interest.

Author contributions statement

Conceptualization: KC, CB, KH; Methodology: KC, CB, KH; Software: KC; Data Curation: KC, CB, KH; Project administration: CB, KH; Formal analysis: KC; Resources: CB, KH; Writing - Original Draft: KC; Writing - Review & Editing: KC, CB, KH.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author, [KC] or Convoy of Hope through the third author (KH). The data are not publicly available due to their containing information that could compromise the privacy of research participants

References

Abu-Raiya, H., & Pargament, K. I. (2015). Religious coping among diverse religions: Commonalities and divergence.

Abu-Raiya, H., Pargament, K. I., & Krause, N. (2016). Religion as a problem, religion as a solution: Religious buffers of the links between religious/spiritual struggles and well-being/mental health. *Quality of Life Research, 25*(5), 1265–1274. https://doi.org/10.1007/s11136-015-1159-0

Adiguzel, V., Tan, K., & Okanlı, A. (2023). The effect of compassion on psychological resilience: A study of healthcare professionals. *Current Psychology.* https://doi.org/10.1007/s12144-023-05169-w

Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence & Abuse, 6*(3), 195–216. https://doi.org/10.1177/1524838005277438

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

Amer, M. M., Hovey, J. D., Fox, C. M., & Rezcallah, A. (2008). Initial development of the Brief Arab Religious Coping Scale (BARCS). *Journal of Muslim Mental Health, 3*, 69–88. https://doi.org/10.1080/15564900802156676

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. http://doi**:**10.1002/jclp.20049

Armstrong, M. I., Birnie-Lefcovitch, S., & Ungar, M. T. (2005). Pathways between social support, family well-being, quality of parenting, and child resilience: What we know. *Journal of Child and Family Studies, 14*, 269–281. https://doi.org/10.1007/s10826-005-5054-4

Aten, J. D., O'Grady, K. A., Milstein, G., Boan, D., Smigelsky, M. A., Schruba, A., & Weaver, I. (2015). Providing spiritual and emotional care in response to disaster. In D. F. Walker, C. A. Courtois, & J. D. Aten (Eds.), *Spiritually oriented psychotherapy for trauma* (pp. 189–210). Washington, DC: American Psychological Association. https://doi.org/10.1037/14500-010

Baker, C., & Cohen, K. (2023). Harnessing the power of faith: Resilience, compassion and psychological well-being among women in context of global precarity. *Project Report: Goldsmiths, University of London.* https://research.gold.ac.uk/id/eprint/34543

Beasley, M., Thompson, T., & Davidson, J. (2003). Resilience in responses to life stress: The effects of coping style and cognitive hardiness. *Personality and Individual Differences, 34*(1), 77–95. https://doi.org/10.1016/S0191-8869(02)00027-2

Benjet, C., Bromet, E., Karam, E. G., Kessler, R. C., McLaughlin, K. A., Ruscio, A. M., & Koenen, K. C. (2016). The epidemiology of traumatic event exposure worldwide: Results from the World Mental Health Survey Consortium. *Psychological Medicine, 46*(2), 327–343. https://doi.org/10.1017/S0033291715001981

Block, J. H., & Block, J. (1980). The role of ego–control and ego–resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition, affect and social relations: The Minnesota symposia on child psychology* (Vol. 13, pp. 39–101). Erlbaum.

Bryant-Davis, T., Ullman, S. E., Tsong, Y., & Gobin, R. (2011). Surviving the storm: The role of social support and religious coping in sexual assault recovery of African American women. *Violence Against Women, 17*(12), 1601–1618. https://doi.org/10.1177/1077801211436138

Campbell, C., & Bauer, S. (2021). Christian faith and resilience: Implications for social work practice. *Social Work and Christianity, 48*(1), 28–51. https://doi.org/10.3403/SWC.V48I1.212

Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy, 44*(4), 585–599. https://doi.org/10.1016/j.brat.2005.05.001

Caplan, G. (1964). *Principles of preventive psychiatry.* New York: Basic Books.

Chapman, L. K., & Steger, M. F. (2010). Race and religion: Differential prediction of anxiety symptoms by religious coping in African American and European American young adults. *Depress Anxiety, 27*(3), 316–322. https://doi.org/10.1002/da.20510

Chen, C. (2016). The role of resilience and coping styles in subjective well-being among Chinese university students. *Asia-Pacific Education Research, 25*, 377–387. https://doi.org/10.1007/s40299-016-0274-5

Cohen, K., & Jones, C. (2022). The role of psychological resilience and family dysfunction in the relationship between parental behavioral addictions and adult mental health. *The European Journal of Counselling Psychology.* https://doi.org/10.46853/001c.38664

Collishaw, S., Hammerton, G., Mahedy, L., Sellers, R., Owen, M. J., Craddock, N., Thapar, A. K., Harold, G. T., Rice, F., & Thapar, A. (2016). Mental health resilience in the adolescent offspring of parents with depression: A prospective longitudinal study. *The Lancet Psychiatry, 3*(1), 49–57. https://doi.org/10.1016/S2215-0366(15)00358-2

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. https://doi.org/10.1002/da.10113

Condon, P., & DeSteno, D. (2011). Compassion for one reduces punishment for another. *Journal of Experimental Social Psychology, 47*(3), 698–701. https://doi.org/10.1016/j.jesp.2010.11.016

Cosco, T. D., Kaushal, A., Hardy, R., Richards, M., Kuh, D., & Stafford, M. (2017). Operationalising resilience in longitudinal studies: A systematic review of methodological approaches. *Journal of Epidemiology and Community Health, 71*(1), 98–104. https://doi.org/10.1136/jech-2015-206980

Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: The role of compassionate and self-image goals. *Journal of Personality and Social Psychology, 95*(3), 555–575. https://doi.org/10.1037/0022-3514.95.3.555

Dean, J. G., & Stain, H. J. (2010). Mental health impact for adolescents living with prolonged drought. *The Australian Journal of Rural Health, 18*(1), 32–37. https://doi.org/10.1111/j.1440-1584.2009.01107.x

Dedmari, H. M. (2021). Assessing the relationship between religious coping and gender role attitudes. *The International Journal of Indian Psychology, 9*(4), 421–428. https://doi.org/10.25215/0904.040

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

DeSteno, D. (2015). Compassion and altruism: How our minds determine who is worthy of help. *Current Opinion in Behavioral Sciences, 3*, 80–83. https://doi.org/10.1016/j.cobeha.2015.02.002

Eisenberg, N., Castellani, V., Panerai, L., Eggum, N. D., Cohen, A. B., Pastorelli, C., & Caprara, G. V. (2011). Trajectories of religious coping from adolescence into early adulthood: Their form and relations to externalizing problems and prosocial behavior. *Journal of Personality, 79*(4), 841–873. https://doi.org/10.1111/j.1467-6494.2011.00703.x

Friedli, L., & World Health Organization (WHO) Regional Office for Europe. (2009). *Mental health, resilience, and inequalities.* Switzerland: WHO Regional Office for Europe. Retrieved from https://coilink.org/20.500.12592/zgpmsf

Ford, J. D., Grasso, D. J., Elhai, J. D., & Courtois, C. A. (2015). Social, cultural, and other diversity issues in the traumatic stress field. *Posttraumatic Stress Disorder, 2015*, 503–546. https://doi.org/10.1016/B978-0-12-801288-8.00011-X

Gall, T., Basque, V., Damasceno-Scott, M., & Vardy, G. (2007). Spirituality and the current adjustment of adult survivors of childhood sexual abuse. *Journal for the Scientific Study of Religion, 46*(1), 101–117. https://doi.org/10.1111/j.1468-5906.2007.00343.x

Ghorbani, N., Watson, P. J., Tahbaz, S., & Chen, Z. J. (2017). Religious and psychological implications of positive and negative religious coping in Iran. *Journal of Religion and Health, 56*(2), 477–492. https://doi.org/10.1007/s10943-016-0228-5

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin, 136*(3), 351–374. https://doi.org/10.1037/a0018807

Green, M., & Elliott, M. (2010). Religion, health, and psychological well-being. *Journal of Religious Health, 49*(2), 149–163. https://doi.org/10.1007/s10943-009-9242-1

Gündüzoğlu, N. Ç., & Tanrıverdi, D. (2019). Nursing students' compassion levels and the factors affecting them. *Journal of Education and Research in Nursing, 16*(2), 84–89. https://doi.org/10.5222/HEAD.2019.084

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). The Guilford Press.

Henslee, A. M., Coffey, S. F., Schumacher, J. A., Tracy, M., Norris, F. H., & Galea, S. (2015). Religious coping and psychological and behavioral adjustment after Hurricane Katrina. *Journal of Psychology, 149*(6), 630–642. https://doi.org/10.1080/00223980.2014.953441

Hwang, J. Y., Plante, T., & Lackey, K. (2008). The development of the Santa Clara Brief Compassion Scale: An abbreviation of Sprecher and Fehr's Compassionate Love Scale. *Pastoral Psychology, 56*(4), 421–428. https://doi.org/10.1007/s11089-008-0117-2

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events. *Social Cognition, 7*(2), 113–136. https://doi.org/10.1521/soco.1989.7.2.113

Kaniasty, K. (2012). Predicting social psychological well-being following trauma: The role of postdisaster social support. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(1), 22–33. https://doi.org/10.1037/a0021412

Khan, Z. H., & Watson, P. J. (2006). Construction of the Pakistani Religious Coping Practices Scale: Correlations with religious coping, religious orientation, and reactions to stress among Muslim university students. *International Journal for the Psychology of Religion, 16*, 101–112. https://doi.org/10.1207/s15327582ijpr1602_2

Khan, Z. H., Sultana, S., & Watson, P. J. (2009). Pakistani Muslims dealing with cancer: Relationships with religious coping, religious orientation, and psychological distress. *Research in the Social Scientific Study of Religion, 20*, 217–237. https://doi.org/10.1163/ej.9789004175624.i-334.74

Kira, I., Templin, T., Lewandowski, L., Ramaswamy, V., Bulent, O., & Abu-Mediane, S. (2011). Cumulative tertiary appraisal of traumatic events across cultures: Two studies. *Journal of Loss and Trauma, 16*(1), 43–66. https://doi.org/10.1080/15325024.2010.519288

Knabb, J. J., & Grigorian-Routon, A. (2014). The role of experiential avoidance in the relationship between faith maturity, religious coping, and psychological adjustment among Christian university students. *Mental Health, Religion & Culture, 17*(5), 458–469. https://doi.org/10.1080/13674676.2013.846310

Kowal, E., Gunthorpe, W., & Bailie, R. S. (2007). Measuring emotional and social well-being in Aboriginal and Torres Strait Islander populations: An analysis of a negative life events scale. *International Journal for Equity in Health, 6*(1), 18. https://doi.org/10.1186/1475-9276-6-18

Krause, N., & Hayward, R. D. (2015). Humility, compassion, and gratitude to God: Assessing the relationships among key religious virtues. *Psychology of Religion and Spirituality, 7*, 192–204. https://doi.org/10.1037/rel0000028

Krause, N., Ironson, G., & Hill, P. (2018). Religious involvement and happiness: Assessing the mediating role of compassion and helping others. *The Journal of Social Psychology, 158*(2), 256–270. https://doi.org/10.1080/00224545.2017.1331992

Kristof, N. D., & WuDunn, S. (2009). *Half the sky: Turning oppression into opportunity for women worldwide.* Vintage Books.

Konaszewski, K., Niesiobędzka, M., & Surzykiewicz, J. (2021). Resilience and mental health among juveniles: Role of strategies for coping with stress. *Health and Quality of Life Outcomes, 19*(1), 58. https://doi.org/10.1186/s12955-021-01701-3

Kubiak, S. P. (2005). Trauma and cumulative adversity in women of a disadvantaged social location. *American Journal of Orthopsychiatry, 75*, 451–465. https://doi.org/10.1037/0002-9432.75.4.451

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*, 141–169. https://doi.org/10.1002/per.2410010304

Lee, S. A., Choi, E. J., & Ryu, H. U. (2019). Negative, but not positive, religious coping strategies are associated with psychological distress, independent of religiosity, in Korean adults with epilepsy. *Epilepsy & Behavior, 90*, 57–60. https://doi.org/10.1016/j.yebeh.2018.11.017

Lee, H. H., & Cranford, J. A. (2008). Does resilience moderate the associations between parental problem drinking and adolescents' internalizing and externalizing behaviors?: A study of Korean adolescents. *Drug and Alcohol Dependence, 96*(3), 213–221. https://doi.org/10.1016/j.drugalcdep.2008.03.007

Leipold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist, 14*(1), 40–50. https://doi.org/10.1027/1016-9040.14.1.40

Lim, D., & DeSteno, D. (2016). Suffering and compassion: The links among adverse life experiences, empathy, compassion, and prosocial behavior. *Emotion, 16*(2), 175–182. https://doi.org/10.1037/emo0000144

Liu, Y., Wang, Z., & Lü, W. (2013). Resilience and affect balance as mediators between trait emotional intelligence and life satisfaction. *Personality and Individual Differences, 54*(7), 850–855. https://doi.org/10.1016/j.paid.2012.12.010

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*(3), 543–562. https://doi.org/10.1111/1467-8624.00164

Manning, L., Ferris, M., Narvaez Rosario, C., Prues, M., & Bouchard, L. (2018). Spiritual resilience: Understanding the protection and promotion of well-being in the later life. *Journal of Religion, Spirituality & Aging, 31*(2), 168–186. https://doi.org/10.1080/15528030.2018.1532859

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227–238. https://doi.org/10.1037/0003-066X.56.3.227

McElroy-Heltzel, S. E., Davis, E. B., Davis, D. E., Aten, J. D., 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.

Monforte, P. (2020). From compassion to critical resilience: Volunteering in the context of austerity. *The Sociological Review, 68*(1), 110–126. https://doi.org/10.1177/0038026119858220

Moreira-Almeida, A., Neto, F. L., & Koenig, H. G. (2006). Religiousness and mental health: A review. *Revista Brasileira de Psiquiatria, 28*(3), 242–250. https://doi.org/10.1590/s1516-44462006000300018

Moore, R. C., Martin, A. S., Kaup, A. R., Thompson, W. K., Peters, M. E., Jeste, D. V., & Eyler, L. T. (2015). From suffering to caring: A model of differences among older adults in levels of compassion. *International Journal of Geriatric Psychiatry, 30*(2), 185–191. https://doi.org/10.1002/gps.4123

Neal Krause, Kenneth I. Pargament, Peter C. Hill, & Gail Ironson. (2018). Assessing gender differences in the relationship between religious coping responses and alcohol consumption. *Mental Health, Religion & Culture, 21*(1), 93–104. https://doi.org/10.1080/13674676.2018.1455652

O'Brien, B., Shrestha, S., Stanley, M. A., Pargament, K. I., Cummings, J., Kunik, M. E., & Amspoker, A. B. (2018). Positive and negative religious coping as predictors of distress among minority older adults. *International Journal of Geriatric Psychiatry, 34*(11), 1633–1640. https://doi.org/10.1002/gps.4983

Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice.* Guilford Press. https://doi.org/10.1037/t10648-000

Pargament, K. I., Feuille, M., & Burdzy, D. (2011). The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions, 2*(4), 51–76. https://doi.org/10.3390/rel2010051

Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal for the Scientific Study of Religion, 27*(1), 90–104. https://doi.org/10.2307/1387404

Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology, 56*(4), 519–543. https://doi.org/10.1002/(sici)1097-4679(200004)56:4<519::aid-jclp6>3.0.co;2-1

Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Brief RCOPE [Database record]. APA PsycTests.

Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin, 136*(2), 257–301. https://doi.org/10.1037/a0018301

Park, C. L., Smith, P. H., Lee, S. Y., Mazure, C. M., McKee, S. A., & Hoff, R. (2017). Positive and negative religious/spiritual coping and combat exposure as predictors of posttraumatic stress and perceived growth in Iraq and Afghanistan veterans. *Psychology, Religion and Spirituality, 9*(1), 13–20.

Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment, 5*(2), 164–172. https://doi.org/10.1037/1040-3590.5.2.164

Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior, 30*, 241–256.

Peres, J. F. P., Moreira-Almeida, A., Nasello, A. G., & Koenig, H. G. (2007). Spirituality and resilience in trauma victims. *Journal of Religion and Health, 46*, 343–350. https://doi.org/10.1007/s10943-006-9103-0

Proffitt, D., Cann, A., Calhoun, L. G., & Tedeschi, R. G. (2007). Judeo-Christian clergy and personal crisis: Religion, posttraumatic growth and well-being. *Journal of Religion and Health, 46*, 219–231. https://doi.org/10.1007/s10943-006-9074-1

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In S. Weintraub (Ed.), *Risk and protective factors in the development of psychopathology* (pp. 181–214). Cambridge University Press. https://doi.org/10.1017/cbo9780511752872.013

Satici, S. A. (2016). Psychological vulnerability, resilience, and subjective well-being: The mediating role of hope. *Personality and Individual Differences, 102*, 68–73. https://doi.org/10.1016/j.paid.2016.06.057

Schaefer, L. M., Howell, K. H., Schwartz, L. E., Bottomley, J. S., & Crossnine, C. B. (2018). A concurrent examination of protective factors associated with resilience and posttraumatic growth following childhood victimization. *Child Abuse and Neglect, 85*, 17–27. https://doi.org/10.1016/j.chiabu.2018.08.019

Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of Social Psychology, 141*(4), 523–536. https://doi.org/10.1080/00224540109600569

Smith, L. B., Lenz, S. A., & Strohmer, D. (2017). Differential prediction of resilience among individuals with and without a history of abuse. *Counseling and Values, 62*, 106–122. https://doi.org/10.1002/cvj.12052

Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships, 22*(5), 629–651. https://doi.org/10.1177/0265407505056439

Staub, E., & Vollhardt, J. (2008). Altruism born of suffering: The roots of caring and helping after victimization and other trauma. *The American Journal of Orthopsychiatry, 78*(3), 267–280. https://doi.org/10.1037/a0014223

Steffen, P. R., & Masters, K. S. (2005). Does compassion mediate the intrinsic religion-health relationship? *Annals of Behavioral Medicine, 30*(3), 217–224. https://doi.org/10.1207/s15324796abm3003_6

Stellar, J. E., Manzo, V. M., Kraus, M. W., & Keltner, D. (2012). Class and compassion: Socioeconomic factors predict responses to suffering. *Emotion, 12*(3), 449–459. https://doi.org/10.1037/a0026508

Surzykiewicz, J., Skalski, S. B., Niesiobędzka, M., & Konaszewski, K. (2022). Exploring the mediating effects of negative and positive religious coping between resilience and mental well-being. *Frontiers in Behavioral Neuroscience, 16*, 954382. https://doi.org/10.3389/fnbeh.2022.954382

Tamura, S., Suzuki, K., Ito, Y., & Fukawa, A. (2021). Factors related to the resilience and mental health of adult cancer patients: A systematic review. *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer, 29*(7), 3471–3486. https://doi.org/10.1007/s00520-020-05943-7

Ungar, M. (2015). Practitioner review: Diagnosing childhood resilience—A systemic approach to the diagnosis of adaptation in adverse social and physical ecologies. *Journal of Child Psychology and Psychiatry, 56*(1), 4–17. https://doi.org/10.1111/jcpp.12306

Valdesolo, P., & Desteno, D. (2011). Synchrony and the social tuning of compassion. *Emotion, 11*(2), 262–266. https://doi.org/10.1037/a0021302

Van Doesum, N. J., Van Lange, D. A., & Van Lange, P. A. (2013). Social mindfulness: Skill and will to navigate the social world. *Journal of Personality and Social Psychology, 105*(1), 86–103. https://doi.org/10.1037/a0032540

Van Hook, M. P. (2016). Spirituality as a potential resource for coping with trauma. *Social Work & Christianity, 43*(1), 7–25.

Van Hook, M. (2014). *Social work practice with families: A resiliency-based approach* (2nd ed.). Chicago: Lyceum Books.

Vollhardt, J. R., & Staub, E. (2011). Inclusive altruism born of suffering: The relationship between adversity and prosocial attitudes and behavior toward disadvantaged outgroups. *American Journal of Orthopsychiatry, 81*(3), 307–315. https://doi.org/10.1111/j.1939-0025.2011.01099.x

Wachholtz, A., & Sambamoorthi, U. (2011). National trends in prayer use as a coping mechanism for health concerns: Changes from 2002 to 2007. *Psychology of Religion and Spirituality, 3*, 67–77. https://doi.org/10.1007/s10943-012-9649-y

Walker, D. F., Reese, J. B., Hughes, J. P., & Troskie, M. J. (2010). Addressing religious and spiritual issues in trauma-focused cognitive-behavioral therapy for children and adolescents. *Professional Psychology: Research and Practice, 41*, 174–181. http://doi.org/10.1037/a0017782

Xiaofan, Y., Xiaojie, W., Chen, X., Yuanyuan, X., Peng, L., Li, P., & Min, L. (2023). Psychometric properties of the 10-item Connor-Davidson Resilience Scale (CD-RISC-10) in male military personnel with and without PTSD. *Journal of Affective Disorders Reports, 14*. https://doi.org/10.1016/j.jadr.2023.100666

Zautra, A. J., Hall, J. S., & Murray, K. E. (2010). Resilience: A new definition of health for people and communities. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 3–29). The Guilford Press.

Zeligman, M., Majuta, A. R., & Shannonhouse, L. R. (2020). Posttraumatic growth in prolonged drought survivors in Botswana: The role of social support and religious coping. *Traumatology, 26*(3), 308–316. https://doi.org/10.1037/trm0000237