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Religion and Meaning: Its Moderating Effects on Stressful Life Events and Mental Health

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RELIGION AND MEANING: ITS MODERATING EFFECTS ON STRESSFUL LIFE EVENTS AND MENTAL HEALTH

by

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ABSTRACT

The present study was designed to examine the relationship among religion, mental health, stressful life events, and people's sense of meaning and purpose in life using data from the 2017 Baylor Religion Survey (BRS), a publicly available dataset. This survey obtained data from a nationwide study of 1,501 United States adults, 1,402 of whom are included in the current analyses. The first three hypotheses of this study were that (1) religion is positively associated with meaning to an individual's life, that (2) meaning is positively associated with mental health, and that (3) stress is negatively associated with mental health. Finally, the central hypothesis of this study was that (4) meaning moderates the relationship between stress and mental health. The results of the study found modest support for the first three hypotheses, but do not confirm the primary hypothesis of this study. However, interestingly, analysis of the data showed that stress is positively associated with mental health, consistent with a view distinguishing distress from eustress.

INDEX WORDS: Religion, Mental health, Meaning and purpose in life, Stressful life events, Stress

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by

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CHAPTER 1

INTRODUCTION

Purpose of the Study

This study seeks to examine the interrelationships among religion, mental health, stressful life events, and people's sense of meaning and purpose. Religion can play an important role in individuals' mental health and their sense of meaning and purpose. Central to the present study is the examination of a possible moderation effect regarding stressful life events. Based on the current research, the following hypotheses are thus formulated: (1) Religion gives meaning to an individual's life, (2) having meaning in life improves one's mental health, (3) stress is negatively associated with mental health. A fourth hypothesis is that (4) meaning moderates the negative relationship between stress and mental health, such that as the sense of meaning increases, the negative correlation between stress and mental health will decrease. This moderation effect will be tested both in terms of the number of stressful events a person experiences, and in terms of the perceived severity of those stressors.

How This Study Is Original

Two general options remain available in order to test these hypotheses. Convenience samples, whether composed of university students obtained through a participant pool, or of adults obtained through online or snowball sampling, often are used in psychological research. However, these types of samples have come under fire for poorly representing the broader population to which the results might be generalized (Newson et al., 2020). Because of these limitations the present study will rely on the Baylor Religion Survey (BRS-V; Baylor Religion Survey, 2017). This publicly available dataset has important advantages over a convenience sample. In particular, the BRS-V was constructed to be a representative, proportional sample of adults in the United States, meaning that the results can be generalized with more confidence than would be possible in a convenience sample. The BRS-V's large sample includes a wider range of ages than would be

obtained in a convenience sample of university students, and by having a wide range of ages we can better test the effect of stressful life events than would be possible in a sample of students. After examining several data sets in social science archives such as the Association of Religion Data Archives (www.thearda.com), I concluded that the BRS had the best measures that will help answer the questions in this study. This survey, administered by Gallup and created by a research team at Baylor University, was funded by the John Templeton Foundation. The BRS addresses a wide range of topics (Baylor Religion Survey, 2017), such as Christian nationalism (Al-Kire et al., 2021), attitudes toward immigrants (Jones, 2020), the role of Internet usage on religion and spirituality (McClure, 2020), and other subjects related to religion. However, no researchers have used the dataset to test the predictions outlined in this study.

CHAPTER 2

LITERATURE REVIEW

Stress can be defined as a condition for which individuals label life situations "as taxing or exceeding personal resources" (Roming & Howard, 2019, p. 832). The severity of stress and its impact on an individual varies from person to person depending on how effectively they can cope with stress. Coping can be defined as behavioral efforts to mitigate, diminish, or overcome the effects of stressful events (Brennan, 2001). Individuals attempt to cope with stress in order to minimize risk of negative consequences. Future negative consequences can lead to the development of high-risk behaviors, higher illness risk, more emotional distress, and poorer adjustment to negative life events (Nelson, 2009). In order to relieve these consequences, individuals can choose to look for guidance either religiously or spiritually (Nelson, 2009).

Religious or spiritual guidance can act as a coping resource (Jung, 2018; Pargament et al., 1998; Park, 2008). In fact, religious coping can be defined as "a search for significance, involving the sacred" (Pargament et al., 1998, p. 712). Specifically, there are three roles, as outlined by Spilka, Shaver, and Kilpatrick (1985), that religion plays in the coping process. The three roles that religion offers to the meaning of life provides the individual with a greater sense of control over one's situation and builds self-esteem. Based on these roles, religion can serve as a resource to cope with situations that can be seen as stressful (Roming & Howard, 2019).

Several studies point to the conclusion that religion can be an effective coping resource for stress (Krok, 2015; Lee, 2007; Lewinson, 2015; Lorenz et al., 2019; Pargament et al., 1998; Roming & Howard, 2019). Krok (2015) concluded that there was a significant relationship between a religious meaning system and coping styles. Similarly, Lee (2007) found that religious and spiritual coping moderated the relationship between perception of stress and psychological well-being. Coping styles allow for individuals to deal with personal situations and problems. Specifically, stressful life events can act as triggers to many psychiatric disorders, but both social

support and intrinsic religiousness buffered these effects (Lorenz et al., 2019). Other effective coping resources include seeking spiritual support, religious forgiveness, collective religious coping, spiritual connection, religious refinement, religious reassessment, and religious focus (Pargament et al., 1998).

Adaptive coping mechanisms can increase one's quality of life, as suggested by Roming and Howard's (2019) study. This is consistent with a study conducted by the Higher Education Research Institute (HERI, 2006) which assessed spirituality's relationship with stress and quality of life. The data revealed that those scoring higher in spirituality more frequently discovered meaning in their life and peace even in times of stress. Furthermore, Graham et al., (2001) observed that counseling students identified religion as an important component of coping with stress. Additionally, researchers like Lewinson et al., (2015) have explored how older adults with unstable housing situations and adverse health conditions use religion to manage daily stressors. Researchers found that religious coping enhanced older adults' adaptive capacities to defy the effects of adversity (Coyle, 2002; Lewinson et al., 2015). Interestingly, religious coping also facilitates the thought that survivors can assign meaning and purpose to life events and suffering. Hope and belief allow individuals to move forward and be resilient when dealing with adversity.

Religion generally involves beliefs, practices, or ceremonial acts related to a higher power (Kidwai, 2014). Religion can be practiced in institutional settings or alone (Kidwai, 2014). It can also influence perspectives about other aspects of the world, like beliefs about fairness and equity, and how to make choices (Galek, 2015). Therefore, religion can be defined as "the search for significance that occurs within the context of established institutions that are designed to facilitate spirituality" (Pargament et al., 2013, p. 15). Scholars consider religion to be multidimensional and to offer adherents to provide cognitive, personal, and social resources that are particularly important during times of stress (Nelson, 2009; Jung, 2018).

Because of the resources that religion can provide, it is especially useful when addressing the most severe challenges of life, such as death, illness, suffering, and other tragedies (Galek,

2015; Stauner, 2009; Hood et al., 2009; Rafferty, 2015). Major life stress can upset assumptions about oneself and the kindness of the world (Stauner, 2009). In order to soften these assumptions, religion can offer a sense of fulfillment to an individual, providing meaning to existential problems that all individuals encounter (Galek, 2015). The effectiveness of religion in providing a sense of meaning is facilitated by religion's ability to subsume other sources of meaning, such as work, family, personal relationships, values and ideals, and achievements (Hood et al., 2009). In fact, evidence confirms that there is a positive association between religion and the belief that there is meaning and purpose in life, a relationship that is particularly strong among elderly individuals and ethnic minorities (Ardelt, 2003; Fry, 2000; Galek, 2015; Hughes & Peake, 2002; Krause, 2003). Lastly, individuals have described how religion provides meaning and purpose to people facing severe life stressors, such as difficult stages of illness (Rafferty et al., 2015).

Although research often indicates that religion plays a positive role in people's efforts to cope, the effect is inconsistent. For example, Pargament and Lomax (2013) confirmed that higher levels of religiousness were associated with lower levels of depression. Specifically, highly religious individuals facing severe life stressors showed lower levels of depression than did less religious individuals facing similar stressors. On the other hand, many studies have found that religion exacerbates the harmful effects of stress on mental health (Lewis et al., 1996; Lewis et al., 1997; Lewis et al., 2000; O'Connor et al., 2003) while other studies have stated that there is no relationship between religion and psychological distress (Blazer & Palmore et al., 1976; Ferraro & Albrecht-Jensen, 1991). A study conducted by O'Connor, Cobb, and O'Connor (2003) investigated the relationship between religiosity, social support, and psychological distress. These researchers did not find any beneficial effect that mental health had on religion. Furthermore, the data also failed to provide evidence for the notion that religiosity buffers the impact of stress on psychological distress. Ferraro and Albrecht-Jenson (1991) completed a study that showed that there are both positive and negative associations of religion on health. However, it was concluded

that there is at least one dimension of religion that has a positive effect on health: People who pray and participate more actively in their religions have better health.

In light of the mixed findings regarding religion's role in mental health, further research is needed in order to better understand the positive and negative effects religion can play in coping (Hood et al., 2009). From a clinical point of view, improving our understanding of religious and spiritual coping and its potential influence on health problems may have implications with respect to enhancing coping resources, thereby improving adjustment to stressful life events (Lee, 2007; Stauner, 2019). The struggles of everyday life, as well as more adverse religious struggles, can predict physical symptoms, functional disabilities, and poor adaptation to stress (Stauner, 2019). Because of this, Pargament et al. (2013) suggests that the study of religious coping patterns is useful for practical purposes. Furthermore, if religious coping is determined to have a positive practical impact, it may help to challenge negative stereotypes about religion.

In an effort to continue challenging negative stereotypes, research on both religion and mental health has expanded. Recent work, specifically by Koenig (2006), has suggested that religion has a positive effect on mental health. Several studies have demonstrated that a secure relationship with God lowers levels of psychological distress (Pargament et al., 2013). Furthermore, other studies have concluded that religiosity is associated with lower levels of many types of psychological struggles including psychosis, borderline personality, and schizotypal symptoms (Nelson, 2009; Ross, 1990). Additionally, research has found that a strong faith combined with being religiously active, seems to counter pain-related distress, depression, and anxiety (Hood et al., 2009). Based on the research demonstrating a positive relationship between religion and mental health, the focus of the present research is on the mechanisms that help individuals deal with stress.

Religious beliefs and practices, such as prayer, can help to buffer the impact of stressors on mental health and allow individuals to react positively to these stressors (Lorenz, 2019). So, it is valuable to understand religion, stressors, and how they both can impact mental health. For

example, research suggests that those who obtain a divorce, which can be an immense life stressor, experience increased psychological distress, such as greater depression and decreased happiness (Krumrei et al., 2011). Utilizing positive religious coping mechanisms after a stressful event, such as divorce, is beneficial because this pattern of results leads researchers to conclude that religiousness can be a protective factor against divorce and other stressors (Koenig et al., 2014; Krumrei et al., 2011).

Facing adversity can impact an individual's resilience when it comes to mental health. Krause (2006) examined the relationship between older adults' physical health and their gratitude toward God. It was hypothesized that negative stress could lead individuals to reflect on their experiences in order to make positive life changes. The data from this study suggest that feeling grateful can mitigate negative life events and foster a greater sense of purpose. Krause (2006) concluded that the effects of stress were significantly reduced when religion was used as a means of coping. For instance, the researchers indicated that the effects of living in a bad area were lessened for people who felt more grateful to God.

Other researchers find that religion and spirituality can be important to individuals' meaning and purpose in life (Krok, 2015). The development of faith and consistent emphasis on faith allows individuals to overcome life's difficulties (Hood et al., 2009). Religion and spirituality can provide individuals with a combined set of beliefs, goals, and meanings that help individuals understand the world better and encourage reframing negative events into positive outlooks (Krok, 2015). Generally, emphasizing the search for meaning and purpose in life plays a large role in an individual's functioning and their life (Ardelt & Eichenberger, 2008; Hood et al., 2009; Park, 2013). Based on this, religion has two roles that play a part in others outlook of life: (1) orienting others to a religion that helps individuals comprehend one's life, and (2) providing a way to help individuals discover their meaning and purpose (Krok, 2015).

Galek et al., (2015), asking a similar but different question from the current study, examined the associations among religious commitment, belief in meaning and purpose in life, and

psychiatric symptoms among the general public using data from the 2010 Baylor Religion Survey (BRS). The researchers found that the belief that life lacks meaning and purpose had a significant positive association with four of the five psychiatric symptoms. Furthermore, meaning and purpose in life have a beneficial association with psychological well-being, since lack of meaning and purpose was found to be directly related to psychiatric symptoms. On the other hand, the lack of meaning and purpose has a pernicious association with four of the five classes of psychiatric symptoms.

As mentioned in Chapter 1, this study is intended to examine the interrelationships among religion, mental health, and people's sense of meaning and purpose. In particular, it is designed to address four hypotheses: (1) Religion gives meaning to an individual's life; (2) having meaning in life improves one's mental health; (3) stress is negatively associated with mental health; and (4) meaning moderates the negative relationship between stress and mental health, such that as the sense of meaning increases, the negative correlation between stress and mental health will decrease. This moderation effect was tested both in terms of the number of stressful events a person experiences, and in terms of the perceived severity of those stressors.

CHAPTER 3

METHOD

The data for the current analysis come from the fifth wave of the BRS. The survey used a

self-administered pen and paper methodology with mail-based collection only. The BRS-V

contains 322 variables. Gallup originally mailed out 11,000 surveys with an invitation letter, return

envelope, and $1 USD cash incentive. Reminder letters are mailed to all addresses a week later.

Two weeks later, a full cover letter, survey, and return envelope package were mailed to those

same addresses. Collection of completed surveys finished on March 21, 2017. The sample for this

study was selected using a single stratified sample design, based on United States Postal Service

addresses. The total number of responses was $n = 1{,}501$.

Participants

The BRS-V includes a total of 1,501 participants ranging from 17 to 98 years old. Twenty-

six individuals indicated they were undecided regarding two variables, Meaning and Purpose and

Religious Belief, and therefore were excluded from analyses. As a result 1,402 participants were

used in this study. The BRS-V data set includes age as a grouped variable, asking respondents to

indicate their age from the categories: Less than 25; 25-34; 35-44; 45-54; 55-64; or 65+. The mean

age is $M = 48.8$, $SD = 17.1$, according to Baylor Religion Survey, 2017. Furthermore, this archival

dataset is comprised of a diverse sample, obtained by forming strata based on the density of

specific subgroups, like Hispanic and African American populations, to ensure that these

subgroups were included in the sample. The organization of these subgroup populations was based

on information at the census block group level.

Measures

Dependent variables.

The mental health variable is measured by a total of 18 questions (see Appendix A). The root question was, "In the past WEEK, about how often have you had the following feelings?". Response options ranged from *Never* (1) to *Most or all of the time* (4). The items that included negative wording were reverse-coded. The 18 items comprising the mental health variable were averaged together.

Predictor variables.

The meaning and purpose variable included one question: "I have a good sense of what makes my life meaningful." The response options ranged from *Strongly disagree* (1) to *Strongly Agree* (4), with *Undecided* coded as 8. Religiosity was measured with two questions. The first question was, "How religious do you consider yourself to be?" with response options ranging from *Not religious* (1) to *Very religious* (4); *I don't know* is coded as 8. The second question was, "How often do you attend religious services at a place of worship?" Response options were: *Never* = 0, *Less than once a year* = 1, *Once or twice a year* = 2, *Several times a year* = 3, *Once a month* = 4, *2 to 3 times a month* = 5, *About once a week* = 6, and *Several times a week* = 7. Responses to the each of the religious variable questions were analyzed separately.

Lastly, the stressful life events variable was measured by a total of 10 questions. Participants were asked whether or not any of the following events occurred during the past year: Got married; Had a child; Failed at something important to me; Had a crisis of faith; Had house foreclosed; Moved; Got a long-term illness or injury; Lost a job; Experienced a death of a loved one; Got divorced/separated. They also were asked about the severity of the effects of those stressful events. The response options were *Not at all stressful* = 1, *Somewhat stressful* = 2, and *Very stressful* = 3. Responses were summed together to form a total number of stressful life events.

Demographic variables.

The demographic variables used in this study are age, gender, race, ethnicity, education, religion, and marital status. Each of these variables were measured categorically using the response options indicated in Tables 1 and 2.

Data Analysis

A registered data analysis plan specified that Hypotheses 1 through 3, that religion gives meaning to an individual's life, that meaning is positively associated with mental health, and that stress is negatively associated with mental health, would be tested using correlation analyses. Hypothesis 4, that meaning moderates the relationship between stress and mental health, would be tested with multiple regression using Hayes (2021) Process Macro, Model 3, developed to test for moderation effects. This macro is commonly used to test the moderating effect of variables and will allow me to test this key hypothesis.

Table 1.

Descriptive Statistics with Sample Size and Frequency.

	N	Percent
Age	1402	--
Gender		
Female	854	56.9
Male	613	40.8
Other	4	0.3
Marital Status		
Single	235	15.7
Married	780	52
Separated	32	2.1
Divorced	205	13.7
Widowed	149	9.9
Domestic Partnership	71	4.7
Highest Education Level		
8th Grade or Less	17	1.1
9th to 12 Grade	60	4
High School Graduate	214	17.3
Technical, trade, vocational or business school	101	6.7
Some college but no degree	244	16.3
Two-year associate degree	122	8.1
Four-year bachelor's degree	312	20.8
Some postgraduate or professional schooling	104	6.9
Postgraduate or professional degree	295	19.7
Race		
White	1169	77.9
Black	163	10.9
Asian	39	2.6
American Indian	8	0.5
Pacific Islander	5	0.3
Multiple races	42	2.8
Religion		
Black Protestant	97	6.5
Jewish	29	1.9
Catholic	376	25
Evangelical	410	27.3
Atheist	126	8.4
Other	114	7.6

Table 2.

Frequency of Age

	Frequency	Percent
Less than 25	57	3.8
25-34	181	12.1
35-44	161	10.7
45-54	204	13.6
55-64	349	23.3
65+	450	30.0

CHAPTER 4

RESULTS

Cronbach's Alpha

Before starting the analysis, some of the items in the Mental Health variable had to be reverse-coded because these items included negative wording (see Appendix A). Then, the 18 items were averaged together in order to obtain a Cronbach's Alpha ($\alpha = .904$).

Demographics

The demographic variables used in this study included: age, gender, marital status, education, race, and religious affiliation. Frequency distributions for these variables are reported in Tables 1 and 2.

Bivariate Correlation Analysis of Research Variables

The correlation analyses for the main study variables are presented in Table 3. These data were used to examine the first three hypotheses.

Hypothesis 1. I ran a bivariate correlation analysis to evaluate if religion is associated with a sense of meaning in an individual's life. The correlations between religion and meaning and purpose ($r = .134$, $p < .05$), religious belief and meaning and purpose ($r = .145$, $p < .05$), and religious attendance and meaning and purpose ($r = .122$, $p < .01$) are small. Although the correlations are small, they are in the predicted direction, lending support to the idea that religion is associated with a sense of meaning in an individual's life.

Hypothesis 2. I ran a bivariate correlation analysis to evaluate if having meaning in life is associated positively with mental health. The association between meaning and purpose and mental health is small ($r = .231$, $p < .01$). However, the correlation is positive, suggesting that having meaning in life is associated with better mental health.

Hypothesis 3. A third bivariate correlation analysis was used to examine the degree to which stress is negatively associated with mental health. While the correlation was significant, the

correlation showed a positive association between stress and mental health ($r = .228$, $p < .01$). This result is counter to the third hypothesis, that stress would be associated with poorer mental health.

Moderation Analysis with PROCESS Macro

Hypothesis 4. I ran two separate multiple regression analyses using Hayes (2021) Process Macro, Model 3, to test for moderation effects. In the first multiple regression analysis, with the Religious Belief variable, the overall model was significant, but the interaction was not, $F(7, 1351) = 23.07$, $p < .001$, $R = .33$. There was only one significant prediction found, meaning and purpose significantly predicted mental health ($\beta = .19$, SE $= .07$, 95% CI: [.04, .33]. In the second multiple regression analysis, with the Religious Attendance variable the overall model also was significant, but the interaction was not, $F(7, 1365) = 24.74$, $p < .001$, $R = .34$. Like the first analysis there was only one significant prediction found, with meaning and purpose significantly predicting mental health ($\beta = .19$, SE $= .04$, 95% CI: [.10, .27]). There were no other significant interactions in both analyses, which are shown in Appendices B and C. This suggests that having meaning and purpose leads to better mental health.

Supplemental Analyses

Bivariate Correlation Analysis of Research Variables.

The supplemental correlation analyses for the main study variables are presented in Table 4. These data were used to examine the first three hypotheses.

Hypothesis 1. I ran a bivariate correlation analysis to evaluate if religion is associated with a sense of meaning in an individual's life. The correlations between religious belief and meaning and purpose ($r = .145$, $p < .01$), and religious attendance and meaning and purpose ($r = .127$, $p < .01$) are small. Although the correlations are small, they are in the predicted direction, lending support to the idea that religion is associated with a sense of meaning in an individual's life.

Hypothesis 2. I ran a bivariate correlation analysis to evaluate if having meaning in life is associated positively with mental health. The association between meaning and purpose and mental

health is small ($r = .312$, $p < .01$). However, the correlation is positive, suggesting that having

meaning in life is associated with better mental health.

Hypothesis 3. A third bivariate correlation analysis was used to examine the degree to

which stress is negatively associated with mental health. The correlation showed a small, but

significant negative association between stress and meaning and purpose ($r = -.16$, $p < .01$). This is

contrary to what was found in the prior analysis.

Moderation Analysis with PROCESS Macro.

Hypothesis 4. I ran two separate multiple regression analyses using Hayes (2021) Process

Macro, Model 3, to test for moderation effects. In the first multiple regression analysis, with the

Religious Belief variable, the overall model was significant, but the interaction was not, $F(7, 1269)$

$= 25.77$, $p < .001$, $R = .35$. There was only one significant prediction found, meaning and purpose

significantly predicted mental health ($\beta = .20$, SE $= .07$, 95% CI: [.06, .35]. In the second multiple

regression analysis, with the Religious Attendance variable the overall model also was significant,

but the interaction was not, $F(7, 1271) = 26.76$, $p < .001$, $R = .37$. However, two predictions were

supported by the data. First, meaning and purpose significantly predicted mental health ($\beta = .18$, SE

$= .05$, 95% CI: [.09, .27]). Secondly, the magnitude of stressful life events significantly predicted

mental health ($\beta = -.04$, SE $= .17$, 95% CI: [-.07, -.007]). There were no other significant

interactions in both analyses, which are shown in Appendices D and E.

Table 3.

Correlation Coefficients for Study Variables.

Variables	*M*	*SD*	1	2	3	4
1. Mental Health	3.00	.560				
2. Stressful Life Events	.892	1.02	.228**			
3. Meaning & Purpose	3.29	.595	.231**	-.040		
4. Religious Belief	2.68	1.07	.021	.003	.145*	
5. Religious Attendance	3.32	2.57	.062*	-.011	.122**	.684**

Table 4.

Correlation Coefficients for Supplemental Analysis Variables.

Variables	*M*	*SD*	1	2	3	4
1. Mental Health	3.19	.477				
2. Stress Magnitude	4.92	5.64	-0.16**			
3. Meaning & Purpose	3.29	.592	.312**	-0.006		
4. Religious Belief	2.69	1.07	.078**	-0.022	.145**	
5. Religious Attendance	3.35	2.56	.107**	-0.045	.127**	.684**

CHAPTER 5

DISCUSSION

Review of Purpose

The current study aimed to examine the relationship between religion, meaning and purpose, stressful life events, and mental health in a sample of adults, using the BRS-V. Based on a review of the literature the following hypotheses were formulated: (1) Religion gives meaning to an individual's life, (2) having meaning in life improves one's mental health, (3) stress is negatively associated with mental health. My final hypothesis was that (4) meaning moderates the negative relationship between stress and mental health, such as that as the sense of meaning increases, the negative correlation between stress and mental health will decrease.

Bivariate Correlation Analysis

Although Hypotheses 1 and 2 – that religion is associated to greater meaning in a person's life, and that having meaning is associated with improved mental health – were supported, the magnitude of the correlations were quite modest. The direction of the effect is consistent with Ardelt (2003), who confirmed that there is a positive association between religion and the belief that there is meaning and purpose in life. Additionally, this effect is consistent with Galek et al. (2015), who found that the belief that life lacks meaning and purpose had a significant positive association with mental health.

Curiously, the data here showed that stress is positively associated with mental health, rather than negatively associated with mental health as predicted in Hypothesis 3. Although, this was an unexpected result, there is research to support this finding. According to this literature, there is a type of stress that is associated with positive feelings and a healthy physical state after going through stressful life events (Kupriyanov & Zhdanov, 2014). This type of stress is called eustress. Many studies have shown that individuals who go through stressful life events, can achieve positive results and traits that help to facilitate the process (Britt et al., 2001). These individuals gain psychological resources, like hardiness and resilience, that help to cope with adversity and to adapt

to future stressful life events (Ben-Zur & Michael, 2020). Overall, these individuals that gain psychological resources and see positive change, tend to have less depression and more positive well-being (Helgeson et al., 2006; Koutrouli et al., 2012). Therefore, it is likely that individuals in the current study were exhibiting eustress, rather than distress.

Moderation Analysis with PROCESS Macro

The results of the moderation analyses showing no significant effect among the interactions, are somewhat inconsistent with previous literature. Many studies have found that religion provides resources, such as a sense of fulfillment, that facilitates a person's ability to address severe challenges in life (Galek et al., 2015; Stauner, 2009; Hood et al., 2009; Rafferty, 2015). On the other hand, some research has indicated that this effect, that religion plays a positive role in people's efforts to cope, is inconsistent or unreliable. For example, higher levels of religiousness have been associated with lower levels of depression (Pargament & Lomax, 2013). Highly religious individuals who faced severe life stressors showed lower levels of depression than did less religious individuals facing similar stressors. Furthermore, other studies have found that religion has no effect on mental health, which is similar to what is found in the current study (Blazer & Palmore et al., 1976; Ferraro & Albrecht-Jensen, 1991). A potential factor influencing the results in the present study is that most members of the BRS did not report a stressful life event. The degree to which this data set reflects stress levels in the broader population is not clear and may be a factor impacting the failure to find a significant moderation effect.

Another study has tested similar hypotheses using an earlier version of the BRS. Galek and colleagues (2015) used the BRS-IV to test the degree to which the belief that life lacks meaning and purpose moderates the association of religious commitment on psychiatric symptoms. These researchers found that highly religious individuals who believed their lives lacked meaning and purpose experienced more frequent symptoms of social anxiety, paranoia, and obsession than individuals who were less religious or highly religious individuals who believed their lives have

meaning and purpose. The result of the study completed by Galek et al., (2015) and the result of the current study lends to the idea that this effect is inconsistent.

Supplemental Analyses

Like the previous analyses, Hypotheses 1 and 2 – that religion is associated to greater meaning in a person's life, and that having meaning is associated with improved mental health – were supported. However, unlike the previous analysis, the data showed that stress is negatively associated with mental health. Although the magnitude of the correlation was quite modest, this association was predicted in Hypothesis 3. A potential factor influencing the results in the present study, is that most members of the BRS indicated that an event like a death of a loved one and experiencing a failure was more stressful than an event like a birth of a child or getting married. The result of the supplemental moderation analyses showing no significant effect among the interactions continues to lend to the idea that this effect is inconsistent.

Limitation

The current study included a limitation worth noting. The BRS, although a well-regarded dataset, was not specifically made to answer these types of questions. In order to get the variables I needed, I had to combine multiple items into one variable. Because of this, there was only one meaning and purpose question and two questions regarding religiousness. This may have led to a poor operationalization of these constructs. Although the BRS has been used to answer a variety of questions regarding a wide range of topics, the items used in a survey such as this may not be ideal for all purposes. Future researchers in this area should consider relying on measures specifically developed for testing the hypothesis.

General Conclusions

Overall, despite these limitations, these results add to our knowledge and understanding of the relationship between religion, meaning and purpose, stress, and mental health outcomes.

Specifically, these results confirm the positive associations between religion, meaning, and mental health. Furthermore, they provide insight on future research directions involving religion, meaning and purpose, stressful life events, and mental health. Future research should continue to test these relationships and the interactions between them but should rely on robust operationalizations of these constructs.
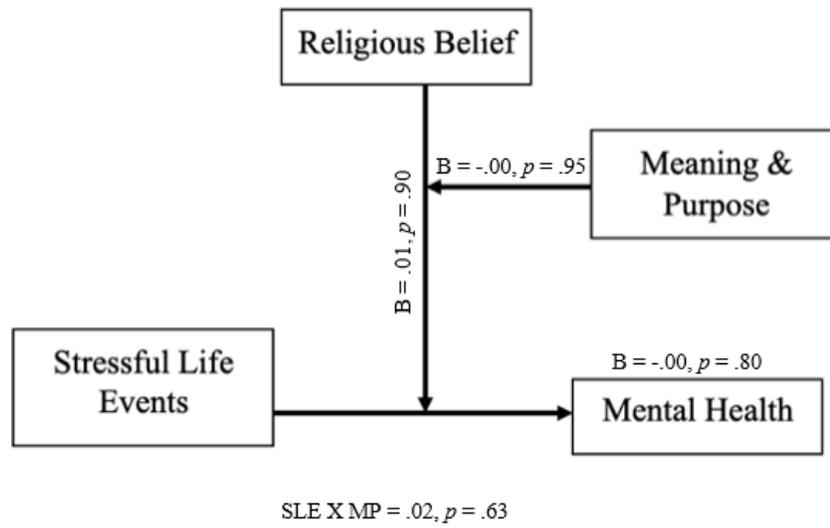
Figure 1: First moderation analysis with Religious Belief, Meaning & Purpose, Stressful Life Events, and Mental Health Interactions
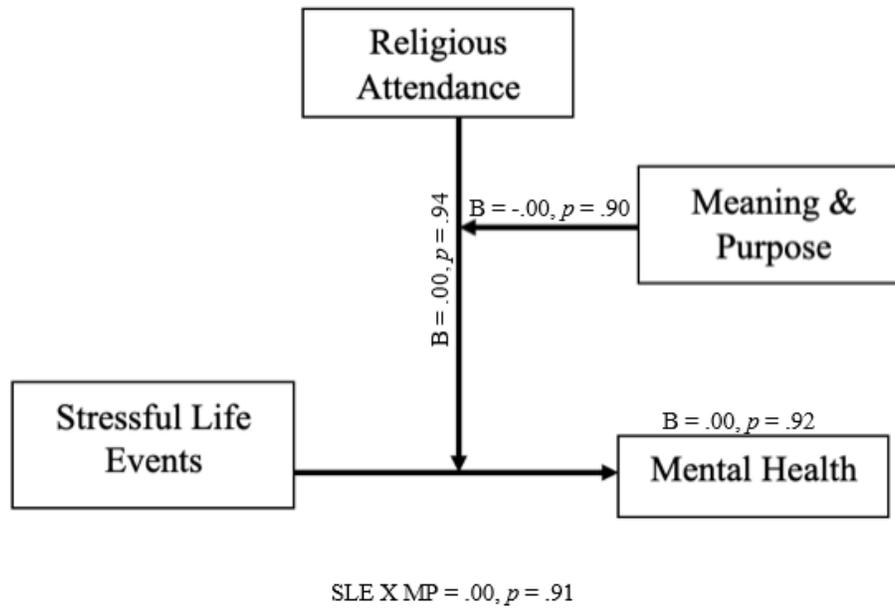
Figure 2: Second moderation analysis with Religious Attendance, Meaning & Purpose, Stressful Life Events, and Mental Health Interactions

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APPENDIX A

MENTAL HEALTH VARIABLE ITEMS

In the past WEEK about how often have you had the following feelings?

1. I was bothered by things that usually don't bother me. *
2. I could not shake off the blues, even with help from my family and my friends. *
3. I felt I was just as good as other people. *
4. I had trouble keeping my mind on what I was doing. *
5. I felt depressed. *
6. I felt too tired to do things. *
7. I felt happy.
8. I enjoyed life.
9. I felt sad. *
10. I felt that people disliked me. *
11. I had fear of the worst happening. *
12. I was nervous. *
13. I felt my hands trembling. *
14. I had a fear of dying. *
15. I felt faint. *
16. I felt bored.*
17. I felt that I missed out on a fun activity.*
18. I felt angry. *

*Reverse-coded variables.

APPENDIX B

MODERATION ANALYSES WITH RELIGIOUS BELIEF VARIABLE

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.5 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 3
    Y  : MH_VAR
    X  : SLEtot
    W  : RelBel
    Z  : MP_VAR

Sample
Size:  1359


**************************************************************************
OUTCOME VARIABLE:
 MH_VAR

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3268      .1068      .2275    23.0717     7.0000  1351.0000      .0000

Model
            coeff         se          t          p       LLCI       ULCI
constant    2.5061      .2399    10.4473      .0000     2.0355     2.9767
SLEtot      -.1619      .1430    -1.1326      .2576     -.4423      .1185
RelBel       .0171      .0882      .1939      .8463     -.1558      .1900
Int_1        .0069      .0569      .1212      .9035     -.1047      .1184
MP_VAR       .1827      .0730     2.5033      .0124      .0395      .3258
Int_2        .0223      .0458      .4865      .6267     -.0676      .1122
Int_3       -.0018      .0263     -.0679      .9459     -.0533      .0498
Int_4       -.0045      .0175     -.2542      .7994     -.0388      .0299


Product terms key:
 Int_1    :        SLEtot    x        RelBel
 Int_2    :        SLEtot    x        MP_VAR
 Int_3    :        RelBel    x        MP_VAR
 Int_4    :        SLEtot    x        RelBel    x        MP_VAR

Test(s) of highest order unconditional interaction(s):
        R2-chng          F        df1        df2          p
X*W*Z      .0000      .0646     1.0000  1351.0000      .7994

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

------ END MATRIX -----
```

APPENDIX C

MODERATION ANALYSES WITH RELIGIOUS ATTENDANCE VARIABLE

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.5 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

*************************************************************************
Model  : 3
    Y  : MH_VAR
    X  : SLEtot
    W  : RelAtte
    Z  : MP_VAR

Sample
Size: 1373

*************************************************************************
OUTCOME VARIABLE:
 MH_VAR

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3356      .1126      .2253    24.7416     7.0000  1365.0000      .0000

Model
            coeff         se          t          p       LLCI       ULCI
constant    2.5038      .1429    17.5180      .0000     2.2234     2.7841
SLEtot      -.1356      .0872    -1.5553      .1201     -.3067      .0354
RelAtte      .0096      .0365      .2644      .7915     -.0619      .0812
Int_1        .0018      .0255      .0706      .9437     -.0483      .0519
MP_VAR       .1873      .0438     4.2714      .0000      .1013      .2733
Int_2        .0032      .0276      .1168      .9071     -.0509      .0573
Int_3       -.0014      .0110     -.1240      .9013     -.0229      .0202
Int_4        .0008      .0078      .1064      .9153     -.0145      .0162

Product terms key:
 Int_1    :        SLEtot   x        RelAtte
 Int_2    :        SLEtot   x        MP_VAR
 Int_3    :        RelAtte  x        MP_VAR
 Int_4    :        SLEtot   x        RelAtte  x        MP_VAR

Test(s) of highest order unconditional interaction(s):
        R2-chng          F        df1        df2          p
X*W*Z      .0000      .0113     1.0000  1365.0000      .9153

********************* ANALYSIS NOTES AND ERRORS *********************

Level of confidence for all confidence intervals in output:
  95.0000

------ END MATRIX -----
```

APPENDIX D

SUPPLEMENTAL MODERATION ANALYSES WITH RELIGIOUS BELIEF VARIABLE

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.0 ****************

          Written by Andrew F. Hayes, Ph.D.        www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 3
     Y  : MHAvg
     X  : SLEMag
     W  : RelBel
     Z  : MP_VAR

Sample
Size:  1277


**************************************************************************
OUTCOME VARIABLE:
 MHAvg

Model Summary
           R        R-sq        MSE           F        df1        df2           p
       .3528       .1244       .2016     25.7652     7.0000  1269.0000       .0000

Model
            coeff         se          t          p       LLCI       ULCI
constant   2.5245      .2431    10.3863      .0000     2.0477     3.0014
SLEMag     -.0265      .0300     -.8854      .3761     -.0853      .0323
RelBel      .0329      .0876      .3759      .7071     -.1389      .2048
Int_1      -.0049      .0112     -.4430      .6578     -.0268      .0169
MP_VAR      .2040      .0730     2.7936      .0053      .0607      .3472
Int_2       .0059      .0091      .6520      .5145     -.0119      .0238
Int_3      -.0027      .0259     -.1031      .9179     -.0535      .0482
Int_4       .0008      .0033      .2475      .8045     -.0057      .0073


Product terms key:
 Int_1    :        SLEMag    x        RelBel
 Int_2    :        SLEMag    x        MP_VAR
 Int_3    :        RelBel    x        MP_VAR
 Int_4    :        SLEMag    x        RelBel    x        MP_VAR

Test(s) of highest order unconditional interaction(s):
        R2-chng          F        df1        df2          p
X*W*Z      .0000      .0613     1.0000  1269.0000      .8045

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

------ END MATRIX -----
```

APPENDIX E

SUPPLEMENTAL MODERATION ANALYSES WITH RELIGIOUS ATTENDANCE VARIABLE

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.0 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

*************************************************************************
Model  : 3
    Y  : MHAvg
    X  : SLEMag
    W  : RelAtte
    Z  : MP_VAR

Sample
Size: 1279


*************************************************************************
OUTCOME VARIABLE:
 MHAvg

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3584      .1285      .2015    26.7629     7.0000  1271.0000      .0000

Model
            coeff         se          t          p       LLCI       ULCI
constant    2.6185      .1512    17.3216      .0000     2.3219     2.9150
SLEMag      -.0415      .0173    -2.4015      .0165     -.0755     -.0076
RelAtte     -.0015      .0369     -.0395      .9685     -.0739      .0710
Int_1        .0011      .0047      .2274      .8201     -.0081      .0102
MP_VAR       .1794      .0458     3.9163      .0001      .0895      .2692
Int_2        .0094      .0052     1.7882      .0740     -.0009      .0196
Int_3        .0051      .0110      .4655      .6417     -.0165      .0268
Int_4       -.0005      .0014     -.3908      .6960     -.0033      .0022


Product terms key:
 Int_1    :        SLEMag    x        RelAtte
 Int_2    :        SLEMag    x        MP_VAR
 Int_3    :        RelAtte   x        MP_VAR
 Int_4    :        SLEMag    x        RelAtte    x        MP_VAR

Test(s) of highest order unconditional interaction(s):
        R2-chng          F        df1        df2          p
X*W*Z      .0001      .1527     1.0000  1271.0000      .6960

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

------ END MATRIX -----
```