

**Mindfulness and Faith Development in the Relationship
Between Religious Doubt and Mental Health**


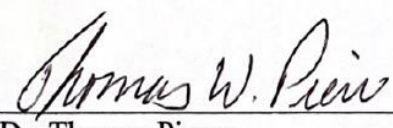
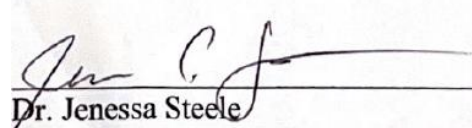
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Abstract

Doubt is believed to be a common experience for religious individuals and has been associated with negative mental health outcomes (Dein, 2013). However, previously published research has revealed that this relationship between religious doubt and mental health tends to be weaker in older individuals (Galek et al., 2007; Krause et al., 1999). The aim of this study was to identify covariates of this age effect. Measures of age, religious doubt, spiritual support, mindfulness (MAAS and LMS), faith development (FDS), and mental health (DASS-21) were utilized. Structural equations modeling revealed a significant inverse relationship between religious doubt and mental health, along with an influence of age in this relationship. Western mindfulness, measured with the LMS, did not act as a mediator or moderator in the relationship between religious doubt and mental health. However, Eastern mindfulness, measured with MAAS, acted as a mediator. Both factors extracted from the FDS moderated the relationship between religious doubt and mental health. The primary covariates of the age effect were Eastern mindfulness and faith development.

Mindfulness and Faith Development in the Relationship Between Religious Doubt and Mental Health

Introduction

Religious doubt is questioning the beliefs of one's religion (Hunsberger et al., 1993). Some individuals would argue that religious doubt can be a sign of spiritual maturity or may lead to spiritual growth (Dein, 2013; Krause & Ellison, 2009), which distinguishes religious doubt from the construct of unbelief. Despite these proposed positive relations, religious doubts are typically related to negative life events, and thus the doubting process is often reported as an unpleasant experience. Additionally, religious doubt has been associated with many negative conditions: depressive symptoms, poorer ratings of life satisfaction, lower self-esteem, among other states (Dein, 2013; Krause, 2006). Furthermore, coping with religious doubt through its suppression is related to lower ratings of physical health (Krause & Ellison, 2009). However, the association between religious doubt and negative mental health outcomes appears to be weaker in older adults (Galek et al., 2007; Krause et al., 1999).

Galek et al. (2007) proposed that this difference may be due to developing more mature concepts surrounding faith as people age. Therefore, older individuals are better able to reconcile their doubts with less distress. Krause et al. (1999) offered wisdom as a reason for these differences, writing that older individuals, being wiser, may cope with their religious doubt more effectively than their younger counterparts. Another way in which older individuals may have an advantage when dealing with religious doubt is through mindfulness, which appears to be stronger as people age (Mahlo & Windsor, 2020). For each of these explanations, there is a common thread: older individuals seem to be better equipped than younger individuals in the reconciliation of religious doubts. The main purpose of the current study is to further elucidate

what this “equipment” is. It is proposed that mindfulness, spiritual support, and faith maturation, either individually or in some combination, contribute to older individuals’ ability to alleviate the negative effects often associated with religious doubt.

Spiritual Support

Few studies have been conducted to investigate directly how church relationships may alleviate some of the negative effects of religious doubt on mental health. However, results generally include a relationship between support from coreligionists and well-being. For example, church relationships appear to have some connection with depression. What is more, this relationship is stronger among older individuals than younger adults, with younger individuals’ church friendships not being as strongly related to their well-being (Krause & Wulff, 2005). Another example of church relationships’ correlation with well-being can be found in Krause and Ellison’s (2009) longitudinal study, in which the researchers sought to more clearly define the relationship between religious doubt and physical health, as well as spiritual support’s role in that relationship. They assessed religious individuals’ doubt by simply asking them the contents of their religious doubts and how often they were experienced. Participants were also asked to rate how much they suppressed those doubts, how much spiritual support—both formal and informal—they received from others, and their physical health. Spiritual support was defined by Krause and Ellison (2009) as any activity or meeting that is done for the purpose of strengthening one’s faith, with formal spiritual support being described as planned meetings for this purpose (such as a prayer group) and informal spiritual support being described as unplanned conversation concerning faith-related topics (such as meeting with another church member individually). Participants were asked to complete these ratings at three different times, each 3 years apart.

Using ordinary least squares regression, Krause and Ellison (2009) found significant relationships between 1) church-based relationships and religious doubt, 2) church-based relationships and doubt suppression, and 3) doubt-suppression and ratings of health. Attendance at prayer groups was related to less religious doubt over time. Individuals who experienced negative interactions with other church members also tended to cope with their religious doubt through suppression. Lastly, those who suppressed their doubts rated their health more poorly than those who did not suppress their doubts (Krause & Ellison, 2009).

Although the study by Krause and Ellison (2009) did not investigate the effects of doubt on mental health specifically, the findings do demonstrate that church relationships correlate with how individuals cope in the face of religious doubt and how those coping mechanisms may affect one's well-being. Taking both studies (Krause & Ellison, 2009; Krause & Wulff, 2005) into account, it is logical to think that spiritual support could play a part in the relationship between religious doubt and psychological well-being.

Mindfulness

Few, if any, studies have addressed a possible relationship between mindfulness and religious doubt. However, the nature of mindfulness makes it plausible as a protective factor against the deleterious outcomes related to religious doubt. As a construct, mindfulness can be defined as “the state of being attentive to and aware of what is taking place in the present” (Brown & Ryan, 2003, p. 822). Such a definition is more contemplative and follows a more traditional, Eastern understanding of mindfulness. However, others have conceptualized mindfulness as a socio-cognitive construct related to creativity or an ability to consider situations from different perspectives (Langer, 1989; Pirson et al., 2018). This definition is oriented towards taking the context of a situation into account when making decisions and considering

different perspectives. Langer (1989) distinguished this description of mindfulness—Western mindfulness—from the other description of mindfulness—Eastern mindfulness. Both Eastern and Western mindfulness have well-established definitions, and some findings even seem to support the idea of two separate “types” of mindfulness. For example, participants, after receiving mindfulness training oriented towards either Eastern or Western mindfulness, seem to react differently to posttests meant to assess the respective, opposite type of mindfulness (Doughtie, 2022).

Both conceptualizations of mindfulness have been related to positive mental, as well as physical, health outcomes. Brown and Ryan’s (2003) study established Eastern mindfulness as a construct that significantly influences overall well-being. Langer (1989) additionally demonstrated that a lack of Western mindfulness may be detrimental to both one’s mental and physical health. Furthermore, Eastern mindfulness has also been associated with both intellectual humility and faith development (Wrench et al., 2019), hinting that the psychological construct of mindfulness and religion are closely intertwined. In their study, Wrench et al. (2019) described faith development as a process of coming to maturity in one’s faith through questioning and scrutiny. Mindfulness’ association with this construct supports the idea that it may in some way be related to the doubting process, which is considered a sign of a deeper faith in some literature (Dein, 2013; Krause & Ellison, 2009).

Finally, mindfulness, like religious doubt, has some associations with age. Just as religious doubt seems to yield fewer negative effects for older individuals (Galek et al., 2007; Krause et al., 1999), findings suggest that Eastern mindfulness yields more positive effects for older individuals (Mahlo & Windsor, 2020). What is more, older individuals seem to be more mindful overall (Mahlo & Windsor, 2020). These positive relationships with age and faith

development suggest that mindfulness may play a role in alleviating some of religious doubt's negative associations.

Faith Development

Galek et al. (2007) suggested that older individuals' spiritual maturity likely accounts for the fewer negative effects they experience in relation to their religious doubts. The authors stated that because older individuals have a more nuanced view of their faith, many doubts no longer cause distress as they would for younger individuals. Furthermore, older individuals are able to utilize this nuanced faith to reconcile doubts that do produce distress. This idea is reflective of the construct of faith development, which is described by Harris and Leak (2013) as a process of questioning through which one comes to a stronger faith. In Wrench et al.'s (2019) study, the authors found that the non-judging of inner experience is related to greater faith development. With faith development's proposed relation to the effects of religious doubt and its established relation to mindfulness, it is possible that faith development is a part of this interplay between religious doubt and its associated negative effects.

Hypotheses

Krause et al. (1999) and Galek et al. (2007) both demonstrated that the relationship between religious doubt and deleterious mental health outcomes becomes weaker with age. Furthermore, Krause and Ellison (2009) and Krause and Wulff (2005) both showed that church relationships deliver positive effects for religious individuals. Mindfulness, in both its socio-cognitive or Western (Langer, 1989; Pirson et al., 2018) and traditional or Eastern (Brown & Ryan, 2003) conceptualizations, seems to answer some of the suggestions made by previous researchers concerning the differences seen in the effects of religious doubt across the lifespan. Increasing and yielding more positive results with age (Mahlo & Windsor, 2020), mindfulness

plays a significant role in well-being (Brown & Ryan, 2003) and has been related to faith development (Wrench et al., 2019). With the established connections in mind, the following hypotheses are proposed:

H1: As age increases, the relationship between religious doubt and poorer mental health will weaken.

H2: Older individuals will benefit more from church relationships than younger individuals.

H3: Spiritual support will moderate the relationship between religious doubt and mental health.

H4: Older individuals will exhibit more mindfulness, both Eastern and Western, than younger individuals.

H5: Both Eastern and Western mindfulness will moderate the relationship between religious doubt and well-being.

H6: Mindfulness will be positively related to faith development.

H7: Faith development will moderate the relationship between religious doubt and well-being.

Method

Participants

Four hundred ten participants were recruited through Prolific, where they were screened for Christianity, being 18 years of age or older, and being from the United States. Anyone who identified as Christian and met the other criteria could participate, regardless of Christian denomination. This was done to replicate previously published studies, the majority of which were conducted with Christians. Individuals who choose to participate were compensated at a rate of \$11.00 per hour for their time completing surveys.

Measures

Each of the following were compiled into one, conglomerate survey, which was then administered using the survey tool, Qualtrics. The link to the survey was connected to the Prolific advertisement.

Demographic Information. Participants were requested to provide their age, race, gender, and denomination within Christianity. Participants were also asked to report at which age they decided to become a Christian. Lastly, participants were asked how often they had attended church services in the previous month.

Religious Doubt. Following Krause and Ellison (2009), participants in this study were asked to rate the following statements concerning their religious doubts:

How often do you have doubts about your religious or spiritual beliefs?

How often do you have doubts about the things you've been taught in church?

How often do you doubt whether your prayers make a difference in your life?

How often do you doubt that God is directly involved in your life?

Each of the questions were rated on a scale of 1 (never) to 4 (very often). In Krause and Ellison's (2009) work, these questions had a Cronbach's alpha of .78.

Spiritual Support. Continuing to follow the work of Krause and Ellison (2009), participants were asked the following questions to assess how often they receive spiritual support:

How often do you attend adult Sunday School or Bible study groups?

How often do you participate in prayer groups that are not part of your regular worship services or Bible study groups?

For each of these questions, participants were asked to give a rating on a scale of 1 (never) to 9 (several times a week).

Additionally, for each of these questions, participants were asked to rate the quality of the support they receive on a scale of 1 to 5, with 1 being “very poor” and 5 being “very good.”

Mindfulness. Two different mindfulness scales were used in this study. The first was the Langer Mindfulness Scale (LMS; Pirson et al., 2018; see Appendix A for items), which assesses the socio-cognitive or Western understanding of mindfulness. This 21-item scale is more focused on the creative aspects of mindfulness. People with higher scores are more likely to think deeply about situations and topics and consider them from other perspectives. The LMS is a reliable scale, consistently yielding a Cronbach’s alpha somewhere between .83 and .9.

The Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003; see Appendix B for items) was also used in this study. The MAAS is the most widely used scale in mindfulness research, which is one of the reasons it was utilized in the current study. This 15-item scale measures the more contemplative or Eastern side of mindfulness, compared to the LMS. With student samples, the MAAS has had a Cronbach’s alpha of .82 and with more general samples an alpha of .87 (Brown & Ryan, 2003).

Faith Development. Following the work by Wrench et al. (2019), who found connections between mindfulness and faith development, the Revised Faith Development Scale (FDS; Harris & Leak, 2013) was used to assess faith development. This 16-item scale (see Appendix C for items) assesses postconventional religious reasoning, which is “the ability to critically evaluate religious ideas rather than depend primarily on outside authorities” (Harris & Leak, 2013, p. 1). It is typically viewed as one of the main indications of faith development. The FDS asks test-takers to rate statements on a scale of 1 (very unlike me) to 4 (very like me). The scale has a Cronbach’s alpha of .78 (Harris & Leak, 2013).

Mental Well-Being. We utilized the shortened version of the Depression Anxiety Stress Scale (DASS) for nonclinical populations (see Appendix D for items). This 21-item measure was developed by Henry and Crawford (2005) and assesses levels of depression and anxiety by asking test-takers to rate how much each item in the test applied to them in the last week on a scale of 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The DASS is a reliable measure, with a Cronbach's alpha of .88 on the depression sub-scale, .82 on the anxiety sub-scale, .9 for the stress sub-scale, and .93 for the whole scale.

Procedure

This study was approved by Radford University's Institutional Review Board, with the approval number 2021-376. Because one of the aims of the current study is confirmation of results from previously published research with Christian groups (Galek et al., 2007; Krause & Ellison, 2009; Krause et al., 1999), we screened for Christianity using Prolific. Participants accessed a link to the Qualtrics survey through the Prolific advertisement for the study.

After participants accessed the link, they were presented with a cover letter for the study. Continuation past the cover letter indicated consent to taking part in the study. Individuals who chose to participate then took the compiled survey of the demographic questions, questions from Krause and Ellison (2009), the statements assessing quality of spiritual support, the LMS (Pirson et al., 2018), the MAAS (Brown & Ryan, 2003), the FDS (Harris & Leak, 2013), and the DASS-21 (Henry & Crawford, 2005). All of the scales, excluding the demographic questions, were randomized to ensure counter-balancing. Upon completion of the survey, participants were compensated for their time at \$11.00 per hour.

Results

Demographics

This sample consisted of 145 male, 258 female, and 4 non-binary participants, with ages ranging 18-76 ($M = 40.91$, $SD = 14.92$, $Mdn = 37.5$, skewness = 0.42). Our sample was 1.5% (6) American Indian or Alaska Native, 4.1% (17) Asian, 11% (45) Black or African American, .5% (2) Native Hawaiian or Pacific Islander, 82.2% (337) White, and .7% (3) chose not to respond. Additionally, 29 participants (7.1%) identified as being of Latino/Hispanic origin. For the purpose of further analyses, race and ethnicity were dichotomized by non-Hispanic, White participants and participants who identified as being in a minority group. The most represented Christian denominations in the sample were Baptist (61, 14.9%), Catholic (106, 25.9%), and Nondenominational (78, 19%). There were three participants (0.7%) who did not report a denomination, and 23 participants selected “Other” (5.6%).

Independent samples t -tests were conducted to test group differences based on gender, race, and ethnicity. Females yielded significantly higher means on the DASS anxiety and stress subscales, compared to males (see Tables 1 and 2). No other group differences were found for gender (see Tables 3 and 4; listed in Tables and Figures). Additionally, no group differences were found for race or ethnicity (see Tables 5-8; listed in Tables and Figures). Means and standard deviations can be found in Table 9 featured below.

Table 1

T-test Results Comparing Males and Females on DASS Anxiety Subscale

Gender	n	Mean	SD	t	df	p
Male	145	11.76	3.66	-3.52	339.69	< .001
Female	258	13.18	4.3			

Table 2*T-test Results Comparing Males and Females on DASS Stress Subscale*

Gender	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Male	145	14.17	4.68	-2.501	328.98	.01
Female	258	15.45	5.28			

Table 9*Means and Standard Deviations for Gender and Race/Ethnicity on DASS and Religious Doubt*

Demographic Group	Depression M (SD)	Anxiety M (SD)	Stress M (SD)	Religious Doubt M (SD)
Male	13.51 (5.31)	11.76 (3.66)	14.17 (4.68)	2.03 (0.84)
Female	14.45 (5.88)	13.18 (4.3)	15.45 (5.28)	1.09 (0.78)
Non-Hispanic Whites	13.91 (5.6)	12.56 (4.12)	14.97 (5.2)	2.03 (0.82)
Minority	15.04 (6.01)	13.29 (4.35)	15.38 (4.87)	1.98 (0.78)

Lastly, a one-way ANOVA was conducted to test group differences between denominations, based on level of tradition in each denomination. The first level of tradition was determined by the presence of a unitary leader; examples of denominations in this category include Anglicans, Catholics, and Mormons. The second level was any defined denomination

that does not have a specific leader; examples of denominations in this category are Baptists, Methodists, and Presbyterians. The final level consisted of individuals in our sample who identified as nondenominational. No significant differences were found between any of these groups on any subscale of the DASS-21 or on religious doubt (see Tables 10-13; listed in Tables and Figures). Means and standard deviations for each level of tradition are listed below in Table 14.

Table 14

Means and Standard Deviations on DASS Depression, Anxiety, and Stress and Religious Doubt for Each Level of Tradition

Level of Tradition	DASS Depression M (SD)	DASS Anxiety M (SD)	DASS Stress M (SD)	Religious Doubt M (SD)
Unitary Leader	14.02 (5.7)	12.64 (4.06)	14.99 (5.33)	2.09 (0.82)
No Unitary Leader	14.39 (5.78)	12.77 (4.2)	15.09 (5.12)	2.05 (0.83)
Nondenominational	13.72 (5.76)	12.55 (4.24)	14.81 (4.67)	1.88 (0.74)

Correlations

Mindfulness and Age. We hypothesized that mindfulness and age would be related, so that as age increases, so too does mindfulness. A Pearson's correlation revealed that scores on the MAAS were significantly and positively correlated with age, $r(404) = .269, p < .001$.

However, there were no significant correlations found between age and LMS novelty-seeking, $r(404) = -.02, p = .72$, novelty-producing, $r(404) = .08, p = .11$, or engagement, $r(404) = .04, p = .45$.

Mindfulness and Faith Development. Additionally, we hypothesized that faith development and mindfulness would be positively related. We found that faith development was positively correlated with each subscale of the Langer Mindfulness Scale: novelty-seeking, $r(408) = .20, p < .001$, novelty-producing, $r(408) = .15, p = .002$, and engagement, $r(408) = .11, p = .03$. However, MAAS is negatively correlated with faith development, $r(408) = -.215, p < .001$.

Factor Analyses

Initial exploratory factor analyses were conducted using principle axis factoring through SPSS. The results of these analyses were then used as guides for confirmatory factor analyses, conducted using IBM's SPSS Amos.

Depression Anxiety Stress Scale-21. Following the original design of the DASS-21, we fashioned the items in the scale into a three-factor solution in Amos (see Appendix D). Depression, anxiety, and stress-related items were each put into their own subscales. This demonstrated that a three-factor solution for the DASS-21 accounted for 65.8% of the variance.

Mindfulness Attention Awareness Scale. Brown and Ryan (2003) designed the MAAS as a unidimensional scale (see Appendix B). A confirmatory factor analysis revealed that this proposed model is sufficient, with the one factor accounting for 47.26% of the variance.

Langer Mindfulness Scale. Pirson et al. (2018) proposed a three-factor model for the LMS, removing seven items from the original 21-item scale (see Appendix A). Following Pirson et al.'s (2018) model, we split the remaining items into three scales: engagement, novelty-

seeking, and novelty-producing. A confirmatory factor analysis revealed that this was a good structure for the remaining 14 items in the scale. The three-factor solution accounted for 61.83% of the variance.

Faith Development Scale. Exploratory factor analysis revealed a three-factor solution for the Faith Development Scale. However, when using this solution for confirmatory factor analysis, the model would not converge. A closer look at the exploratory factor analysis showed that item 4 (“My religious orientation comes primarily from my own efforts to analyze and understand God.”) was split across multiple factors. The third factor in the original solution consisted solely of items 4 and 8. Moving these items to other factors still produced a model that did not fit. Item 4 was then removed from the analysis, which then produced a two-factor solution that fit well (see Appendix C). This two-factor solution accounted for 54.68% of the variance.

Model

Religious Doubt and Mental Health. Structural equations modeling revealed a positive, significant relationship between religious doubt and stress, anxiety, and depression. The original model, including only religious doubt and all three subscales from the DASS-21, had a root mean square error of approximation (RMSEA) of .12. The direct effect of religious doubt on each measure of mental health can be seen in Table 15 below.

Table 15

Model 1 Including Religious Doubt and Mental Health

	Stress β (p)	Anxiety β (p)	Depression β (p)
Religious Doubt	.403 (< .001)	.308 (< .001)	.483 (< .001)

Age. Adding age to Model 1 produced a small reduction in the direct effect of religious doubt on stress, anxiety, and depression. Age had significant direct effects on stress and anxiety and a marginally significant direct effect on depression. Age did not show promise as either a mediator or moderator in the relationship between religious doubt and mental health. This version of the model, including age, religious doubt, and mental health, had an RMSEA of .101. A summary of this model can be seen in Table 16.

Table 16

Model 2 Including Religious Doubt, Mental Health, and Age

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		.385 (< .001)	.292 (< .001)	.474 (< .001)
Doubt-Age Mediator	-0.075 (.15)	.013 (.15)	.013 (.15)	.007 (.15)
Doubt-Age Moderator	-0.013 (.8)	0.001 (.8)	0.001 (.8)	.000 (.925)
Direct Effect of Age		-0.174 (< .001)	-0.173 (< .001)	-0.087 (.057)

Spiritual Support. We calculated a spiritual support variable that included spiritual support quality by multiplying each spiritual support questions' results by the results of the quality check for that question. Then we added those two products together, yielding a spiritual support variable that included both quality and quantity. Addition of this spiritual support variable into the model failed to lower the direct effect of religious doubt on stress, anxiety, and depression. Age continued to have significant direct effects on stress and anxiety and a marginally significant effect on depression, though each of these effects were smaller than they were before the inclusion of spiritual support. As a moderating or mediating variable, spiritual support showed little to no promise, and each of spiritual support's direct effects on mental

health were non-significant. This model, of which a summary can be seen in Table 17, had an RMSEA of .095.

Table 17

Model 3 Including Religious Doubt, Mental Health, Age, and Spiritual Support

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.4 (< .001)	0.34 (< .001)	0.5 (< .001)
Doubt-Age Mediator	-0.07 (.21)	0.01 (.21)	0.01 (.21)	0.01
Doubt-Age Moderator	-0.004 (.93)	.000 (.93)	.000 (.93)	.000 (.96)
Direct Effect of Age		-0.132 (< .001)	-0.092 (.001)	-0.063 (.06)
Doubt-Spiritual Support Mediator	-0.351 (< .001)	-.003 (.9)	-0.03 (.14)	-0.01 (.3)
Doubt-Spiritual Support Moderator	-0.343 (< .001)	0.01 (.51)	0.03 (.14)	0.02 (.29)
Direct Effect of Spiritual Support		0.01 (.9)	0.08 (.21)	0.03 (.64)

Eastern Mindfulness. Including the MAAS as a measure of Eastern mindfulness significantly lowered the direct effect of religious doubt on stress, anxiety, and depression. Eastern mindfulness partially mediated the relationship between religious doubt and stress, anxiety, and depression. There were significant direct effects of Eastern mindfulness on stress, anxiety, and depression. Age no longer had significant direct effects on stress, anxiety, and depression. Spiritual support did not act as a mediator or moderator, and it did not have significant effects on any measure of mental health (see Table 18 below). This model, including religious doubt, age, spiritual support, and Eastern mindfulness, had an RMSEA of .07.

Table 18*Model 4 Including Religious Doubt, Mental Health, Age, Spiritual Support, and Eastern**Mindfulness (MAAS)*

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.16 (.003)	0.14 (.02)	0.31 (< .001)
Doubt-Age Mediator	-0.081 (.12)	0.003 (.44)	.005 (.21)	-0.002 (.59)
Doubt-Age Moderator	-0.01 (.83)	-0.001 (.83)	.000 (.88)	-0.001 (.83)
Direct Effect of Age		-0.03 (.44)	-0.06 (.21)	0.02 (.59)
Doubt-Spiritual Support Mediator	-0.346 (< .001)	-0.01 (.55)	-0.02 (.44)	.000 (.98)
Doubt-Spiritual Support Moderator	-0.34 (< .001)	0.003 (.57)	0.023 (.15)	0.029 (.29)
Direct Effect of Spiritual Support		-0.03 (.55)	0.046 (.44)	-0.001 (.98)
Doubt-MAAS Mediator	-0.34 (< .001)	0.2 (< .001)	0.15 (< .001)	0.14 (< .001)
Doubt-MAAS Moderator	-0.09 (.12)	0.001 (.8)	-0.006 (.16)	-0.007 (.04)
Direct Effect of MAAS		-0.59 (< .001)	-0.433 (< .001)	-0.42 (< .001)

Western Mindfulness. Inclusion of each of the Langer Mindfulness Scale's subscales lowered the direct effects of religious doubt on stress, anxiety, and depression. Novelty producing had significant direct effects on stress and depression, but not on anxiety. At this point, novelty producing showed possible promise as a mediator in the relationship between religious doubt and stress and depression, though these effects were only marginally significant.

Novelty producing did not show any promise as a moderator. Engagement had significant direct effects on stress, anxiety, and depression, though it did not act as a mediator or moderator.

Novelty seeking did not act significantly as a mediator or moderator, and it had no significant direct effects on any of the mental health measures.

In this model, age still had no significant effects, either directly, as a mediator, or as a moderator. Spiritual support also had no significant effects. Eastern mindfulness continued to act as a mediator in the relationship between religious doubt and stress, anxiety, and depression. It also had significant direct effects on all three factors of the DASS-21. This model (see Table 19 below) had an RMSEA of .07.

Table 19

Model 5 Including Religious Doubt, Mental Health, Age, Spiritual Support, Eastern Mindfulness (MAAS), and Western Mindfulness (LMS)

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.13 (.01)	0.12 (.04)	0.28 (< .001)
Doubt-Age Mediator	-0.08 (.12)	0.003 (.46)	0.004 (.24)	-0.002 (.44)
Doubt-Age Moderator	-.01 (.79)	.000 (.79)	.000 (.83)	-0.001 (.79)
Direct Effect of Age		-0.03 (.46)	-0.05 (.24)	0.03 (.44)
Doubt-Spiritual Support Mediator	-0.35 (< .001)	0.01 (.46)	-0.02 (.44)	0.002 (.9)
Doubt-Spiritual Support Moderator	-0.34 (< .001)	-0.01 (.62)	-0.03 (.08)	-0.02 (.24)

Direct Effect of Spiritual Support		-0.04 (.46)	0.04 (.44)	-0.01 (.9)
Doubt-MAAS Mediator	-0.34 (< .001)	0.21 (< .001)	0.16 (< .001)	0.14 (< .001)
Doubt-MAAS Moderator	-0.09 (.11)	0.001 (.85)	0.01 (.09)	0.01 (.03)
Direct Effect of MAAS		-0.61 (< .001)	-0.46 (< .001)	-0.422 (< .001)
Doubt-LMS Novelty Producing Mediator	-0.11 (.06)	0.01 (.06)	0.01 (.13)	0.02 (.06)
Doubt-LMS Novelty Producing Moderator	-0.08 (.15)	0.001 (.65)	-0.003 (.43)	0.01 (.15)
Direct Effect of LMS Novelty Producing		-0.12 (.01)	-0.08 (.13)	-0.21 (< .001)
Doubt-LMS Engagement Mediator	-0.03 (.62)	-0.01 (.62)	-0.01 (.62)	-0.01 (.62)
Doubt-LMS Engagement Moderator	-0.05 (.36)	0.002 (.36)	0.001 (.76)	-0.002 (.36)
Direct Effect of LMS Engagement		0.17 (< .001)	0.18 (.001)	0.16 (.001)
Doubt-LMS Novelty Seeking Mediator	0.01 (.81)	.000 (.81)	.000 (.81)	.000 (.81)
Doubt-LMS Novelty Seeking Moderator	0.02 (.71)	.000 (.97)	-0.002 (.71)	-0.001 (.71)
Direct Effect of Novelty Seeking		0.01 (.81)	0.02 (.76)	-0.02 (.59)

Faith Development. Upon adding faith development to the model (see Table 21), we found suppressor effects. Due to its previous issues in the factor analysis, item 4 in the Faith Development Scale was thought to possibly be the variable causing these effects. A closer look at standardized direct effects revealed that item 4 as a moderating variable seemed to have little influence on stress, anxiety, and depression; item 4's direct and mediating influence on mental health were larger in comparison to its moderating effects. Therefore, we suspected that item 4 as a moderator was the suppressor variable. Removing this variable did mostly eliminate the suppressor effect. However, the direct effects of religious doubt on stress, anxiety, and depression did still increase.

The traditions factor of the FDS had significant direct effects on anxiety and depression. It also had significant moderator effects on stress, anxiety, and depression. As a mediator, this factor had significant effects on anxiety and depression. To gain more clarity on the relationship between the traditions factor and mental health, we looked at the Betas at each quartile of the traditions factor. This revealed that being in the highest and lowest quartiles of the traditions factor had positive relationships with anxiety, depression, and stress, while being in the middle two quartiles had negative (though generally non-significant relationships) with each factor of the DASS-21 (see Table 20). The learning factor of the FDS had significant moderator effects on stress, anxiety, and depression. Because of this, we also looked at the Betas at each quartile for the learning factor of the FDS. This revealed a general trend of individuals in higher quartiles in learning exhibiting poorer mental health, though for each DASS-21 factor, there was a slight dip in quartile 3 (see Table 20). Lastly, item 4 had significant direct effects on stress and anxiety and a marginally significant effect on depression. As a mediator, item 4 had significant effects on stress and anxiety and a marginally significant effect on depression.

Table 20*Betas at Each Quartile of FDS Factors*

	Tradition Quartile				Learning Quartile			
	1 β (p)	2 β (p)	3 β (p)	4 β (p)	1 β (p)	2 β (p)	3 β (p)	4 β (p)
Stress	0.26 (.01)	-0.2 (.04)	-0.02 (.83)	0.76 (< .001)	0.02 (.81)	0.3 (.004)	0.26 (.008)	0.59 (< .001)
Anxiety	0.23 (.02)	-0.16 (.12)	-0.12 (.22)	0.88 (< .001)	0.08 (.41)	0.34 (.001)	0.26 (.008)	0.6 (< .001)
Depression	0.17 (.1)	-0.22 (.03)	-0.07 (.51)	0.8 (< .001)	-0.001 (.99)	0.36 (< .001)	0.35 (< .001)	0.51 (< .001)

Spiritual support continued to yield no direct, mediator, or moderator effects. MAAS continued to act as a mediator in the relationships between doubt and stress, anxiety, and depression, and had significant direct effects on stress, anxiety, and depression. As a moderator, MAAS had a marginally significant effect on stress. Novelty producing only had a significant direct effect on depression. Engagement had significant direct effects on stress, anxiety, and depression. Novelty seeking only had a significant direct effect on depression. This final model, including all of the variables, had an RMSEA of .07.

Table 21

Model 6 Including Religious Doubt, Mental Health, Age, Spiritual Support, Eastern Mindfulness (MAAS), Western Mindfulness (LMS), and Faith Development

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.32 (< .001)	0.4 (< .001)	0.54 (< .001)
Doubt-Age Mediator	-0.08 (.11)	0.003 (.38)	0.004 (.2)	-0.002 (.4)
Doubt-Age Moderator	-0.01 (.86)	.000 (.86)	0.001 (.86)	.000 (.86)

Direct Effect of Age		-0.03 (.38)	-0.05 (.2)	0.03 (.4)
Doubt-Spiritual Support Mediator	-0.4 (< .001)	0.01 (.46)	-0.01 (.7)	0.01 (.75)
Doubt-Spiritual Support Moderator	-0.39 (< .001)	0.01 (.71)	-0.01 (.17)	0.01 (.4)
Direct Effect of Spiritual Support		-0.04 (.46)	0.02 (.7)	-0.02 (.75)
Doubt-MAAS Mediator	-0.36 (< .001)	0.21 (< .001)	0.15 (< .001)	0.14 (< .001)
Doubt-MAAS Moderator	-0.1 (.07)	0.06 (.069)	0.04 (.38)	0.04 (.53)
Direct Effect of MAAS		-0.57 (< .001)	-0.41 (< .001)	-0.38 (< .001)
Doubt-LMS Novelty Producing Mediator	-0.09 (.13)	0.004 (.2)	.000 (.96)	0.01 (.13)
Doubt-LMS Novelty Producing Moderator	-0.1 (.07)	0.01 (.62)	.000 (.07)	0.01 (.4)
Direct Effect of LMS Novelty Producing		-0.05 (.2)	0.002 (.96)	-0.14 (.002)
Doubt-LMS Engagement Mediator	-0.02 (.74)	-0.003 (.74)	-0.004 (.74)	-0.003 (.74)
Doubt-LMS Engagement Moderator	-0.06 (.29)	-0.01 (.45)	-0.01 (.72)	-0.01 (.29)
Direct Effect of LMS Engagement		0.17 (< .001)	0.19 (.001)	0.17 (.001)
Doubt-LMS Novelty Seeking Mediator	0.01 (.37)	.000 (.37)	.000 (.37)	.000 (.37)

Doubt-LMS Novelty Seeking Moderator	0.02 (.92)	.000 (.92)	-0.002 (.92)	-0.001 (.92)
Direct Effect of LMS Novelty Seeking		0.01 (.11)	0.02 (.13)	-0.02 (.02)
Doubt-FDS Traditions Mediator	0.71 (< .001)	-0.06 (.17)	-0.13 (.01)	-0.16 (< .001)
Doubt-FDS Traditions Moderator	0.54 (< .001)	-0.05 (< .001)	-0.1 (< .001)	-0.12 (< .001)
Direct Effect of FDS Traditions		-0.09 (.17)	-0.18 (.01)	-0.22 (< .001)
Doubt-FDS Learning Mediator	0.5 (< .001)	0.002 (.92)	0.01 (.81)	0.02 (.42)
Doubt-FDS Learning Moderator	0.26 (< .001)	0.001 (< .001)	0.003 (< .001)	0.01 (< .001)
Direct Effect of FDS Learning		0.01 (.92)	0.01 (.81)	0.04 (.42)
Doubt-FDS Item 4 Mediator	-0.25 (< .001)	-0.03 (.01)	-0.04 (.002)	-0.02 (.07)
Direct Effect of FDS Item 4		0.11 (.01)	0.14 (.002)	0.07 (.07)

Discussion

In this study, we attempted to more deeply understand the relationship between religious doubt and mental health by essentially eliminating age's contribution to mental health's variability through the addition of other possibly related variables. The variables we included were spiritual support, Eastern and Western mindfulness, and faith development. While these

analyses were ultimately of an exploratory nature, we did have hypotheses listed that require addressing.

Hypothesis 1

Our first hypothesis was that as age increases, the relationship between religious doubt and mental health will decrease. While age did have significant, negative direct effects on stress and anxiety, it neither acted as a mediator nor moderator in the relationship between religious doubt and mental health. Therefore, this first hypothesis was not supported.

Hypotheses 2 and 3

The second hypothesis in the current study was that older adults would benefit more from church relationships, compared to younger adults. The third hypothesis was that spiritual support would act as a moderator in the relationship between religious doubt and mental health. Spiritual support showed little to no promise as a mediator or moderator and had no significant direct effects on any of the mental health subscales. These findings, therefore, do not support these hypotheses, as spiritual support did not yield any effect.

Hypothesis 4

We hypothesized that as age increases, mindfulness will also increase. We found that scores on the MAAS and age were correlated, while scores on the LMS and age were not correlated. Therefore, our hypothesis was partially supported by these findings.

Hypothesis 5

The fifth hypothesis in this study stated that mindfulness would moderate the relationship between religious doubt and mental health. The LMS did not act as a mediator or moderator in this relationship. MAAS did not act as a moderator. These findings do not support our hypothesis.

Hypothesis 6

Our sixth hypothesis was that mindfulness and faith development would be positively related with one another. Our findings partially supported this hypothesis, as Western mindfulness was positively correlated with faith development, but Eastern mindfulness was actually negatively correlated with faith development.

Hypothesis 7

We hypothesized that faith development would moderate the relationship between religious doubt and mental health. We found that both the learning and traditional aspects of faith development acted as moderators in the relationship between religious doubt and mental health. Individuals higher in the learning factor seemed to have worse mental health in the presence of religious doubt. For the traditions factor, individuals in the upper and lower quartiles tended to have worse mental health in the presence of religious doubt, while individuals in the middle quartiles did not show the same decreases in mental health.

The “Toolbox”

While age did not moderate the relationship between religious doubt and mental health, it did have significant direct effects on each subscale of mental health before the addition of other variables. Therefore, the addition of these other variables did reveal some of the “tools” older adults may have in their “toolboxes.” The findings in the present study do not support the idea that spiritual support is one of the things older adults use to reconcile religious doubt. However, it does seem that Eastern mindfulness, measured using the MAAS, does act as a mediator in the relationship between religious doubt and mental health. This suggests that Eastern mindfulness may be the process through which individuals protect themselves against the harmful effects of religious doubt.

It is intriguing that faith development moderates the relationship between religious doubt and mental health, so that higher traditional faith development is associated with poorer mental health outcomes. Looking at the quartiles of both factors of faith development brings faith development's role into focus. For the traditions factor, being at either end of the traditional spectrum (which involves upholding one's church's teachings or following the religion of one's family, for example) is associated with poorer mental health. Additionally, the learning factor (which involves have a desire to learn about other religions and one's own religion) is associated with worse mental health, so that greater desire to learn is related to poorer mental health. It is possible that this is a glimpse at what Dein (2013) described as the nature of religious doubt: painful and unpleasant in the moment, but associated with faith development. Faith development may moderate the relationship between doubt and mental health solely because developing one's faith may be a difficult process in the moment. Eastern mindfulness, however, seems to play a part in avoiding these difficulties. Individuals who doubt may use mindfulness to bypass these deleterious effects of religious doubt, which may arise during the process of faith development. Such claims, however, do require even further exploration.

Limitations

A major limitation of the present study is its correlational nature. One should not make causal claims based on these data, due to the design of the study. Additionally, some of the scales included in the study (such as the religious doubt and spiritual support questions) are by no means comprehensive or detailed. Unfortunately, few studies have been conducted to examine religious doubt and spiritual support, leaving the literature barren of surveys and questionnaires for these constructs. Therefore, the operationalization of religious doubt and spiritual support, specifically, may restrict the kinds of conclusions drawn from this study.

Furthermore, this study was conducted shortly after the COVID-19 pandemic. It is possible that some of the results of this study are due to remnants of this pandemic. Spiritual support, in particular, is an area of concern, as it is possible that our samples' attendance to Bible studies, church services, and prayer groups was affected by the COVID-19 pandemic.

Future Exploration

The current study revealed close relationships among religious doubt, mental health, mindfulness, and faith development. The fact that mental health and religious doubt are intertwined highlights the importance of future investigation of this relationship. While the current study identified roles of mindfulness and faith development in the relationship between religious doubt and mental health, future studies are needed to bring more clarity to their roles. For example, future areas of research may include a deeper look into the process of faith development and its ultimate result. This study, while possibly touching on the process, did not address what the final product of faith development is. Dein (2013) suggested that faith development may lead to positive outcomes, although it is painful in the moment. It would be interesting to test this suggestion in future studies.

Additionally, there is great need for assessments of religious doubt, simply because it is related to negative mental health outcomes. Understanding what religious doubt exactly is and its relationship to mental health requires its operationalization. Currently, there is no standardized measurement, and one is needed to close this gap in the literature.

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Appendix A**Langer Mindfulness Scale Items**

1. I like to investigate things. (NS)
2. I generate few novel ideas. (NP)
3. I am always open to new ways of doing things
4. I “get involved” in almost everything I do.
5. I do not actively seek to learn new things.
6. I make many novel contributions. (NP)
7. I stay with the old tried and true ways of doing things.
8. I seldom notice what other people are up to. (E)
9. I avoid thought provoking conversations. (E)
10. I am very creative. (NP)
11. I can behave in many different ways for a given situation.
12. I attend to the “big picture.”
13. I am very curious. (NS)
14. I try to think of new ways of doing things. (NS)
15. I am rarely aware of changes. (E)
16. I have an open mind about everything, even things that challenge my core beliefs.
17. I like to be challenged intellectually. (NS)
18. I find it easy to create new and effective ideas. (NP)
19. I am rarely alert to new developments. (E)
20. I like to figure out how things work. (NS)
21. I am not an original thinker. (NP)

*NS refers to “Novelty-Seeking.” NP refers to “Novelty-Producing.” E refers to “Engagement.”

Appendix B**MAAS Items**

1. I could be experiencing some emotion and not be conscious of it until some time later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.
3. I find it difficult to stay focused on what's happening in the present.
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way,
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. I forget a person's name almost as soon as I've been told it for the first time.
7. It seems I am 'running on automatic' without much awareness of what I'm doing.
8. I rush through activities without being really attentive to them.
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.
10. I do jobs or tasks automatically, without being aware of what I'm doing.
11. I find myself listening to someone with one ear, doing something else at the same time.
12. I drive places on 'automatic pilot' and then wonder why I went there.
13. I find myself preoccupied with the future or the past.
14. I find myself doing things without paying attention.
15. I snack without being aware that I'm eating.

Appendix C

Revised Faith Development Scale Items

1. My religious orientation comes primarily from my church and the people who first taught me about my faith. (T)
2. It is not important that I keep the same religious views as my family of origin. (T)
3. The religious traditions and beliefs I grew up with are very important to me and do not need changing. (T)
4. My religious orientation comes primarily from my own efforts to analyze and understand God.
5. I would rather not be exposed to other religions. (L)
6. The religious traditions and beliefs I grew up with have become less and less relevant to my current religious orientation. (T)
7. I believe that my church has much to offer but that other religions can also provide many religious insights. (L)
8. I believe totally (or almost totally) the teachings of my church. (T)
9. I am interested in learning more about other religions. (L)
10. It is very important for me to critically examine my religious beliefs and values. (L)
11. As my religious views have changed, I find that I sometimes disagree with my family of origin about my faith. (T)
12. It is rare for me to disagree with church leadership or my family of origin about my faith. (T)
13. It is very important that my faith is very much like the faith of my parents and family of origin. (T)
14. I find myself disagreeing with my church over numerous aspects of my faith. (T)

15. I believe that my church offers a full insight into what God wants for us and how we should worship God. (T)

16. It is very important for me to accept the religious beliefs and values of my church. (T)

*T refers to the Traditions factor, and L refers to the Learning factor.

Appendix D**DASS-21 Items**

1. I found it hard to wind down. (s)
2. I was aware of dryness of my mouth. (a)
3. I couldn't seem to experience any positive feeling at all. (d)
4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion). (a)
5. I found it difficult to work up the initiative to do things. (d)
6. I tended to over-react to situations. (s)
7. I experienced trembling (e.g. in the hands). (a)
8. I felt that I was using a lot of nervous energy. (s)
9. I was worried about situations in which I might panic and make a fool of myself. (a)
10. I felt that I had nothing to look forward to. (d)
11. I found myself getting agitated. (s)
12. I found it difficult to relax. (s)
13. I felt down-hearted and blue. (d)
14. I was intolerant of anything that kept me from getting on with what I was doing. (s)
15. I felt I was close to panic. (a)
16. I was unable to become enthusiastic about anything. (d)
17. I felt I wasn't worth much as a person. (d)
18. I felt that I was rather touchy. (s)
19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat). (a)

20. I felt scared without any good reason. (a)

21. I felt that life was meaningless. (d)

*s refers to the stress subscale, a to anxiety, and d to depression.

Tables

Table 1

T-test Results Comparing Males and Females on DASS Anxiety Subscale

Gender	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Male	145	11.76	3.66	-3.52	339.69	< .001
Female	258	13.18	4.3			

Table 2

T-test Results Comparing Males and Females on DASS Stress Subscale

Gender	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Male	145	14.17	4.68	-2.501	328.98	.01
Female	258	15.45	5.28			

Table 3

T-test Results Comparing Males and Females on DASS Depression Subscale

Gender	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Male	145	13.51	5.31	-1.6	401	.11
Female	258	14.45	5.88			

Table 4*T-test Results Comparing Males and Females on Religious Doubt*

Gender	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Male	145	2.03	0.84	0.55	401	.584
Female	258	1.99	0.78			

Table 5*T-test Results Comparing Non-Hispanic White Participants and Minority Participants on the DASS Depression Subscale*

Race/Ethnicity	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Non-Hispanic Whites	317	13.91	5.6	1.66	404	.1
Minority	89	15.04	6.01			

Table 6*T-test Results Comparing Non-Hispanic White Participants and Minority Participants on the DASS Anxiety Subscale*

Race/Ethnicity	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Non-Hispanic Whites	317	12.56	4.12	1.46	404	.15
Minority	89	13.29	4.35			

Table 7

T-test Results Comparing Non-Hispanic White Participants and Minority Participants on the DASS Stress Subscale

Race/Ethnicity	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Non-Hispanic	317	14.97	5.2	0.68	404	.5
Whites						
Minority	89	15.38	4.87			

Table 8

T-test Results Comparing Non-Hispanic White Participants and Minority Participants on Religious Doubt

Race/Ethnicity	<i>n</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Non-Hispanic	317	2.03	0.82	-0.54	404	.59
Whites						
Minority	89	1.98	0.78			

Table 9

Means and Standard Deviations for Gender and Race/Ethnicity on DASS and Religious Doubt

Demographic Group	Depression	Anxiety	Stress	Religious Doubt
	M (SD)	M (SD)	M (SD)	M (SD)
Male	13.51 (5.31)	11.76 (3.66)	14.17 (4.68)	2.03 (0.84)

Female	14.45 (5.88)	13.18 (4.3)	15.45 (5.28)	1.09 (0.78)
Non-Hispanic Whites	13.91 (5.6)	12.56 (4.12)	14.97 (5.2)	2.03 (0.82)
Minority	15.04 (6.01)	13.29 (4.35)	15.38 (4.87)	1.98 (0.78)

Table 10

One-Way ANOVA Comparing Level of Tradition on DASS Depression Subscale

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Between Groups	26.81	2	13.41	0.41	.67
Within Groups	12591.19	381	33.05		
Total	12618	383			

Table 11

One-Way ANOVA Comparing Level of Tradition on DASS Anxiety Subscale

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Between Groups	2.88	2	1.44	0.08	.92
Within Groups	6590.37	381	17.3		
Total	6593.24	383			

Table 12*One-Way ANOVA Comparing Level of Tradition on DASS Stress Subscale*

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Between Groups	4.18	2	2.09	0.08	.92
Within Groups	9942.82	381	26.1		
Total	9947	383			

Table 13*One-Way ANOVA Comparing Level of Tradition on Religious Doubt*

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Between Groups	2.42	2	1.21	1.85	.16
Within Groups	249.69	381	0.66		
Total	252.1	383			

Table 14

Means and Standard Deviations on DASS Depression, Anxiety, and Stress and Religious Doubt for Each Level of Tradition

Level of Tradition	DASS Depression M (SD)	DASS Anxiety M (SD)	DASS Stress M (SD)	Religious Doubt M (SD)
Unitary Leader	14.02 (5.7)	12.64 (4.06)	14.99 (5.33)	2.09 (0.82)
No Unitary Leader	14.39	12.77	15.09	2.05

	(5.78)	(4.2)	(5.12)	(0.83)
Nondenominational	13.72	12.55	14.81	1.88
	(5.76)	(4.24)	(4.67)	(0.74)

Table 15*Model 1 Including Religious Doubt and Mental Health*

	Stress β (p)	Anxiety β (p)	Depression β (p)
Religious Doubt	0.4 (< .001)	0.31 (< .001)	0.48 (< .001)

Table 16*Model 2 Including Religious Doubt, Mental Health, and Age*

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		.385 (< .001)	.292 (< .001)	.474 (< .001)
Doubt-Age Mediator	-0.075 (.15)	.013 (.15)	.013 (.15)	.007 (.15)
Doubt-Age Moderator	-0.013 (.8)	0.001 (.8)	0.001 (.8)	.000 (.925)
Direct Effect of Age		-0.174 (< .001)	-0.173 (< .001)	-0.087 (.057)

Table 17*Model 3 Including Religious Doubt, Mental Health, Age, and Spiritual Support*

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.4 (< .001)	0.34 (< .001)	0.5 (< .001)
Doubt-Age Mediator	-0.07 (.21)	0.01 (.21)	0.01 (.21)	0.01

Doubt-Age Moderator	-0.004 (.93)	.000 (.93)	.000 (.93)	.000 (.96)
Direct Effect of Age		-0.132 (< .001)	-0.092 (.001)	-0.063 (.06)
Doubt-Spiritual Support Mediator	-0.351 (< .001)	-.003 (.9)	-0.03 (.14)	-0.01 (.3)
Doubt-Spiritual Support Moderator	-0.343 (< .001)	0.01 (.51)	0.03 (.14)	0.02 (.29)
Direct Effect of Spiritual Support		0.01 (.9)	0.08 (.21)	0.03 (.64)

Table 18

Model 4 Including Religious Doubt, Mental Health, Age, Spiritual Support, and Eastern Mindfulness (MAAS)

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.16 (.003)	0.14 (.02)	0.31 (< .001)
Doubt-Age Mediator	-0.081 (.12)	0.003 (.44)	.005 (.21)	-0.002 (.59)
Doubt-Age Moderator	-0.01 (.83)	-0.001 (.83)	.000 (.88)	-0.001 (.83)
Direct Effect of Age		-0.03 (.44)	-0.06 (.21)	0.02 (.59)
Doubt-Spiritual Support Mediator	-0.346 (< .001)	-0.01 (.55)	-0.02 (.44)	.000 (.98)
Doubt-Spiritual Support Moderator	-0.34 (< .001)	0.003 (.57)	0.023 (.15)	0.029 (.29)
Direct Effect of Spiritual Support		-0.03 (.55)	0.046 (.44)	-0.001 (.98)
Doubt-MAAS Mediator	-0.34 (< .001)	0.2 (< .001)	0.15 (< .001)	0.14 (< .001)

Doubt-MAAS Moderator	-0.09 (.12)	0.001 (.8)	-0.006 (.16)	-0.007 (.04)
Direct Effect of MAAS		-0.59 (< .001)	-0.433 (< .001)	-0.42 (< .001)

Table 19

Model 5 Including Religious Doubt, Mental Health, Age, Spiritual Support, Eastern Mindfulness

(MAAS), and Western Mindfulness (LMS)

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.13 (.01)	0.12 (.04)	0.28 (< .001)
Doubt-Age Mediator	-0.08 (.12)	0.003 (.46)	0.004 (.24)	-0.002 (.44)
Doubt-Age Moderator	-.01 (.79)	.000 (.79)	.000 (.83)	-0.001 (.79)
Direct Effect of Age		-0.03 (.46)	-0.05 (.24)	0.03 (.44)
Doubt-Spiritual Support Mediator	-0.35 (< .001)	0.01 (.46)	-0.02 (.44)	0.002 (.9)
Doubt-Spiritual Support Moderator	-0.34 (< .001)	-0.01 (.62)	-0.03 (.08)	-0.02 (.24)
Direct Effect of Spiritual Support		-0.04 (.46)	0.04 (.44)	-0.01 (.9)
Doubt-MAAS Mediator	-0.34 (< .001)	0.21 (< .001)	0.16 (< .001)	0.14 (< .001)
Doubt-MAAS Moderator	-0.09 (.11)	0.001 (.85)	0.01 (.09)	0.01 (.03)
Direct Effect of MAAS		-0.61 (< .001)	-0.46 (< .001)	-0.422 (< .001)
Doubt-LMS Novelty Producing Mediator	-0.11 (.06)	0.01 (.06)	0.01 (.13)	0.02 (.06)

Doubt-LMS Novelty Producing Moderator	-0.08 (.15)	0.001 (.65)	-0.003 (.43)	0.01 (.15)
Direct Effect of LMS Novelty Producing		-0.12 (.01)	-0.08 (.13)	-0.21 (< .001)
Doubt-LMS Engagement Mediator	-0.03 (.62)	-0.01 (.62)	-0.01 (.62)	-0.01 (.62)
Doubt-LMS Engagement Moderator	-0.05 (.36)	0.002 (.36)	0.001 (.76)	-0.002 (.36)
Direct Effect of LMS Engagement		0.17 (< .001)	0.18 (.001)	0.16 (.001)
Doubt-LMS Novelty Seeking Mediator	0.01 (.81)	.000 (.81)	.000 (.81)	.000 (.81)
Doubt-LMS Novelty Seeking Moderator	0.02 (.71)	.000 (.97)	-0.002 (.71)	-0.001 (.71)
Direct Effect of Novelty Seeking		0.01 (.81)	0.02 (.76)	-0.02 (.59)

Table 20*Betas at Each Quartile of FDS Factors*

	Tradition Quartile				Learning Quartile			
	1 β (p)	2 β (p)	3 β (p)	4 β (p)	1 β (p)	2 β (p)	3 β (p)	4 β (p)
Stress	0.26 (.01)	-0.2 (.04)	-0.02 (.83)	0.76 (< .001)	0.02 (.81)	0.3 (.004)	0.26 (.008)	0.59 (< .001)
Anxiety	0.23 (.02)	-0.16 (.12)	-0.12 (.22)	0.88 (< .001)	0.08 (.41)	0.34 (.001)	0.26 (.008)	0.6 (< .001)
Depression	0.17 (.1)	-0.22 (.03)	-0.07 (.51)	0.8 (< .001)	-0.001 (.99)	0.36 (< .001)	0.35 (< .001)	0.51 (< .001)

Table 21*Model 6 Including Religious Doubt, Mental Health, Age, Spiritual Support, Eastern Mindfulness**(MAAS), Western Mindfulness (LMS), and Faith Development*

	Indirect β (p)	Stress β (p)	Anxiety β (p)	Depression β (p)
Direct Effect of Religious Doubt		0.32 (< .001)	0.4 (< .001)	0.54 (< .001)
Doubt-Age Mediator	-0.082 (.11)	0.003 (.38)	0.004 (.2)	-0.002 (.4)
Doubt-Age Moderator	-0.01 (.86)	.000 (.86)	0.001 (.86)	.000 (.86)
Direct Effect of Age		-0.03 (.38)	-0.05 (.2)	0.03 (.4)
Doubt-Spiritual Support Mediator	-0.4 (< .001)	0.01 (.46)	-0.01 (.7)	0.01 (.75)
Doubt-Spiritual Support Moderator	-0.39 (< .001)	0.01 (.71)	-0.01 (.17)	0.01 (.4)
Direct Effect of Spiritual Support		-0.04 (.46)	0.02 (.7)	-0.02 (.75)
Doubt-MAAS Mediator	-0.36 (< .001)	0.21 (< .001)	0.15 (< .001)	0.14 (< .001)
Doubt-MAAS Moderator	-0.1 (.07)	0.06 (.069)	0.04 (.38)	0.04 (.53)
Direct Effect of MAAS		-0.57 (< .001)	-0.41 (< .001)	-0.38 (< .001)
Doubt-LMS Novelty Producing Mediator	-0.09 (.13)	0.004 (.2)	.000 (.96)	0.01 (.13)
Doubt-LMS Novelty Producing Moderator	-0.1 (.07)	0.01 (.62)	.000 (.07)	0.01 (.4)
Direct Effect of LMS Novelty Producing		-0.05 (.2)	0.002 (.96)	-0.14 (.002)

Doubt-LMS Engagement Mediator	-0.02 (.74)	-0.003 (.74)	-0.004 (.74)	-0.003 (.74)
Doubt-LMS Engagement Moderator	-0.06 (.29)	-0.01 (.45)	-0.01 (.72)	-0.01 (.29)
Direct Effect of LMS Engagement		0.17 (< .001)	0.19 (.001)	0.17 (.001)
Doubt-LMS Novelty Seeking Mediator	0.01 (.37)	.000 (.37)	.000 (.37)	.000 (.37)
Doubt-LMS Novelty Seeking Moderator	0.02 (.92)	.000 (.92)	-0.002 (.92)	-0.001 (.92)
Direct Effect of LMS Novelty Seeking		0.01 (.11)	0.02 (.13)	-0.02 (.02)
Doubt-FDS Traditions Mediator	0.71 (< .001)	-0.06 (.17)	-0.13 (.01)	-0.16 (< .001)
Doubt-FDS Traditions Moderator	0.54 (< .001)	-0.05 (< .001)	-0.1 (< .001)	-0.12 (< .001)
Direct Effect of FDS Traditions		-0.09 (.17)	-0.18 (.01)	-0.22 (< .001)
Doubt-FDS Learning Mediator	0.5 (< .001)	0.002 (.92)	0.01 (.81)	0.02 (.42)
Doubt-FDS Learning Moderator	0.26 (< .001)	0.001 (< .001)	0.003 (< .001)	0.01 (< .001)
Direct Effect of FDS Learning		0.01 (.92)	0.01 (.81)	0.04 (.42)
Doubt-FDS Item 4 Mediator	-0.25 (< .001)	-0.03 (.01)	-0.04 (.002)	-0.02 (.07)
Direct Effect of FDS Item 4		0.11 (.01)	0.14 (.002)	0.07 (.07)