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Spiritual Fortitude, Spiritual Struggles, Attachment to God and Faith Maturity: An Exploratory Study

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ABSTRACT

Spiritual fortitude is a relatively new construct in psychological research with promising insights for helping individuals navigate challenges throughout life. This study aims to explore spiritual fortitude and its relationship to other religious variables, namely religious/spiritual struggles, attachment to God, and faith maturity. Additionally, I explored spiritual fortitude as a moderator of attachment to God and religious/spiritual struggles. Results indicated a positive correlation between spiritual fortitude and faith maturity, as well as spiritual fortitude moderating the relationship between attachment to God and religious/spiritual struggles. I discuss implications of the findings as well as future directions for research.

Spiritual Fortitude, Spiritual Struggles, Attachment to God and Faith Maturity:
An Exploratory Study

A Thesis

Presented to

The Faculty of the Department of Psychology

Abilene Christian University

In Partial Fulfillment

Of the Requirement for the Degree

Master of Science in Clinical Psychology

By

Jacob Kranendonk

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This thesis, directed and approved by the committee for the thesis candidate Jacob Kranendonk, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree

Master of Science in Psychology



Assistant Provost for Residential Graduate Programs

Date

Apr 18, 2022

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This thesis is dedicated to my family, my friends and the faculty that made it all possible. Throughout this entire process, I was shown immense and selfless academic and emotional support to which I am entirely grateful. It has been a shining example of the kind of support I hope to pass on to others in the future. Thank you all.

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CHAPTER I

INTRODUCTION

Literature Review

In recent years, the psychology of religion has flourished from the exploration of understanding religious/spiritual (R/S) struggles, which was largely affected by the development of the Religious and Spiritual Struggles Scale (Exline et al., 2014). For instance, as researchers have examined R/S struggles, constructs like faith maturity (Exline et al., 2014) and attachment to God (Exline et al., 2017) have shed light on the nuances on how people engage with the Sacred (e.g., a deity or ultimate truth believed to be worthy of veneration) and how these impact well-being (Ellison & Lee, 2010).

While some individuals experience R/S struggles, other people use their spirituality to cope with hardships (Exline et al., 2017). In this vein, spiritual fortitude is a recent and promising avenue of research that examines how people access a spiritual resource to persevere through adversity (Van Tongeren et al., 2019). Researchers posit that spiritual fortitude is theoretically similar to other psychological constructs like grit (Duckworth & Quinn, 2009) and positive religious coping (Pargament et al., 2001). To date, a handful of studies have explored spiritual fortitude as a moderator of struggles and well-being (Van Tongeren et al., 2019), but little to no research has explored the relationship between spiritual fortitude and potential moderation of other religious/spiritual variables (e.g., attachment to God, faith maturity, R/S struggles). Thus, this study will explore the construct of spiritual fortitude and its connection to well-

being, while also examining spiritual fortitude as a potential moderator for faith maturity and R/S struggles.

Religious/Spiritual Struggles

Religious and spiritual struggles are conflicts, concerns, and negative thoughts or emotions that relate to one's religious/spiritual beliefs, spiritual practices, or religious experiences (Exline, 2013). R/S struggles can take a wide variety of forms (e.g., anger toward God, interpersonal conflict, lack of meaning) for different people (Exline & Rose, 2005, 2013; Pargament, 2011; Pargament et al., 2005). Within these many types, two specifically focus on beliefs directed towards supernatural agents like angels and demons. First, *divine struggles* are categorized by negative emotions or a conflict about a deity or a perceived relationship with a deity (Exline, 2013; Exline & Rose, 2013; Pargament et al., 2005). The second type refers to *demonic struggles*, which are categorized as the belief that a devil or some types of evil spirits are targeting an individual or directly causing negative events to happen to an individual (Exline & Rose, 2013).

There are other types of R/S struggles that focus less on spiritual beings and more on the institution of religion. Common struggles are *interpersonal struggles*, which are differentiated from other types of R/S as they center on negative experiences with religious people (e.g., discrimination, lack of belonging) and/or their conflict with others that stemmed from religious topics (Exline, 2013; Exline & Rose, 2013; Pargament et al., 2005).

The final overarching type of R/S struggles is *intrapersonal struggles* or struggles that are directed inwardly towards one's own thoughts or actions (Exline, 2013; Pargament et al., 2005). Within intrapersonal R/S struggles, there are three primary

subtypes. First, the *moral struggles* subtype involves individuals struggling to adhere to their moral principles or feeling guilt or shame in response to a situation in which they took an action that conflicted with their moral principles. The second subtype is *doubt-related struggles*, wherein an individual experiences discomfort about any doubts they may experience towards their R/S beliefs or questions that they may have about their R/S beliefs. The third subtype of intrapersonal struggle is called *struggle around ultimate meaning*, which may occur when an individual feels that their life is lacking a deep meaning.

R/S struggles negatively impact people's well-being, such as worse physical health and increased emotional distress (Ano & Vasconcelles, 2005; Pargament, 2011; Smith et al., 2003). To understand this relationship, researchers investigated how an individual's attachment style with God, who serves a similar role as a parent or supportive and protective figure, relates to how they positively or negatively engage with their R/S (Abu-Raiya et al., 2010). In other words, individuals often turn to God in stressful situations, but their attachment style (e.g., secure, insecure) will either positively or negatively affect their interaction with the Sacred (Abu-Raiya et al., 2010). For example, a person with an insecure attachment to God may struggle to experience God as a source of comfort and support. Instead, they may experience more anxiety, emotional disturbance, or physiological symptoms when they use religion as a source of coping, especially if they perceive God as distant, uncaring, or unconcerned with their situation (Abu-Raiya et al., 2010). Therefore, individuals with problematic attachment styles may experience more R/S struggles and find their engagement with God causes more anxiety than it relieves or helps them persevere.

In 2010, Pargament et al. conducted a longitudinal study examining the effects of R/S struggles on physical health by examining mortality rates. They tracked 596 patients ages 55 or older for two years (1996 through 1997) assessing positive religious coping (e.g., prayer and petition to the Sacred, support from religious community) and R/S struggles. After controlling for other physical and mental health factors, individuals with higher levels of R/S struggles had higher mortality rates than those with lower levels R/S struggles with three items (i.e., “wondered whether God had abandoned me,” “questioned God’s love for me,” “decided the devil made this happen”) having the strongest correlation. Additionally, R/S struggles have been correlated with poorer psychological well-being, such as increased depression and anxiety (Zhang et al., 2021a).

In this regard, a study conducted by Ellison and Lee (2010) examined the relationship between spiritual struggles and psychological distress. To assess this, 1,445 participants completed the psychological distress index (Kessler et al., 2002) as well as three aspects of R/S struggles: divine struggles, interpersonal struggles, and doubt-related struggles. They noted four key findings in their study. First, the prevalence of R/S struggles is relatively equal when comparing a general sample to a clinical sample. Second, there was a small correlation between the three different dimensions of R/S struggles, indicating that each type taps into a different facet of experience rather than pulling from a larger common construct. Third, they found that each dimension of R/S struggles acted as an independent predictor of psychological distress, with divine struggles providing the strongest predictive power. Fourth, R/S struggles served as a strong predictor of psychological distress. R/S struggles leads to poorer physical and

psychological health, and by examining the influencing factors, we can help people cope in healthier ways.

Faith Maturity and Attachment to God

While R/S can introduce new kinds of struggles, individuals also turn towards the Sacred when facing problems in positive ways, coined as positive religious coping (Pargament et al., 1998). Positive religious coping includes “an expression of a sense of spirituality, a secure relationship with God, a belief that there is meaning to be found in life, and a sense of spiritual connectedness with other” (Pargament et al., 1998, p. 712). Because of the complex and multifaceted nature of R/S struggles, researchers are trying to build a more nuanced understanding of this construct, as well as potential moderating variables. Two posited moderating variables are faith maturity, attachment to God, and spiritual fortitude. For example, faith maturity serves as a protective factor against R/S struggles in that individuals with higher levels of faith maturity are better equipped to resolve their R/S struggles (Pargament et al., 2005). Indeed, through a Christian worldview, R/S struggles could be one avenue for how God builds maturity (Exline et al., 2017). While attachment to God has been linked to R/S struggles (Abu-Raiya et al., 2010), the human experience of attaching to a Sacred figure could open the doors for joy, meaning, and positive growth (Exline, 2013).

Faith Maturity

Benson et al. (1993) define faith maturity as “the degree to which a person embodies the priorities, commitments, and perspectives characteristic of a vibrant and life transforming faith, as these have been understood in ‘mainline’ Protestant traditions” (p. 3). Individuals with a high faith maturity score live their lives more aligned with this

definition, while individuals with a low faith maturity score live their lives less aligned with this definition. Therefore, faith maturity is a measure of behavior that reflects deeper rooted religious worldviews, beliefs, and values rather than adherence to religious doctrine (Salsman & Carlson, 2005).

Faith maturity has two dimensions, classified as vertical and horizontal (Benson et al., 1993). Vertical faith maturity is the extent that an individual builds, maintains, and honors a relationship with God or a transcendent reality. Horizontal faith maturity comprises faith manifested through pro-social behavior, such as service to others, acts of justice, and showing mercy.

Both vertical and horizontal domains of faith maturity are positively correlated with various religious practices and experiences (Piedmont & Nelson, 2002). For instance, vertical faith maturity positively correlates with increased frequency of prayer, higher attendance of religious services, as well as a stronger feeling of connectedness to a higher power (Piedmont & Nelson, 2002). Higher levels of faith maturity allow for individuals to engage with more positive religious coping (e.g., the three behaviors listed previously) allowing them to experience less R/S struggles during times of distress.

Another study conducted by Knabb and Grigorian-Routon (2013) reported a strong positive correlation between faith maturity and positive religious coping. Their results showed that individuals with higher faith maturity reported higher levels of positive religious coping (Knabb & Grigorian-Routon, 2013), which expedites the positive resolution of R/S struggles (Exline et al., 2017; Wilt et al., 2019). Thus, one way people resolved their doubts, anger to God, or interpersonal conflict with religious individuals was through positive engagement with their faith. These studies provide a

theoretical framework to connect faith maturity to a lower prevalence and higher resolution rate of R/S struggles.

Attachment to God

Attachment to God compares a relationship with God to that of an attachment figure who serves as a source of comfort, security, and protection (Kirkpatrick, 1999). An attachment bond has four distinct criteria that sets them apart from other relationships that may not incorporate attachment styles: “1) maintaining proximity with the attachment figure, 2) seeing the attachment figure as a secure base of explorative behavior, 3) considering the attachment figure as providing a haven of safety, and 4) experiencing separation anxiety when removed from the attachment figure” (Ainsworth, 1985; Beck & McDonald, 2004, p. 92).

Attachment to God, modeled after parental attachment theory, involves one’s avoidance of intimacy and anxiety about abandonment (Beck & McDonald, 2004). Avoidance of intimacy includes feeling the need to be self-reliant, issues with or inability to depend on God, and the unwillingness to open up and be emotionally intimate with God (Beck & McDonald, 2004). Anxiety about abandonment includes a fear that God might leave or become distant, feeling resentment or frustration at the perceived lack of affection from God (also called “angry protest”), feeling jealous toward the perceived intimacy God shares with others, anxiety about one’s ability to be loved by God, and anxiety over one’s relationship with God (Beck & McDonald, 2004).

As noted earlier, attachment to God influences a person’s experience of R/S struggles. For instance, Exline et al. (2017) examined what variables influence a person’s navigation of R/S struggles. They surveyed 454 college students from three United States

universities that self-identified as Christians. In brief, individuals who experience R/S struggles are more likely to resolve issues and experience personal growth when they 1) positively engage with God and 2) have the perception that God was directly helping or communicating with them. Additionally, a pre-established, positive relationship with God predicted participants' personal growth via their engagement and perceptions of God. While not directly measuring attachment to God, perceiving a direct relationship with God and having a positive relationship with God would both theoretically relate to a secure attachment to God.

Moreover, Zarzycka (2019) showed that a person's image of God mediated the relationship between parental attachment and spiritual struggles. In this study, Roman Catholics ($N = 149$) that had avoidant parental attachments were more likely to experience divine struggles (e.g., anger towards God), whereas participants with anxious parental attachments reported more with moral struggles (e.g., fear of God's disapproval). Both the images of God's distance and cruelty mediated the relationship between avoidant parental attachment and R/S struggles. To illustrate, a person who grew up with unsupportive, cold caregivers may experience more struggles by perceiving a divine figure as sharing similar qualities with their caregiver. These findings support earlier literature that links insecure parental attachments styles with difficulties in holding positive images of God (Brokaw & Edwards, 1994; Dickie et al., 1997; Justice & Lambert, 1986). Similarly, insecure ambivalent attachment to God predicts a person's likelihood of experiencing R/S struggles (Ano & Pargament, 2013).

Spiritual Fortitude

One of the newest constructs to be explored as a moderating variable for R/S struggles is spiritual fortitude. *Spiritual fortitude* (SF) is defined as “a confidence that one has sufficient spiritual resources to face and grow in the face of a stressor” (Van Tongeren et al., 2019, p. 2). They conceptualize SF as having three distinct perspectives, with the first being that individuals who have higher SF will have a stronger sense of being able to use their faith to overcome challenges (i.e., spiritual endurance). The second domain is that individuals with high SF will believe that they have the power to maintain their integrity and will to live even in the face of significant challenges or adversity (i.e., spiritual enterprise). The third domain is that an individual is confident and stays confident, even when facing adversity, that they will eventually find a renewed sense of meaning and purpose in life (i.e., redemptive purpose). Notably, SF is a character trait strengthened over time as an individual faces adversity and hardships throughout the course of their lives.

Research focusing on SF has shown it to be effective in helping individuals cope when facing difficult events such as Hurricane Matthew (McElroy-Heltzel et al., 2018), a flood (Zhang et al., 2021c), and the COVID-19 pandemic (Zhang et al., 2021b). These studies suggest that SF operates as a type of positive religious coping mechanism where individuals can draw from spiritual resources across the three dimensions to help give them strength when facing adversity.

While SF is similar to other constructs such as grit and resilience, there are a few key differences that set SF apart and make it worth studying. *Grit* is usually defined as having perseverance towards long-term goals even when facing adversity (Duckworth et

al., 2007). SF differs from this in the way that it includes the ability to demonstrate perseverance even in the absence of a goal or certain desired outcome (Van Tongeren et al., 2019). As a construct, resilience involves an individual's ability to recover from adversity and return to a former state of functioning (Masten, 2001). SF, while related to this construct, focuses more on the underlying cognitive schema that facilitate resilience and less on the outcome of persistence (Van Tongeren et al., 2019).

For example, McElroy-Heltzel et al. (2018) recruited 227 undergraduate students who had been affected by Hurricane Matthew and had them complete questionnaires that measured SF, meaning in life, spiritual well-being, religious coping, and disaster exposure. The results suggested that individuals with higher levels of SF scored higher on positive religious coping, meaning in life, as well as spiritual well-being.

In a different context, 279 victims of a flood in Baton Rouge, Louisiana were given scales at both nine and eighteen months after the flood that measured resource loss, SF, meaning in life, anxiety, depression, and PTSD (Zhang et al., 2021b). They found that SF reduced the relationship between resource loss and future search for meaning, while a search for meaning served as a mediator in the relationship between resource loss and SF for the measured mental health symptoms.

A series of eight studies examined how SF affected individuals ($N = 3,455$) facing the COVID-19 pandemic (Zhang et al. 2021c). They found that higher levels of SF negatively correlated with anxiety, depression and PTSD symptoms, and SF positively correlated with positive religious coping. This study also suggests that the meaning in life domain of SF may be the central mechanism for how SF helps facilitate better mental health.

One of the primary limitations listed in the SF literature is that SF is still a relatively new construct and its relationship with other constructs (e.g., R/S struggles, attachment to God, faith maturity) has yet to be explored. The present study aims to examine the relationship between SF and attachment to God, R/S struggles, and faith maturity, as well as test SF as a potential moderator between attachment to God and R/S struggles. Because of SF being related to positive religious coping, I hypothesized that SF will moderate the relationship between R/S struggles and faith maturity and attachment to God.

The Present Study

The first goal of the study was to replicate previous findings in that attachment to God and faith maturity will correlate with R/S struggles (Exline et al., 2017; Exline et al., 2017). Specifically, my first hypothesis was that faith maturity and a more secure attachment to God will negatively correlate with R/S struggles. My second hypothesis was that SF will negatively correlate with R/S struggles.

The second goal of the study was to examine SF as a moderator of the relationship between faith maturity and R/S struggles, as well as a moderator of attachment to God and R/S struggles. Specifically, I hypothesized that lower levels of faith maturity will predict higher levels of R/S struggles, and SF will moderate this relationship by reducing the negative relationship so that higher levels of SF buffer the deleterious effects. In the same vein, individuals with an insecure attachment to God are more likely to experience R/S struggles (Exline et al., 2017), and SF may buffer this relationship as well. Hence, my fourth hypothesis was that SF will buffer the negative impact of an insecure attachment to God on a person's levels of R/S struggles.

CHAPTER II

METHODOLOGY

Sample

An online sample of participants completed measures in a survey and all participants were compensated with a small monetary incentive and an equal chance to earn one of four \$50.00 USD bonus payments. The sample was collected using Amazon's Mechanical Turk (MTurk), which is an online research marketplace. MTurk samples have been shown to be similar to student samples and other samples collected by online survey platforms (Huff & Tingley, 2015). Therefore, MTurk is regarded as a useful platform for collecting data in survey-based research.

One notable difference that the MTurk population has from student samples and general survey platform populations is that it is approximately twice as secular (Lewis et al., 2015). MTurk workers have been found to be reliable in stating their religious beliefs, and their beliefs affect their opinions in a way that is consistent with the population with a few exceptions that are unrelated to the present study. This led to the conclusion that MTurk was a good option for conducting religious-based research, as long as a larger sample size was collected to allow for a large enough religious sample (Lewis et al., 2015).

For the present study, a total sample of 705 participants were collected. I eliminated participants that were 1) non-religious or 2) failed one of the many quality control items placed throughout the survey. Thus, a final total of 518 participants was

collected with a mean age of 35.91 ($SD = 10.67$). Of this sample, 60.6% reported identifying as male ($n = 314$), 39.0% as female ($n = 202$), 0.2% as gender queer ($n = 1$), and 0.2% as other ($n = 1$). A total of 89% identified as White/Caucasian ($n = 461$), 7.1% as Black/African American ($n = 37$), 1.7% as Native American ($n = 9$), 1.2% as Asian/Pacific Islander ($n = 6$), 0.8% as Latino/Hispanic ($n = 4$), and 0.2% as other ($n = 1$). When asked about sexual orientation, 71.2% identified themselves as heterosexual ($n = 369$), 25.9% as bisexual ($n = 134$), 1.4% as gay ($n = 7$), 0.6% as lesbian ($n = 3$), 0.2% as queer ($n = 1$), 0.2% as other ($n = 1$), and 0.6% preferred not to report their sexual orientation ($n = 3$). Due to the religious nature of the present study, participants were asked to report their religious affiliation with 85.5% identifying as Christian-Catholic ($n = 443$), 6.0% as Christian-Evangelical Protestant ($n = 31$), 2.5% as Jewish ($n = 13$), 2.3% as Christian-Mainline Protestant ($n = 12$), 1.5% as Buddhist ($n = 8$), 1.0% as Muslim ($n = 5$), and 0.8% as Christian-Black Protestant ($n = 4$), and 0.4% as Hindu ($n = 2$).

Measures

Demographics

Each participant was asked 15 multiple choice and short-answer questions covering a variety of self-report demographic information such as assigned gender at birth, current gender, age, marital status, race/ethnicity, sexual orientation, education level, occupation, current family annual income, and political views. Past and current religious affiliation were also recorded.

Religious/Spiritual Struggles

Religious and spiritual struggles was measured using the Spiritual Struggle Inventory developed by Exline et al. (2014). The scale comprises 29 items total, with the

first two being open-ended questions about the participants' religious affiliation (past and present). The third question is a 10-point Likert scale assessing the participant's belief in God existing (0 = *not at all*, 10 = *totally*). The other 26 questions assessed how often/what magnitude an individual struggles with various domains of religion and spirituality on a 5-point Likert scale (1 = *not at all*, 5 = *a great deal*). The final 26 questions were read with the preface "Within the past month, to what extent have you struggled with each of the following?" Sample items include, "felt as though God had abandoned me," "felt attacked by the devil or by evil spirits," and "felt hurt, mistreated, or offended by religious/spiritual people." The scale measures six distinct domains of religious and spiritual struggles, consisting of: divine struggle, demonic struggle, interpersonal struggle, moral struggle, struggle with ultimate meaning, and struggle with doubt. A factor analysis showed that the scale fits the 6-factor model well across ethnicity/race and Christian vs. non-Christian participants (Exline et al., 2014). For the sample, a Cronbach's alpha of 0.964 was found.

Spiritual Fortitude

Spiritual fortitude (SF) was measured with the 9-item Spiritual Fortitude Scale (SFS; Van Tongeren et al., 2019). This measure comprises three subscales: Spiritual Endurance, the ability to overcome difficulty through faith ("my faith helps push me to overcome difficult tasks in life"); Spiritual Enterprise, the ability to do the right thing during hardships ("I continue to do the right thing despite facing hardships"); and Redemptive Purpose, finding meaning in hardships ("hardships give me a sense of renewed purpose") (Van Tongeren et al., 2019). The measure asks participants to rate statements on a seven-point Likert scale from 1 (*completely untrue of me*) to 7

(*completely true of me*). Scores are then averaged with a higher score indicating higher spiritual fortitude. Research using the SFS has shown evidence of internal consistency with Cronbach's alphas ranging from .84 to .86 and demonstrated convergent validity with constructs such as grit and resilience (Van Tongeren et al., 2019). For the sample, a Cronbach's alpha of 0.783 was found.

Faith Maturity

Faith maturity was assessed using the 11-item Short Form of The Faith Maturity Scale (FMS; Benson et al., 1993). This Short Form is a revision of the original 12-item Short Form derived from the original Faith Maturity Scale (38 items). The FMS contains two subscales named vertical and horizontal faith maturity. The vertical subscale measures the perception of closeness to God, while the horizontal subscale measures how that perception leads to helping others. The scale is self-report and participants rate themselves on a 7-point Likert scale from 1 (*never true*) to 7 (*always true*). Example items for each subscale are, "I seek opportunities to help grow me spiritually" (vertical faith maturity), and "I feel a deep sense of responsibility for reducing pain and suffering in the world" (horizontal faith maturity). Piedmont and Nelson (2002) reported a reliability of .91 for the FMS. For the sample, a Cronbach's Alpha of 0.892 was found.

Attachment to God

Attachment to God was measured using the Attachment to God Scale (AGS; Kirkpatrick & Shaver, 1992). The AGS comprises 9 items that measure the avoidance of intimacy with God ("*I prefer not to depend too much on God*") as well as anxiety about being abandoned by God ("*I fear God does not accept me when I do wrong*"; Kirkpatrick

& Shaver, 1992). Questions are rated on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). For the sample, a Cronbach's alpha of 0.828 was found.

CHAPTER III

RESULTS

Descriptive Statistics

Descriptive statistics for all scales measuring R/S Struggles, spiritual fortitude, faith maturity and attachment to God can be found in Table 1.

Table 1

Descriptive Statistics of Scales Measuring R/S Struggles, Spiritual Fortitude, Faith Maturity and Attachment to God

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
R/S Struggles	518	26.00	130.00	83.25	23.71
Spiritual Fortitude	518	20.14	45.00	34.91	4.90
Faith Maturity	518	21.55	77.00	54.67	11.02
Attachment to God	518	21.00	55.89	35.21	6.54

Correlations

The first goal of the study was to explore spiritual fortitude and replicate the previous findings that attachment to God and faith maturity were correlated with R/S struggles, as well as explore the relationship between SF and these variables. After conducting a Pearson's product moment correlation analysis, my hypotheses found mixed findings. First, attachment to God had a negative relationship with R/S struggles ($r = -.65, p < .001$), which supports the previous findings. On the other hand, faith maturity had a positive relationship with R/S struggles, ($r = .28, p < .001$), which was counter to previous research findings.

My second hypothesis was that that spiritual fortitude negatively correlated with R/S struggles. This hypothesis was not supported. Spiritual fortitude was positively correlated with R/S struggles ($r = .22, p < .001$). Additionally, spiritual fortitude was not statistically correlated with attachment to God ($r = -.04, p = .392$), but was positively correlated with faith maturity ($r = .748, p < .001$). The correlations between R/S struggles, spiritual fortitude, attachment to God and faith maturity can be found in Table 2.

Table 2

Correlation Matrix of Scales Measuring R/S Struggles, Spiritual Fortitude, Faith Maturity and Attachment to God

	1	2	3	4
1. R/S Struggles	-			
2. Spiritual Fortitude	.218**	-		
3. Attachment to God	-.647**	-.038	-	
4. Faith Maturity	.276**	.748**	-.085	-

** . Correlation is significant at the 0.001 level (2-tailed).

Spiritual Fortitude Moderation and Faith Maturity

My third hypothesis was that spiritual fortitude would moderate the relationship between faith maturity and religious/spiritual (R/S) struggles. Specifically, I expected that the relationship between faith maturity and R/S struggles would be stronger at higher levels of spiritual fortitude. I tested this hypothesis using hierarchical regression as outlined by Aiken et al. (1991). The predictor and moderator variables were standardized to reduce multicollinearity and aid interpretation. This hypothesis was not supported. In Step 1, faith maturity and spiritual fortitude predicted about 7.6% of the variance in R/S

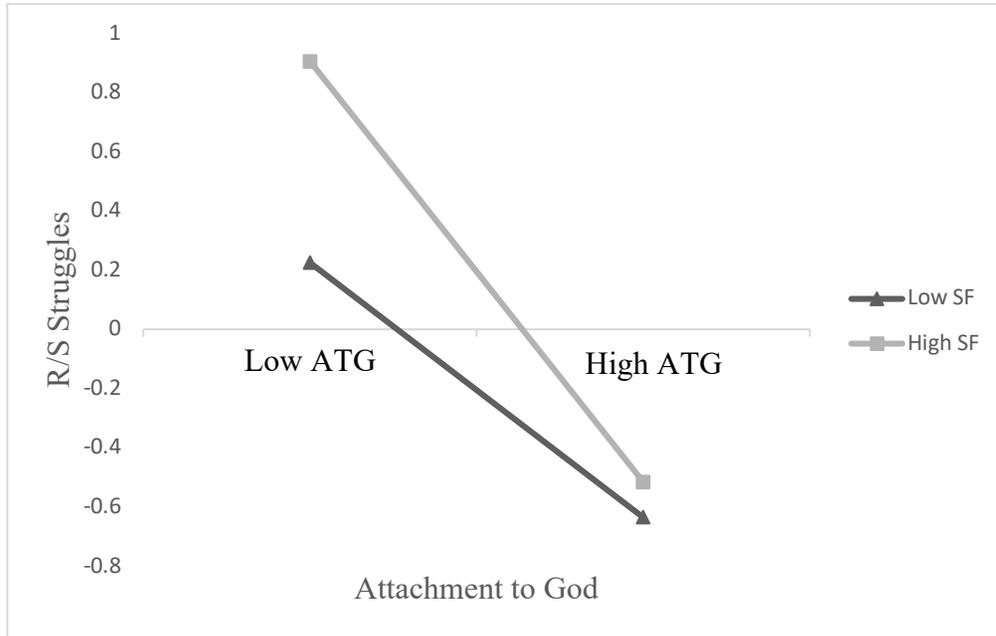
struggles ($R^2 = .076$, $F(2, 515) = 21.25$, $p < .001$). The addition of the interaction term entered in Step 2 failed to predict any additional variance in R/S struggles ($R^2 = .00$, $F(1, 514) = .02$, $p = .884$). Thus, there was no evidence of a moderation effect.

Spiritual Fortitude Moderation and Attachment to God

My fourth hypothesis was that spiritual fortitude would moderate the relationship between attachment to God and R/S struggles. We tested this hypothesis using hierarchical regression as outlined by Aiken et al. (1991). The predictor and moderator variables were standardized to reduce multicollinearity and aid interpretation. This hypothesis was supported. In Step 1, attachment to God and spiritual fortitude predicted about 45.4% of the variance in R/S struggles ($R^2 = .45$, $F(2, 515) = 216.01$, $p < .001$). The addition of the interaction term in Step 2 predicted an additional 2% variance in R/S struggles ($R^2 = .47$, $F(1, 514) = 20.87$, $p < .001$). Thus, there was evidence of a moderation effect. To interpret the interaction, I graphed the interaction and conducted a simple slopes analysis (see Figure 1). At high levels of spiritual fortitude, attachment to God was a significant negative predictor of R/S struggles ($\beta = -.43$, $p < .001$). Also, at low levels of spiritual fortitude, attachment to God was a significant negative predictor of R/S struggles ($\beta = -.71$, $p < .001$).

Figure 1

Spiritual Fortitude as a Moderator of Attachment to God (ATG) and R/S Struggles



CHAPTER IV

DISCUSSION

Overview of Results

The present study aimed to replicate previous research findings and explore SF as a construct through four primary avenues include: 1) faith maturity and attachment to God will be negatively related to R/S struggles, 2) SF will be negatively related to R/S struggles, 3) SF will moderate the relationships between faith maturity and R/S struggles, and 4) SF will moderate the relationship between attachment to God and R/S struggles.

When examining the relationships among the variables in this study, results both aligned with and deviated at times from previous literature findings. For instance, a stronger attachment to God was associated with decreased R/S struggles, which aligns with previous research (Exline et al., 2017). Faith maturity and spiritual fortitude shared a strong, positive correlation. However, other relationships were non-significant or showed a significant relationship in the opposite direction than was hypothesized. Specifically, attachment to God was not significantly related to faith maturity or spiritual fortitude. Another perplexing finding was that higher levels of faith maturity and SF were associated with increased R/S struggles.

Clearly, the relationship attachment to God shared with the other variables in the study, or lack thereof, invited more questions than answers. When examining SF as a moderator between attachment to God and R/S struggles, attachment to God was the bigger predictor. It is possible an individual's relationship with a deity figure has a more

direct effect on R/S struggles than SF or faith maturity. Further, a person's attachment to God could be more of a trait characteristic that is stable over time, whereas their SF is more of a state that is activated more during times of distress, despite previous theorization of SF as a trait developed over time (Van Tongeren et al., 2019). Also, attachment to God would presumably be related to one's faith maturity, yet results did not support this framework. In looking at the two dimensions of faith maturity (i.e., horizontal and vertical), it is possible that they relate differently to attachment to God, though further research is needed.

Still, results shed light on SF as a newly formed construct in research with many implications. The first implication is the positive relationship between SF and R/S struggles. One explanation for this is that SF is a construct that is activated during times of struggle or when it is needed most, meaning that individuals who reported higher SF also reported higher R/S struggles. This would mean that individuals who are experiencing less R/S struggles may not have the need for their SF to be active, so they report lower levels. To highlight this point further, most previous research on SF has focused on disaster or trauma populations, meaning that they would have been experiencing some level of distress or struggle when their SF was measured (Zhang et al., 2021a). However, the current sample is likely less distressed compared to previous studies since it was not pulled from a disaster or trauma population, though the study did not assess for this. Previous MTurk samples were comparative to student samples (Huff & Tingley, 2015). Since this study's sample potentially differed from disaster or trauma participants, it helps illuminate that SF may act differently in non-disaster or trauma situations.

SF also had no relationship to attachment to God but a positive relationship to faith maturity. This means that SF could be a religious variable that is pulling from a separate part of a religious experience than attachment to God is but a similar part as faith maturity. Both SF and faith maturity examine an individual's attitudes and behaviors toward their faith and faith practices while attachment to God focuses more on an individual's attitudes towards a deity figure. This could explain why attachment to God had no relationship with SF or faith maturity. Perhaps, SF taps more into a person's overall faith or religious experience during non-stressful times, whereas previous research found SF to relate more to the engagement with a deity figure during strenuous, disaster contexts.

When examining SF as a moderator between attachment to God and R/S struggles, attachment to God was the bigger predictor. This indicates that an individual's relationship with a deity figure has a stronger effect on R/S struggles than SF does. However, this would make sense if SF is indeed a construct that becomes more activated during hardships as it would be less active in the prevention of R/S struggles. This could also explain why attachment to God was the only measured variable that had a negative relationship with R/S struggles. Attachment to God can be seen as more of a preventative measure against R/S struggles rather than a way that one would cope with R/S struggles.

The final takeaway from this study was that SF seemed to be a construct that was characteristic of a mature and developed faith, while also being associated with facing more difficulties. This suggests that SF potentially has both state and trait characteristics that become prominent as one experiences struggles, challenges, pain, and distress.

Theoretically, as an individual experiences more struggles, they will also begin to report higher levels of SF and thus a higher resilience to working through those challenges.

Limitations

One limitation of this study is that the sample was very homogenous in terms of race/ethnicity and religious affiliation (89.0% White/Caucasian, 85.5% Christian-Catholic). The sample was also somewhat homogenous in terms of gender with 60.6% of participants identifying as male. This only allows for a narrow understanding of the interaction as well as limited generalizability. A larger sample size with more diverse demographics would help lead to a more nuanced and generalizable understanding of the interaction between attachment to God, faith maturity and R/S struggles with SF as a moderating variable.

Another limitation is the self-report nature of the measures used in the study alongside the fact that the questionnaire was answered in an uncontrolled testing environment given the nature of MTurk. Environmental factors outside of what was controlled in the study could have impacted the reliability and validity of the measures used.

The study was conducted in a cross-sectional research design rather than a longitudinal research design, meaning that constructs were measured during only one moment of time. Using a longitudinal design may mean that our findings would have changed. Additionally, the cross-sectional design does not account for any growth curve analysis or movement over time. Spiritual fortitude is a construct that strengthens over time (Van Tongeren et al., 2019), so it is possible that it is best studied as a developmental process over time.

A final limitation was that no measure of general distress (non-R/S) was added to the questionnaire packet. This would have aided in determining if participants were currently experiencing or had recently experienced trauma, allowing for a more direct comparison to previous studies examining SF. Without this scale, it is not possible to determine how much distress outside of R/S struggles the sample used was experiencing.

Future Directions

In addition to replicating the results found in this study, future studies could focus on examining the difference in SF between a sample that is currently in distress versus a sample that is currently not in distress to help narrow down when SF is most active. Another potential direction is examining the overlap between SF and faith maturity to see if there is a common part of religious experience, they are both drawing from. Other religious variables such as positive religious coping may also be related to those variables as well. Finding variables that work with SF but are from a separate construct, such as attachment to God, is also helpful in understanding how to not only cope with but also prevent R/S struggles. Continuing to explore this variable as well as its relationship with other related variables will help give a wholistic perspective on how to best help religious individuals through life challenges that they may be facing.

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APPENDIX A

Institutional Review Board Approval Letter

ABILENE CHRISTIAN UNIVERSITY

Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

December 1, 2021

David Mosher
Department of Psychology
ACU Box 28011
Abilene Christian University



Dear David,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Gratitude, Spirituality, and Attachment to God",

(IRB# 21-169) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

APPENDIX B
Informed Consent Form

Abilene Christian University Institutional Review Board
Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits, and risks of the study and how it will be conducted.

Title of Study: Gratitude, Spirituality, and Attachment to God

Student Investigators: Jessica Guajardo, B.S. and Jacob Kranendonk, B.S., Abilene Christian University (ACU) Department of Psychology

Supervising Investigator: David Mosher, Ph.D.

Purpose of the Study: You are being asked to participate in a research study exploring spiritual struggles and the influences of gratitude to various aspects of religious experiences.

Study Procedures: You will be asked to complete a series of 14 questionnaires pertaining to one's experiences with gratitude, well-being, personality, and religiosity/spirituality. The study will take approximately 30 minutes of your time. Some sample questions included in the questionnaires are "I have so much in life to be thankful for.", "So far I have gotten the important things I want in life.", "I have a warm relationship with God.", and "My relationship with God (i.e., the Sacred) contributes to my sense of well-being".

Foreseeable Risks: There are no foreseeable risks of this study except for possible feelings of discomfort due to answering survey questions regarding one's religious experiences. Additionally, participation in online surveys involves risks to confidentiality similar to a person's everyday use of the Internet. If you do experience feelings of discomfort, you may contact the supervising investigator, who can refer you to services for counseling. Additionally, you may contact an information and referral service through NAMI (National Alliance on Mental Illness): 800-950-6264 (tel); www.nami.org (website). You may also choose to stop participation at any point throughout the survey.

Benefits to the Subjects or Others: This study is not expected to be of any direct benefit to you but may contribute to the growing body of knowledge surrounding gratitude and religious experiences. Your contribution to this body of knowledge could lead to an increased understanding about how gratitude and spiritual fortitude impacts religious experience and well-being, which would help researchers use this insight to benefit society.

Compensation for Participants: If you are participating in this study through Mechanical Turk for participation in research, you will be compensated a small monetary amount for completion and will be entered into a chance to win one of four \$50 Amazon gift cards.

Procedures for Maintaining Confidentiality of Research Records: Your participation in this study will be confidential. Identifying information will be collected only for compensation purposes. The confidentiality of your individual data will be maintained in any publications or presentations regarding this study. Only aggregated data from the questionnaires will be presented publicly or reported in subsequent publications. All research materials will be kept secure by utilizing a password protected USB to store data. Only the investigators will have access to these materials. Confidentiality will be maintained to the degree possible given the technology and practices used by the online survey company. Your participation in this online survey involves risks to confidentiality similar to a person's everyday use of the internet.

Questions about the Study: If you have any questions about the study, you may contact Jessica Guajardo at jrg16b@acu.edu (email) or Jacob Kranendonk at jhk17a@acu.edu (email). You may also contact Dr. David Mosher at dkm20a@acu.edu (email).

Review for the Protection of Participants: This research study has been reviewed and approved by the Abilene Christian University (ACU) Institution Review Board (IRB). The ACU IRB can be contacted at (325) 674-2885 (tel) or orsp@acu.edu (email) with any questions regarding the rights of research participants.

Research Participants' Rights:

You have read or have had read to you all of the above and you confirm all of the following:

- You understand the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant, and you voluntarily consent to participate in this study

Do you wish to participate in this study?

- Yes, I agree to participate in this study.
- No, I decline to participate in this study.

APPENDIX C
Demographic Questionnaire

1. What was your gender assigned at birth?
 - a. Male
 - b. Female
 - c. Other: _____
2. What is your current gender?
 - a. Male
 - b. Female
 - c. Transgender male
 - d. Transgender female
 - e. Gender Queer
 - f. Other: _____
3. What is your age? _____
4. What is your current marital status?
 - a. Single
 - b. Married
 - c. Separated
 - d. Divorced
 - e. Widowed
 - f. Other: _____
5. What is your race?
 - a. White/Caucasian
 - b. Black/African-American
 - c. Asian/Pacific Islander
 - d. Latino/Hispanic
 - e. Native American
 - f. Multiracial _____
 - g. Other: _____
6. What is your current sexual orientation?
 - a. Heterosexual
 - b. Gay
 - c. Lesbian
 - d. Bisexual
 - e. Queer
 - f. Other: _____
7. What is your current religious affiliation?

- a. Christian – Catholic
 - b. Christian – Evangelical Protestant
 - c. Christian – Mainline Protestant
 - d. Christian – Black Protestant
 - e. Latter-day Saints
 - f. Muslim
 - g. Buddhist
 - h. Hindu
 - i. Jewish
 - j. Atheist
 - k. Agnostic
 - l. None
 - m. Other: _____
8. How long have you been a part of your current religious affiliation? _____
9. Have you ever had a previous religious affiliation that is different from your current religious affiliation?
- a. Yes
 - b. No
10. If yes, what was your previous religious affiliation?
- a. Christian – Catholic
 - b. Christian – Evangelical Protestant
 - c. Christian – Mainline Protestant
 - d. Christian – Black Protestant
 - e. Latter-day Saints
 - f. Muslim
 - g. Buddhists
 - h. Hindu
 - i. Jewish
 - j. Atheist
 - k. Agnostic
 - l. None
 - m. Other: _____
11. How long were you a part of your previous religious affiliation? _____
12. What is your highest level of education?
- a. Less than High School diploma or GED
 - b. High School diploma or GED
 - c. Some college
 - d. Associate’s degree
 - e. Bachelor’s degree
 - f. Master’s degree
 - g. Professional degree
 - h. Doctoral degree
13. What is your current occupation? (If none, type “unemployed”) _____
14. Please estimate your current family annual income. _____

15. Use one of the following numbers to indicate your political views in the accompanying categories.

	Very liberal (1)	Liberal (2)	Slightly liberal (3)	Middle of the road (4)	Slightly conservative (5)	Conservative (6)	Very conservative (7)
1. Foreign policy issues	1	2	3	4	5	6	7
2. Economic issues	1	2	3	4	5	6	7
3. Social issues	1	2	3	4	5	6	7

APPENDIX D

Attachment to God Scale

DIRECTIONS: The following statements concern how you generally think and feel in your relationship with God (or any other supernatural force you believe in). Using the following scale, respond to each statement by indicating how characteristic it is of you.

1	2	3	4	5	6	7
Not at all characteristic of me						Very characteristic of me

1. God seems impersonal to me.	1	2	3	4	5	6	7
2. God seems to have little or no interest in my personal problems.	1	2	3	4	5	6	7
3. God seems to have little or no interest in my personal affairs.	1	2	3	4	5	6	7
4. I have a warm relationship with God.	1	2	3	4	5	6	7
5. God knows when I need support.	1	2	3	4	5	6	7
6. I feel that God is generally responsive to me.	1	2	3	4	5	6	7
7. God sometimes seems responsive to my needs, but sometimes not.	1	2	3	4	5	6	7
8. God's reactions to me seem to be inconsistent.	1	2	3	4	5	6	7
9. God sometimes seems very warm and other times very cold to me.	1	2	3	4	5	6	7

APPENDIX E

Spiritual Struggle Inventory

How would you describe your present religious/spiritual tradition, if any? (for example, Catholic; Jewish; Baptist; Muslim; Buddhist; Hindu; atheist; agnostic; spiritual but not religious; none...)

How would you describe the religious/spiritual tradition in which you were raised, if any? (for example, Catholic; Jewish; Baptist; Muslim; Buddhist; Hindu; atheist; agnostic; spiritual but not religious; none...)

	Not at All										Totally
To what extent do you believe that God exists?	0	1	2	3	4	5	6	7	8	9	10

Within the past month, to what extent have you struggled with each of the following?	Not At All	A Little Bit	Somewhat	Quite a Bit	A Great Deal
questioned God's love for me	1	2	3	4	5
felt angry at God	1	2	3	4	5
felt as though God had abandoned me	1	2	3	4	5
felt as though God was punishing me	1	2	3	4	5
felt as though God had let me down	1	2	3	4	5
felt attacked by the devil or by evil spirits	1	2	3	4	5
felt as though the devil (or an evil spirit) was trying to turn me away from what was good	1	2	3	4	5
worried that the problems I was facing were the work of the devil or evil spirits	1	2	3	4	5
felt tormented by the devil or evil spirits	1	2	3	4	5
had conflicts with other people about religious/spiritual matters	1	2	3	4	5
felt rejected or misunderstood by religious/spiritual people	1	2	3	4	5
felt as though others were looking down on me because of my religious/spiritual beliefs	1	2	3	4	5
felt angry at organized religion	1	2	3	4	5
felt hurt, mistreated, or offended by religious/ spiritual people	1	2	3	4	5
felt guilty for not living up to my moral standards	1	2	3	4	5
worried that my actions were morally or spiritually wrong	1	2	3	4	5
wrestled with attempts to follow my moral principles	1	2	3	4	5

felt torn between what I wanted and what I knew was morally right	1	2	3	4	5
had concerns about whether there is any ultimate purpose to life or existence	1	2	3	4	5
felt as though my life had no deeper meaning	1	2	3	4	5
questioned whether life really matters	1	2	3	4	5
questioned whether my life will really make any difference in the world	1	2	3	4	5
struggled to figure out what I really believe about religion/spirituality	1	2	3	4	5
felt troubled by doubts or questions about religion or spirituality	1	2	3	4	5
felt confused about my religious/spiritual beliefs	1	2	3	4	5
worried about whether my beliefs about religion/spirituality were correct	1	2	3	4	5

APPENDIX F

Spiritual Fortitude Scale (SFS-9)

Please read the items below and respond by selecting the number that corresponds with how you typically respond in situations of adversity or trials.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Agree or Disagree
- 4 = Agree
- 5 = Strongly Agree

1. _____ My faith helps push me to overcome difficult tasks in life.
2. _____ I continue to do the right thing despite facing hardships.
3. _____ Hardships give me a sense of renewed purpose.
4. _____ My faith helps me stand up for what is right during challenging times.
5. _____ I am able to do the right thing even in the midst of hardship.
6. _____ My sense of purpose is strengthened through adversity.
7. _____ My faith helps me withstand difficulties.
8. _____ I retain my will to live despite my hardship.
9. _____ I find meaning in my struggles.

APPENDIX G

Faith Maturity Scale (11-item)

Never True	Rarely True	True once in a While	Sometimes True	Often True	Almost Always True	Always True	
1	2	3	4	5	6	7	
_____							1. I help others with their religious questions and struggles.
_____							2. I seek out opportunities to help me grow spiritually.
_____							3. I feel a deep sense of responsibility for reducing pain and suffering in the world.
_____							4. I give significant portions of my time and money to help other people.
_____							5. I feel God's presence in my relationships with other people.
_____							6. I care a great deal about reducing poverty in the United States and throughout the world.
_____							7. I try to apply my faith to political and social issues.
_____							8. My life is committed to the God of my understanding.
_____							9. I talk to other people about my faith.
_____							10. I have a real sense that God is guiding me.
_____							11. I am spiritually moved by the beauty of God's creation.

APPENDIX H

Quality Control Items

In this questionnaire you will be asked various questions about interests and hobbies. Please rate how much you agree or disagree with each item.

Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree
1	2	3	4	5

1. _____ I love shopping at the mall.
2. _____ I enjoy exercise at the gym.
3. _____ I like baking desserts.
4. _____ I am excited by watching or playing sports.
5. _____ I hate shopping at the mall.
6. _____ I appreciate a good painting.
7. _____ I admire people who play musical instruments.

In this questionnaire you will be asked to complete a series of mental orienting tasks. Please read over the items carefully and answer to the best of your ability.

1. $67 + 79 =$ _____
 - a. 136
 - b. 146
 - c. 156
 - d. 166
2. What year is it? _____
3. Who is the current President of the United States? _____
4. $39 + 57 =$ _____
 - a. 76
 - b. 86
 - c. 96
 - d. 106
5. On average, how many meals does a normal adult eat a day?
 - a. 0
 - b. 2
 - c. 3
 - d. 4