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doi: https://doi.org/10.57709/24143951

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ACCEPTANCE

This dissertation, PRESSURE TO FORGIVE: HOW RELIGIOUS PRESSURE EFFECTS MOVING FROM DECISIONAL TO EMOTIONAL FORGIVENESS, by ELISE CHOE, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education & Human Development, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

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PRESSURE TO FORGIVE: HOW RELIGIOUS PRESSURE EFFECTS MOVING FROM DECISIONAL TO EMOTIONAL FORGIVENESS

by

ELISE CHOE

Under the Direction of Joel Meyers, Ph.D. & Don Davis, Ph.D.

ABSTRACT

Forgiveness and religion/spirituality have been studied together throughout the years. Most studies have claimed that religious/spiritual beliefs and values promote forgiveness and increase psychological well-being. However, reviews of the literature and a meta-analysis have found that these claims and results are tenuous. In Chapter 1, a narrative review of the literature on forgiveness and religion/spirituality was conducted. In the current review, I outline how well the field has answered lingering questions in the past several years. Weaknesses within the field, such as the over-reliance on cross-sectional study designs and the lack of programmatic work, are noted. The current state of the literature and possible new theories and directions for the field are also discussed. In Chapter 2, the present study proposes to examine the relationship between a more contextual religious construct, religious pressure to forgive, and decisional and emotional forgiveness over time, and its influence on psychological well-being over time. The critiques and arguments made by experts, as well as another line of thinking which has suggested that religion may not necessarily have a positive influence on forgiveness, are taken into consideration. Longitudinal data were gathered from participants who identified as being religious/spiritual, were currently in a romantic relationship and experienced a recent, hurtful offense by their partner. These individuals were surveyed over the course of 4 weeks to track their levels of forgiveness and relationship quality with their partners. Results suggested that initial decision to

forgive was positively associated with more initial emotional forgiveness and generally more forgiveness over time. Also, social pressure was found to have a positive effect on initial levels of forgiveness. However, religious pressure to forgive did not have effects on forgiveness. Decisional forgiveness and social pressure also had positive effects on initial relationship quality, but there were no effects on change over time (slope). These results start raising the question on the differences between similar, yet different R/S constructs and pushes toward a better understanding of the relationship between forgiveness and R/S.

INDEX WORDS: Forgiveness, Religion/Spirituality, Pressure to Forgive, Decisional Forgiveness, Emotional Forgiveness

PRESSURE TO FORGIVE: HOW RELIGIOUS PRESSURE EFFECTS MOVING FROM DECISIONAL TO EMOTIONAL FORGIVENESS

by

ELISE CHOE

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Philosophy

in

Counseling Psychology

in

The College of Education and Human Development

Georgia State University

Atlanta, GA

2021

DEDICATION

I would like to dedicate this dissertation to my family and friends. I have always valued my loved ones, but it truly was through this doctoral experience that I came to appreciate each and every individual that supported me and gave me strength throughout this process. First, I would like to thank my family. 아빠 너무나 감사합니다. 제가 박사라는 꿈을 꿀 수 있었던 것은 아빠가 항상 뒤에서 밀어주시고, 힘이 되여 주셔서입니다. 이 과정동안 언제나 믿어 주시고, 버팀목이 되어 주셔서 감사합니다. 엄마도 너무나 감사합니다! Also, to my brother Kevin for always being there when I need you.

I also dedicate this to my friends, who held me through some of the most difficult and some of the best times. Esther thank you for being a steady support through the years and starting down this crazy road of graduate school with me! Eunice thanks for always listening and 'debating' the finer points of philosophy and human nature. Abbey thank you for being a wonderful friend and my crazy partner in crime. Yoon and Sunny thank you for being my family away from family and my quarantine buddies. I could not have survived internship or this Chicago winter without you both. Emily you are the most wonderful research partner and friend I could ask for. Thank you for always being a listening ear and hype-person throughout this crazy ride! You are all such amazing individuals who have gave me strength when I needed it, gave me a place to vent, and helped me to grow into the person I am today.

Lastly, I want to thank my wonderful fur-baby, Go-yo, who has been with me this whole time and has kept me sane through the late nights and early mornings.

ACKNOWLEDGMENTS

It is beyond my imagination to be writing this acknowledgment. I first want to thank all of my committee members, Dr. Davis, Dr. Meyers, Dr. Rice, and Dr. McElroy-Heltzel for being such amazing mentors and support throughout this entire process.

Thank you, Donnie, you have inspired me from the beginning of my Master's program to pursue a doctoral degree and helped me find my way through this journey. Your guidance has allowed me to explore many topics of interest while also helping me grow as a scholar.

Also, thank you Stacey for always being a mentor, colleague, and friend throughout my Ph.D. career and especially as I worked on finalizing this dissertation. I always joked I was following in your footsteps, but I cannot imagine anyone else's path I would love to follow.

Thank you, Dr. Meyers, for being a steady source of encouragement and support. Your calm, steady guidance and wisdom have helped me grow so much.

Dr. Rice, thank you for always pushing me to do my best. Since the first assessment class to now as a committee member, your training and guidance have made me a stronger researcher and writer.

I want to also thank Dr. DeBlaere. Cirleen, you have been a role model for me on what an Asian American woman within this field could be and could do. Thank you for always encouraging me, supporting me, and guiding me through this field and world. You are an inspiration and I can only hope to follow in your footsteps!

Thank you to everyone at GSU, especially everyone on the 9th floor. You have all helped mold me into who I am today, and I am proud to say that the 9th floor was my home for so long.

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Chapter 1: Forgiveness and Religion/Spirituality

Since the scientific study of forgiveness began to accelerate around 25 years ago, a large body of work has accumulated on the association between forgiveness and religion/spirituality (R/S). Both McCullough and Worthington's (1999) narrative review and Davis, Worthington, Hook, and Hill's (2013) meta-analysis concluded that trait R/S constructs tend to show a consistent and moderate relationship with trait forgivingness (r = .29; all rs from Davis et al., 2013), but a weak relationship with state forgiveness (r = .15). Relational R/S constructs (e.g., viewing the offense as a desecration, attachment to God) also show a weak relationship with state forgiveness (r = .23). These findings suggest that R/S constructs are relatively weak predictors of whether someone will forgive an offense. With studies consistently being added to the field, it is imperative that I examine the literature to assess the status of the field's trajectory and promising directions for future research.

Defining Forgiveness and Religion/Spirituality

State forgiveness refers to a decrease in one's negative (and a potential increase in one's positive) thoughts, motivations, emotions, and behaviors towards someone who has committed an interpersonal offense (Exline, Worthington, Hill, & McCullough, 2003). Trait forgivingness refers to one's tendency to forgive across time, situations, and relationships (Davis et al., 2013).

I define religion as an organized system where what is believed and practiced is agreed upon by the religious group; spirituality is an overall feeling of connection with the Sacred (Hill et al., 2000). These are overlapping constructs in many samples (Ammerman, 2013). Measures of R/S that tend to remain fairly stable over time, such as religious commitment, affiliation, or attachment to God are considered trait measures of R/S (Davis et al., 2013). State measures of R/S include constructs that may change based on a person's experiences of relational spirituality,

such as closeness to the Sacred, viewing the offense as a desecration, or appraising an offender's degree of spiritual similarity (Worthington & Sandage, 2018).

Purpose of the Present Review

I had three primary purposes for the present review. First, I wanted to consider any open questions remaining from those raised in McCullough and Worthington's (1999) seminal paper nearly 20 years ago, which noted a discrepancy between studies measuring forgiveness as a trait versus a state. They found R/S constructs tended to show a consistent and moderate relationship with trait forgivingness, but were less consistently related with state forgiveness. This raised the possibility that although religious people might value forgiveness more than non-religious people, they might not be more forgiving in actual practice. While some studies have tested this idea (e.g., Tsang, McCullough, & Hoyt, 2005), the overarching question still remains: under what circumstances does R/S promote greater actual forgiveness?

Second, I address more recent questions raised by Davis et al.'s 2013 meta-analysis. They highlighted a need to test theorizing on diverse samples, given that most prior research had focused on predominately Christian and White samples. Another important suggestion was to employ research designs that not only assesses R/S and forgiveness at the state level, but also use designs that could allow for stronger causal inferences (i.e., experiments or longitudinal methods). This could help determine where R/S constructs lie in the causal chain to forgiveness.

A final purpose of this review was to explore new and potentially promising research questions that could reenergize the field. Given that five years have elapsed since the Davis et al., (2013) meta-analysis and numerous research studies have addressed forgiveness and R/S, it is worth considering whether recent research changes or qualifies the major conclusions of works

in this area. Thus, I conclude by raising questions that could invigorate the next era of scholarship on the role of R/S in the process of forgiveness.

Method

A literature search was conducted on June 13, 2018, through ERIC, PsychINFO, Medline, Social Work Abstracts, Business Complete, and Dissertation Abstracts International databases. The search was conducted with the terms [forgiv*] and [relig* OR spirit*] and was restricted to articles written since 2011, when the search was done in Davis et al.'s (2013) meta-analysis. This initial search yielded 532 articles. I then filtered the articles to include studies that (a) were quantitative, (b) had a measure of forgiveness (other and/or self), (c) had a measure of R/S, and (d) showed results linking forgiveness and R/S. A total of 38 articles met all inclusion criteria, of which 4 included multiple studies (total k = 42). A table 1 provides a summary of these articles.

Overview of Measures

Assessing Forgiveness

There continued to be a trend towards considering contextual factors and utilizing state measures of forgiveness. For example, 18 studies used trait measures of forgiveness, with the most frequent measure used being the Heartland Forgiveness Scale (Thompson et al., 2005). In contrast, 23 studies examined the relationship between R/S and state forgiveness, with most using the Transgression Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998). Recent innovations included the use of the Decisional Forgiveness Scale (Worthington et al., 2008), the Emotional Forgiveness Scale (Worthington et al., 2008), and the Intergroup Forgiveness Scale (Tam et al., 2007). Two studies used adapted measures of state forgiveness (e.g., Ayten, 2012; Krause & Hayward, 2014; Toussaint, Marschall, & Williams, 2012; Tsarenko

& Tojib, 2012). Finally, only three studies (relative to the 23 in Davis et al., 2013) examined the relationship between R/S and self-forgiveness, with all three using the self-forgiveness subscale of the Heartland Forgiveness Scale (Thompson et al., 2005).

Assessing R/S

Regarding assessment of R/S, most measures aligned with those used in the prior metaanalysis. However, I would like to highlight a few notable exceptions. Bell et al. (2014)
expanded on the theory of sanctification of forgiveness (Davis, Hook, Van Tongeren, &
Worthington, 2012) to the context of community values of forgiveness. Sandage and Crabtree
(2012) assessed R/S with two indicators associated with spiritual narcissism: (a) Spiritual
Grandiosity, which refers to a sense of entitlement and superiority, and (b) Spiritual Instability,
which refers to emotional volatility and poor regulation of spiritual feelings of distress.

Overview of Participants

Davis et al. (2013) recommended more deliberate and diverse sampling of participants, such as religious communities voting on controversial changes in policies, intergroup conflicts, or moral offenses committed by religious leaders. Only a few studies have included strategically targeted samples, including international samples (k = 6), and religious samples (k = 3), whereas most studies (k = 19) have relied on convenience samples of undergraduates. However, two studies have focused on health patients (Farley, 2011; van Laarhoven, Schilderman, Verhagen, & Prins, 2012), one has examined psychotherapists (Cannon, 2014), and two have studied prisoners (Bishop, Randall, & Merten, 2014; Randall & Bishop, 2013). Therefore, it remains important to continue to strategically sample more diverse groups.

Overview of Methodology and Results

At the time of Davis et al.'s (2013) meta-analysis, only two studies examined how R/S was related to forgiveness over time (Davis, et al., 2012; Hayward & Krause, 2013). Of the 42 studies published since that time, 22 used regression on cross-sectional data, including 12 that tested a potential mediator. As noted previously, both prior reviews found similar results of trait R/S having a moderate relationship with trait forgiveness and a weak relationship with state forgiveness. For the most part, these correlational studies have not generated new lines of evidence that would change the general conclusions provided in prior reviews (i.e., Davis et al., 2013; McCullough & Worthington, 1999).

Trait Forgivingness and Trait R/S

There were 17 new studies that reported a relationship between R/S and trait forgivingness. Effect sizes ranged from .20 to .37, which is remarkably consistent with the estimate from Davis et al. (2013). The prior meta-analysis included 99,177 participants across 64 studies. In these 17 studies, I saw no indication of much movement or any pioneering line of thought being explored. A set of studies positioned trait forgivingness as a mediator between trait R/S and various positive outcomes (e.g., perceived health, posttraumatic growth, well-being; Bishop et al., 2014; Ochu, Davis, Magyar-Russell, O'Grady, & Aten, 2018; Sharma & Singh, 2018). Yet, the problem with most of these studies is that they violated what is now an accepted caution around using cross-sectional data to test mediators. Cole and Maxwell (2003) have noted that covariation is only one of several conditions required to substantiate a causal inference, and results only replicate using an appropriate design under exceedingly rare conditions.

State Forgiveness and Trait R/S

Over half of the studies (k = 23) in the present review examined the relationship between R/S and state forgiveness. Of these, most (k = 16) assessed R/S as a trait (see table 1). Effect sizes ranged from |.03| to |.44| (absolute values are used to account for different measures, R/S variables showed positive correlations with forgiveness), which is a broader range relative to Davis et al. (2013; r = .15, CI = .10 to .19). The only instances in which this relationship tended to be stronger involved new measures of R/S designed to assess a construct theorized to be more proximal to the causal chain leading to forgiveness. For example, Bell and colleagues (2014) found that religious commitment moderated the relationship between community expectations of forgiveness and state forgiveness ($\beta = .16$, t = 2.73, p = .007). Greater community expectations of forgiveness was related to more state forgiveness among individuals high in religious commitment.

State Forgiveness and State R/S

Since Davis et al.'s review (2013), research teams have explored more contextual measures of R/S and their relationship to forgiveness. Contextual measures of R/S included spiritual appraisals of the offense (k = 7), one's current relationship with the Sacred (k = 3), or spiritual changes experienced since an offense (k = 1). Effect sizes were weak to moderate (k = 1) spiritual changes experienced since an offense (k = 1). Effect sizes were weak to moderate (k = 1). Some studies found appraisals of desecration predicted less forgiveness of the offense (e.g., the more an individual perceived the offense as a desecration the harder it was the forgive; Davis et al., 2012; Davis et al., 2014; McElroy et al., 2016). Largely, these studies found that the R/S interpretations an individual held about an offense significantly affected forgiveness of said offense. These studies are described in greater detail in the following sections.

Cross-sectional tests of mediation. Attempting to extend conclusions of McCullough and Worthington (1999), studies have tested theories on how R/S influences the causal chain of factors that result in forgiveness of a specific offense. I have decided not to detail the findings from these studies, because they all suffer from a similar flaw that severely limits the inferences I can draw from these studies. That is, the assumptions that would have to hold to replicate using an appropriate design (e.g., longitudinal) almost never hold, making the evidence weak (MacKinnon, Lockwood, Hoffman, West, and Sheets; 2002). Therefore, a major gap in the literature exists in extending the theory in these studies to tests that allow for causal inferences.

Nonetheless, the theorizing for many of these models seems to warrant testing with an appropriate design. Some studies have examined empathy (Davis et al., 2012; Ho, Worthington, & Davis, 2017) and cultural factors (Edara, 2015) as potential mediators between R/S and forgiveness. Other studies have examined R/S as the mediator between mindfulness and state forgiveness (Falb, 2016) or other contextual measures of R/S (e.g., desecration, attitudes toward the sacred; Choe et al., 2016). Additionally, studies have looked at the mediating role trait forgiveness plays between R/S and physical health (Bishop et al., 2014; Lutjen, Silton, & Flannely, 2012) and mental health (Ochu et al., 2018; Toussaint et al., 2012). One study assessed the mediating influence self-forgiveness has between R/S and purpose in life (Lyons, Deane, Caputi, & Kelly, 2011). While these studies have put forth some promising models, none have been tested with an appropriate design to examine the causal links between forgiveness and R/S.

Two primary designs to test causal predictions. Two types of design are most relevant to providing evidence of how R/S fits into the causal chain leading to forgiveness: longitudinal and experimental. Longitudinal designs provide an indication of the causal sequence by examining changes in forgiveness that can be attributed to changes in an R/S construct.

Experimental or intervention approaches can manipulate R/S variables to examine how different R/S conditions may be related to differences in forgiveness. Currently, there are two lines of thought that have been tested with these methods.

Line of thought 1: Do R/S values promote forgiveness? One line of thought argues that R/S individuals are more forgiving because religious teachings emphasize the importance of forgiveness (Van Tongeren, Welch, Davis, Green, & Worthington, 2012). Texts of at least three major world religions (i.e., Christianity, Judaism, Islam) encourage its followers to practice forgiveness, with other religious leaders also advocating forgiveness (e.g., Buddhism, Hinduism; Rye et al., 2000). Accordingly, religious individuals may sanctify forgiveness by attaching sacred meaning to it and incorporating it into their personal moral systems.

Four longitudinal or experimental studies have tested this hypothesis. Toussaint et al. (2012) used a sample of 966 participants from a nationally representative sample that were randomly selected from a survey conducted by the Survey of Consumers. Participants completed phone interviews six months apart and questions included measures of trait forgivingness, trait R/S (as measured by church attendance, prayer frequency, degree of religiousness/spirituality), and depressive symptoms. The authors found that forgiveness mediated the relationship between R/S and depression ($\beta = .03$, p < .05). While the results were significant, the effect is very weak, which could be related to one of several factors. For example, one of the constructs making up R/S in this study was the frequency of prayer. However, the content of prayers can differ from person to person: one participant might be praying for an internal posture of forgiveness while another participant is praying for a Higher Power to enact vengeance.

In a stronger test of the hypothesis that R/S promotes forgiveness, Hayward and Krause (2013) used four waves of a study of older adults in which participants (N = 718) completed

measures of religious commitment and forgiveness (others, self, difficulty forgiving) during home visit interviews. Growth curve modeling indicated that religious commitment was weakly associated with slower rises in forgiveness over time (b = -0.005, 95% CI [-0.009, -0.001], p = .01). This finding may seem to indicate that a high level of religious commitment is making it difficult for participants to forgive by slowing down or impeding increases in forgiveness over time. However, this pattern may also suggest that religious individuals are starting out with higher levels of forgiveness and may just have less room for improvement.

Another study used an experimental method to test this hypothesis (Van Tongeren et al., 2012). A sample of 105 college students were randomly assigned to either a forgiveness prime (visualize a time when they forgave) or retributive justice prime group (visualize a time when they engage in justice behavior). After the priming task, participants were presented with three morally ambiguous scenarios and asked to rate the actors in each situation. Results indicated that religious commitment moderated the relationship between the priming condition and the moral judgments of the actors ($\beta = 0.37$, SE = 0.02, t = 2.14, p = 0.04). Also, individuals primed with forgiveness reported more forgiveness than those in the justice group (F(1, 101) = 6.77, p = 0.01). Notably, individuals in the forgiveness condition who were more religious were more forgiving than individuals who were less religious ($\beta = 0.28$, SE = 0.01, t = 2.29, p = 0.02). However, religious commitment was not related to more lenient moral judgments of actors in the justice prime condition.

Finally, an intervention study also provides support for this hypothesis. Twenty-nine students, ranging from 7-14 years old, were recruited from community churches to participate in a forgiveness curriculum (Ahn-Im, 2017). Four groups participated in a religiously adapted version of a 10-week group developed by Enright's team (Knutson & Enright, 2007). On

average, participants tended to increase in both forgiveness, t(29) = 7.24, p < .01, and spirituality, t(29) = 9.43, p < .01, over time. However, due to the lack of random assignment to a control group, conclusions attributing the results to the intervention are tempered. Overall, the evidence supporting the hypothesis that R/S individuals are more forgiving because religious teachings emphasize the importance of forgiveness must be considered weak. While results are consistent in their support, the effect sizes tend to be small.

Line of thought 2: Does context matter?. The second line of thought that has attracted additional research is the idea that contextual measures of R/S may provide a stronger and more consistent predictor of state forgiveness than global R/S constructs. One such hypothesis is the relational spirituality and forgiveness model (Davis et al., 2009). This theory draws on the emotional replacement hypothesis (Worthington, 2006), which posits that forgiveness occurs when negative emotions (e.g., contempt) are replaced with positive emotions (e.g., compassion) towards the offender. Theoretically, individuals make spiritual appraisals of offenses, such as viewing the offense as a desecration (i.e., the destruction of something sacred). Those appraisals intensify the negative emotional responses and thus make it more difficult to forgive the offense.

One longitudinal study has tested this hypothesis. Davis et al. (2012) studied 123 undergraduate students who had experienced a recent romantic transgression and had them complete unforgiveness measures weekly for 6 weeks. Based on results of a growth curve analysis, viewing the offense as a desecration was associated with slower declines in unforgiveness ($\beta = 0.10$, SE = 0.04, p = 0.013).

An experimental study also provides evidence in support of this theorizing. In Vasiliauskas and McMinn's (2013) study, 411 undergraduate students participated in different interventions. Students were prompted to recall a significant personal offense that they were

currently working to forgive. The participants were then randomly split into three groups: the prayer intervention group, the devotional attention group, and no-contact control group. Emails were then sent according to each group: (1) daily devotions focusing on prayer and forgiveness (e.g., prayer for guidance, asking for forgiveness), (2) a daily meditation that did not highlight prayer nor forgiveness, or (3) nothing, respectively, for 16 days. Pre-tests were completed before the intervention and a post-test was given 3-weeks after the pre-test. Participants in both prayer and attention groups showed a significant decrease in unforgiveness (F(2,359) = 5.12, p = .006). The prayer intervention's pre-post Cohen's d was .40, whereas the attention group's was .32. Confidence intervals were not reported to support conclusions of whether the prayer intervention was more effective than the attention intervention. However, participants in the prayer intervention group displayed the greatest increase in empathy towards their offenders after the intervention compared to the attention and control groups (Cohen's d of .52). These results suggest that focusing on prayer and relating to God help facilitate forgiveness and adds strength to the possible causal link between R/S and forgiveness through empathy found in other studies.

A third study also examined the connection between contextual R/S and forgiveness using an intervention. Falb (2016) randomly assigned 87 undergraduate students to one of three conditions: mindfulness training, relaxation training, or a wait-list control group. Four sessions were conducted for participants in the two training groups. At one-week and one-month after the intervention, participants completed measures of trait R/S (e.g. affiliation, frequency of attendance at R/S services). They also completed measures of forgiveness of an actual offense before, one week after, and one month after the intervention. Based on the results of a regression analysis, Falb found that when global religiousness was controlled, the mindfulness intervention increased post-test spirituality (measured by change scores over time), which in turn

significantly, but weakly, increased forgiveness (assessed by change scores over time; $\beta = .03$). To test for bidirectional effects, mindfulness was tested as a mediator in this model but was found to have no significant effect. Mindfulness can affect spirituality, and distally affect forgiveness, but spirituality does not affect mindfulness.

Overall, using more contextual measures of R/S in the study of the causal chain to forgiveness concluded with stronger results. Also, the experimental/intervention studies showed that influencing an individual's present state directly had strong effects on forgiveness. These results show that more current, state-like measures of R/S may be a stronger predictor of forgiveness than global, trait measures of R/S.

Discussion

Literature focusing on the relationship between forgiveness and R/S has proliferated in the past 25 years. A major review (McCullough & Worthington, 1999) and a major meta-analysis (Davis et al., 2013) have examined and informed this literature. These reviews indicated that there is an undeniable link between R/S and forgiveness. However, they also noted a discrepancy between the relationships hypothesized by researchers and the real outcomes from studies conducted on the constructs. Importantly, the results of Davis et al.'s (2013) meta-analysis, while solidifying the story-line, have not lead to a major advance in our understanding of questions identified in the prior review (e.g., does measuring R/S and forgiveness contextually help clarify the weak correlations found in the literature?). Therefore, this review examined the current literature on forgiveness and R/S to better understand the direction the field has since taken. In this review I identify a potential discrepancy and tension that provide the primary dissonance driving most research programs focused on how religion/spirituality might influence the process of forgiveness.

In the past 7 years, a total of 42 studies were published studying forgiveness and R/S. Many studies examined the correlational relationship between forgiveness and R/S and found results comparable to those found in Davis et al.'s (2013) review. Though some stronger effect sizes were seen, such cases were only found when R/S was conceptualized and measured to be closer on the causal chain (e.g., community sanctification of forgiveness; Bell et al., 2014). Other studies also tried to better understand and explain the causal network between forgiveness and R/S, positioning R/S or forgiveness as a mediator in various models (e.g., Bishop et al., 2014; Ochu et al., 2018), or examining mediators of the relationship between R/S and forgiveness (e.g., Davis et al., 2012; Ho et al., 2018).

A few innovative studies used designs appropriate for testing causal theories and models (i.e., longitudinal, experimental/intervention). These studies have expanded the existing literature by largely adhering to one of two theories. One theory has focused on the religious importance placed on forgiveness. The second theory has focused on the contextual nature of R/S, such as relational spirituality, and how that appraisal affects forgiveness. These two theories suggest that R/S helps individuals forgive because religions value forgiveness. Therefore, the religious and/or spiritual appraisal of offenses can impact the ability of an individual to forgive. However, it is possible there are still unexplored facets of the R/S and forgiveness relationship.

With the numerous studies in the forgiveness and R/S field, it is safe to assume there is a clear, distinct relationship connecting these two constructs. Yet, the lack of strong theory has stopped the field from exploring the causal mechanisms connecting forgiveness and R/S. How does R/S influence the causal chain that leads to forgiveness? In what way does R/S influence the mechanism of an individual's ability to forgive? Beyond the models tested in previous literature, various avenues and theories surrounding these questions have yet to be explored.

One such direction may lie with an older yet understudied developmental theory of forgiveness. McCullough and Witvliet (2002) summarized that forgiveness may have age-related trends, like moral development. They explain that forgiveness develops in a similar fashion to moral reasoning. Depending on the stage an individual is at in their development, religious pressures may be present that oblige a person to forgive (McCullough & Witvliet, 2002). This suggests R/S and forgiveness may only be strongly related at specific timepoints of an individual's moral development of forgiveness, which helps explain the weak link between forgiveness and trait R/S seen in the current literature. This relationship may be further complicated by the R/S developmental process (Hill & Gibson, 2008). However, this theory remains largely untested, especially due to the dearth of longitudinal studies being conducted.

Another direction that the field should consider is to focus on groups rather than single individuals. Davis et al. (2013) suggested that forgiveness of intergroup offenses is an increasingly important topic of study. This line of research is especially relevant with the ever-increasing intergroup conflicts arising around the world (e.g., political conflict). Previous research has shown that R/S identity can be linked with prejudice and negative attitudes towards the out-group, with some results indicating attitudes can even lead to violence (Blogowska, Lambert, & Saroglou, 2013; Johnson, Rowatt, & LaBouff, 2011). R/S identity can be a strong factor in an individual's life that can lead to extreme hostility towards the out-group depending on the community and leadership influencing them (Ysseldyk, Matheson, & Anisman, 2010). R/S can both teach forgiveness and condone the intolerance towards the out-group (Ysseldyk et al., 2010). The influence a religious/spiritual community may have on the individual is difficult to dismiss. The varying views of morality taught and advocated within different communities could point to various processes of forgiveness which need to be understood and studied.

Future Directions

In terms of future directions, I desire to reinforce focusing on a list of outstanding items from prior reviews. First, the literature still needs more strategic sampling of R/S diversity (Davis et al., 2013). The majority of the studies in this review continued to use convenience samples of undergraduate students and adults, which were predominantly White and Christian. Given replication crisis issues that have become more prominent since the last review, it is crucial to also see whether hypotheses replicate in diverse samples. Second, as stated previously, stronger designs (i.e., longitudinal, experimental) are needed to more accurately understand the temporal unfolding of forgiveness, which by definition involves a *change* in thoughts feelings, motivations, and behaviors towards an offender.

The third and most critical recommendation involves continued innovation in theory and studies examining contextual R/S variables in order to better understand the influence of R/S on forgiveness and to study more proximal R/S variables such as appraisals of the offense (Davis et al., 2013). Although researchers have followed this suggestion, the key need seems to be for a strong theory that can mobilize and sustain programmatic work. Exploring the relatively new focus on contextual factors that may influence the R/S to forgiveness link and also, exploring understudied theories, such as the developmental model of forgiveness and R/S, or expanding beyond individuals to groups may be the next steps for the field.

In summary, research on how R/S affects forgiveness has only superficially tapped the richness of theory within the psychology of religion/spirituality on how R/S influences the practice of virtue. Given that studies employing contextual or relational measures, longitudinal or experimental designs, and religiously or ethnically diverse samples are only in their infancy, I hope the research questions I have outlined can spur continued, innovative work in these areas.

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Table 1.1. Summary of Studies in Review

Citation	Sample	Procedure	R/S Measure	R/S Trait / Context	Finding
		State Fo	orgiveness	Concent	
Ahn-Im, G. (2017). Forgiveness education for children in a religious setting. Retrieved from ProQuest Information & Learning, US.	29 students (age 7-14) from Protestant churches in Chicago	Participants engaged in 4 forgiveness classes (Enright) and completed several assessments.	Youth Spirituality Scale	Trait	There was a significant increase in spirituality scores after the forgiveness curriculum, however, spirituality and forgiveness were not significantly correlated.
Ayten, A. (2012). How religion promotes forgiveness: The case of Turkish Muslims. <i>Archive for the Psychology of Religions</i> , 34(3), 411-425.	321 participants from Turkey who identified as Sunni Muslims.	Participants answered a questionnaire.	Brief Islamic Religiosity Measure	Trait	Religiosity is a significant predictor of forgiveness (4% of variance)
Bell, C., Woodruff, E., Davis, D. E., Van Tongeren, D. R., Hook, J. N., & Worthington, E. L., Jr. (2014). Community sanctification of forgiveness. <i>Journal of Psychology and Theology</i> , 42, 243-251.	307 undergradua te students from a large urban university.	Participants thought of a time when another person hurt them and wrote about the experience. They then completed several measures.	RCI	Trait	No correlation between forgiveness and RCI, but RCI moderated between forgiveness and community sanctification expectations (relationship stronger at higher RCI)

Choe, E., Davis, D. E., McElroy, S. E., Westbrook, C. J., van Nuenen, M., Van Tongeren, D. R., & Hook, J. N. (2016). Relational spirituality and forgiveness of offenses committed by religious leaders. <i>International Journal for the Psychology of Religion</i> , 26, 46-60.	208 undergradua te students at a large urban university.	Described an offense they experienced by a R/S leader and then answered several questionnaires.	Dedication to the Sacred Scale, ATSS), Sacred Loss & Desecration Scale, spiritual commitment	Trait & Context	Appraisals of relational spirituality (anger toward God & positive attitudes toward God) significantly predicted unforgiveness.
Choe, E., Davis, D. E., McElroy, S. E., Westbrook, C. J., van Nuenen, M., Van Tongeren, D. R., & Hook, J. N. (2016). Relational spirituality and forgiveness of offenses committed by religious leaders. <i>International Journal for the Psychology of Religion</i> , 26, 46-60.	365 undergradua tes from a large urban university.	Described an offense they experienced by a R/S leader and then answered several questionnaires.	Anger towards God, Positive attitudes toward God, Sacred Loss and Desecration, REST	Context	Relational engagement of God mediated between positive attitudes toward God and unforgiveness. Relational engagement of God mediated the relationship between positive attitudes toward God and benevolence & the relationship between anger toward God and benevolence
Conway, A. D. (2013). The role of spirituality in decisional and emotional	105 adult participants	Participants completed a webbased survey.	Gibson Adjective	Trait	Negative cognitive experience of God significantly negatively predicted decisional forgiveness.

forgiveness. Retrieved from ProQuest Information & Learning, US.			Checklist, RCOPE		Negative religious coping significantly positively predicted emotional forgiveness, and positive religious coping significantly negatively predicted emotional forgiveness.
Cooper, M. J., Pullig, C., & Dickens, C. (2016). Effects of narcissism and religiosity on church ministers with respect to ethical judgment, confidence, and forgiveness. <i>Journal of Psychology and Theology</i> , 44, 42-54.	488 participants	Participants completed an online survey.	Religious Orientation Scale	Trait	Extrinsic personal religiosity significantly negatively predicted forgiveness. Intrinsic religiosity significantly positively predicted Forgiveness.
Davis, D. E., Hook, J. N., Van Tongeren, D. R., Gartner, A. L., & Worthington, E. L., Jr. (2012). Can religion promote virtue?: A more stringent test of the model of relational spirituality and forgiveness. International Journal for the Psychology of Religion, 22, 252-266.	425 undergradua te students from a large urban university.	Participants thought of an experience when they had been hurt by another then completed measures.	RCI, SOSS, Sacred Desecration Scale, Dedication to the Sacred	Trait & Context	Appraisals of spirituality significantly predicted unforgiveness, after controlling for hurtfulness and relationship closeness. Empathy partially mediated between desecration and unforgiveness.

Davis, D. E., Hook, J. N., Van Tongeren, D. R., Gartner, A. L., & Worthington, E. L., Jr. (2012). Can religion promote virtue?: A more stringent test of the model of relational spirituality and forgiveness. International Journal for the Psychology of Religion, 22, 252-266.	undergradua te students from a large urban university, who had experienced a transgressio n in a romantic relationship in the past 8 weeks.	Participants described the transgression and completed measures. Participants completed a measure of unforgiveness weekly for 6 weeks.	Similarity of the Offender's spirituality, sacred desecration subscale, dedication to the sacred scale	Context	Appraisals of dedication to the sacred predicted faster decline in unforgiveness. Appraisals of desecration predicted slower declines in unforgiveness.
Davis, D. E., Van Tongeren, D. R., Hook, J. N., Davis, E. B., Worthington, E. L., Jr., & Foxman, S. (2014). Relational spirituality and forgiveness: Appraisals that may hinder forgiveness. <i>Psychology</i> of Religion and Spirituality, 6, 102-112.	425 undergradua te students from a large, urban university	Participants specified a time they had been hurt by another and then completed measures.	Viewing the offender as evil, Viewing the offense as a desecration, SOSS, Anger towards God, RCOPE, RCI	Trait & Context	Negative appraisals of relational spirituality positively related to unforgiveness. Anger toward God and desecration significantly predicted unforgiveness.
Edara, I. R. (2015). Mediating role of	637 participants,	Completed surveys.	Spiritual Transcendenc	Trait	Individualism & collectivism both mediated between spirituality &

individualism-collectivism in spirituality's relation to motivational forgiveness. Asia Pacific Journal of Counselling and Psychotherapy, 6, 28-40.	online and in-person.		e Scale, Intrinsic Religious Motivation Scale		forgiveness; High Ind. = lower forgiveness, High Col. = higher forgiveness.
Edara, I. R. (2013). Spirituality's unique role in positive affect, satisfaction with life, and forgiveness over and above personality and individualism-collectivism. Research in the Social Scientific Study of Religion, 24, 15-41.	637 adult participants from across the U.S.	Participants completed an online survey.	Spiritual Transcendenc e Scale, Intrinsic Religious Motivation Scale	Trait	Spirituality significantly predicted forgiveness beyond personality and cultural factors.
Falb, M. D. (2016). Effects of mindfulness training on individuals experiencing post-breakup distress: A randomized controlled trial. Retrieved from ProQuest Information & Learning, US.	undergradua te students at BGSU who felt distressed about a recent breakup.	Participated were in mindfulness training, relaxation training, or on a waitlist.	Daily Spiritual Experiences Scale, R/S Affiliation, Frequency of attendance at R/S services, self-report of R/S	Trait	Spirituality mediated between mindfulness and forgiveness. Individuals starting with lower levels of mindfulness experiences greater increases in spirituality and then greater forgiveness.

Ho, M. Y., Worthington, E. L., Jr., & Davis, D. E. (2017). Be a peace maker: Examining the relationship between religiousness and intergroup forgiveness. Peace and Conflict: Journal of Peace Psychology, 23, 427-431.	participants Hong Kong Chinese individuals after a bus hi-jacking incident in 2010.	Participants completed an online survey.	Single item religious affiliation	Trait	Religiousness significantly positively predicted intergroup forgiveness. Empathy partially mediated between religiousness and intergroup forgiveness.
Ho, M. Y., Worthington, E. L., Jr., & Davis, D. E. (2017). Be a peace maker: Examining the relationship between religiousness and intergroup forgiveness. <i>Peace and Conflict: Journal of Peace Psychology, 23, 427-431.</i>	80 undergradua te students in Hong Kong.	Participants read an article about a typhoon in the Philippines and then completed measures.	Single item religious affiliation	Trait	Religiousness significantly positively predicted intergroup forgiveness. Empathy fully mediated between religiousness and intergroup forgiveness.
Holeman, V. T., Dean, J. B., DeShea, L., & Duba, J. D. (2011). The multidimensional nature of the quest construct forgiveness, spiritual perception, and differentiation of self.	undergradua te and graduate students from 3 different religiously	Participants were prompted to think of a person who had hurt them and write about the event. They then completed an online survey.	Sacred Loss and Desecration Scale	Context	Sacred loss predicted significant variance of Emotional Forgiveness Scale (EFS) reduction of negative emotion. Desecration explained significant negative variance of Decisional Forgiveness Scale (DFS) prosocial intention, EFS presence of positive emotion, and

Journal of Psychology and Theology, 39, 31-43.	affiliated institutes.				EFS reduction of negative emotion.
McElroy, S., Choe, E., Westbrook, C., Davis, D. E., Van Tongeren, D. R., Hook, J. N., Espinosa, T. (2016). Relational spirituality and forgiveness of intergroup offenses. <i>Journal of Psychology and Theology</i> , 44, 190-200.	166 undergradua tes from a Southern university.	Participants described an intergroup offense and completed measures online.	RCI, Attachment to God Scale, Similarity of an Offender's Spirituality Scale, Desecration subscale	Trait & Context	Avoidant attachment to the Sacred, Anxious attachment to the Sacred, and desecration were negatively correlated with forgiveness. Desecration was a significant predictor of forgiveness, after controlling for other variables.
Messay, B., Dixon, L. J., & Rye, M. S. (2012). The relationship between Quest religious orientation, forgiveness, and mental health. <i>Mental Health, Religion & Culture, 15</i> , 315-333.	242 undergradua te students at a medium- sized Catholic university.	Completed a survey.	Multidimensi onal Quest Orientation Scale	Trait	Moralistic interpretation positively correlated with state forgiveness. Religious angst and existential motives were negatively correlated with both forgiveness measures. Change was negatively correlated with forgiveness; exploration was positively correlated with forgiveness. Ecumenism was negatively correlated with trait forgiveness.
Schultz, J. M., Altmaier, E., Ali, S., & Tallman, B. (2014). A study of posttraumatic spiritual	146 adult participants who had an interpersona	Participants completed an inperson survey.	Religious and Spiritual Importance (made),	Context	TRIM (avoidance - negatively, revenge - positively) significantly predicted spiritual decline.

transformation and forgiveness among victims of significant interpersonal offences. Mental Health, Religion & Culture, 17, 122-135.	l offense in the past 5 years, but not currently ongoing.		Spiritual Transformatio n Scale		
Tsarenko, Y., & Tojib, D. (2012). The role of personality characteristics and service failure severity in consumer forgiveness and service outcomes. <i>Journal of Marketing Management</i> , 28, 1217-1239.	165 college students from a large Australian university.	Demographic information was collected prior. Participants were prompted with a scenario (just moved and setting up internet, but company was delayed in the service). Then they answered measures about the scenario.	3-item religiosity, 6-item spirituality	Trait	R/S positively predicted both emotional and decisional forgiveness. Emotional forgiveness negatively predicts intention to switch providers (weak) and engagement in negative word of mouth (moderate). Decisional forgiveness negatively predicts intention to switch providers (strongly) and engagement in negative word of mouth (significant).
Van Tongeren, D. R., Welch, R. D., Davis, D. E., Green, J. D., & Worthington, E. L., Jr. (2012). Priming virtue: Forgiveness and justice elicit divergent moral judgments among religious individuals. <i>The</i>	105 college students from a mid- Atlantic university	After completing a survey, participants were primed with visualizing either a forgiving or retributive event. They were then presented with three morally questionable	RCI	Trait	When primed with forgiveness, an individual with high RCI had a more lenient moral judgements towards the actor compared to the retributive justice prime.

Journal of Positive Psychology, 7, 405-415. scenarios. They rated each actor and actors' behaviors.

Vasiliauskas, S. L., & McMinn, M. R. (2013). The effects of a prayer intervention on the process of forgiveness. *Psychology of Religion and Spirituality*, 5, 23-32.

undergradua te students from 12 private Christian colleges in the U.S. Participants completed a pretest and pre-survey, then were randomly assigned to 1 of 3 groups (prayer intervention, attention group, and no-contact control group).

Participants filled out the post-test 3 weeks after the pretest.

RCI, REST Trait

State unforgiveness showed a significant decrease in both the prayer and devotional attention groups. The prayer intervention showed a slightly higher effect size (.40 vs .32)

		Trait Fo	orgiveness		
Anderson-Mooney, A. J., Webb, M., Mvududu, N., & Charbonneau, A. M. (2015). Dispositional forgiveness and meaningmaking: The relative contributions of forgiveness and adult attachment style to struggling or enduring with God. <i>Journal of Spirituality in Mental Health</i> , 17, 91-109.	participants from churches in Michigan, Oregon, Virginia, and Western Washington.	Participants completed paper questionnaires which were then returned to researchers.	Suffering with God Scale	Trait	Forgiveness significantly negatively predicted religious struggling and significantly positively predicted Religious enduring.
Bishop, A. J., Randall, G. K., & Merten, M. J. (2014). Consideration of forgiveness to enhance the health status of older male prisoners confronting spiritual, social, or emotional vulnerability. Journal Of Applied Gerontology: The Official Journal Of The Southern Gerontological Society, 33, 998-1017.	261 older, male, prison inmates.	Completed surveys.	Attachment to God Scale	Trait	Forgiveness mediated between attachment to God (Anxiety/Ambivalence towards God) and perceived health

Cannon, C. F. (2014). Therapists' attitudes toward forgiveness: The relationship between forgiveness conceptualizations and predicted likelihood to assist clients to forgive during treatment. Retrieved from ProQuest Information & Learning, US.	269 self-identified as practicing counseling/c linical psychologist s, counselors, clinical social workers, or psychothera pists.	Participants completed a web-based survey.	RCI	Trait	RCI and attitudes (ATFS) were significant predictors of TNTF, after controlling for other variables. RCI and HFS were significant predictors of ATFS, after controlling for TNTF. HFS moderated between RCI and TNTF (low HFS showed a stronger relationship between RCI and TNTF).
Davis, D. E., DeBlaere, C., Hook, J. N., Burnette, J., Van Tongeren, D. R., Rice, K. G., & Worthington Jr, E. L. (2015). Intergroup Forgiveness of Race- Related Offenses. <i>Journal</i> of Counseling Psychology, 62, 402-412.	undergradua te students from a large urban university.	Participants completed an online survey.	RCI	Trait	RCI moderately predicted making a decision to forgive, but not related to avoidance or revenge.
Krause, N., & Hayward, R. D. (2014). Religious involvement and death anxiety. <i>Omega</i> , 69, 59-78.	663 older Mexican Americans	Face-to-face interviews were conducted with the participants.	Religious Commitment (made)	Trait	Higher RC predicted higher forgiveness of others.

Ochu, A. C., Davis, E. B., Magyar-Russell, G., O'Grady, K. A., & Aten, J. D. (2018). Religious coping, dispositional forgiveness, and posttraumatic outcomes in adult survivors of the Liberian Civil War. Spirituality in Clinical Practice, 5, 104-119.	Liberians residing in either the capital of Liberia or the Buduburam refugee camp in Ghana.	Participants completed paper questionnaires which were then returned to researchers.	RCOPE	Trait	Dispositional forgiveness mediated between positive religious coping and perceived PTG.
Peterson, J. A. (2016). Examining the relationship between forgiveness and Subjective Well-Being as moderated by implicit Religiousness and Spirituality. Retrieved from ProQuest Information & Learning, US.	120 undergradua te students from a private university.	Participants completed an online survey, then they completed an IAT task online.	R/S IAT, Duke Religion Index, Attitude Toward God Scale,	Trait	Implicit R/S moderated the relationship between forgiveness and subjective well-being. For individual with high implicit R/S total forgiveness predicted more satisfaction with life and lower negative affect. Also, for individuals with high implicit R/S more self-forgiveness predicted lower negative affect. Higher R/S individuals' situational forgiveness predicted lower negative affect.
Randall, G. K., & Bishop, A. J. (2013). Direct and indirect effects of religiosity on valuation of life through forgiveness	261 older, male, prison inmates.	Completed surveys.	Duke Religion Index	Trait	Forgiveness (self, other, situational) and social provisions partially mediated between religiosity and valuation of life.

and social provisions among older incarcerated males. *The Gerontologist*, 53, 51-59.

Sandage, S. J., & Crabtree, S. (2012). Spiritual pathology and religious coping as predictors of forgiveness. <i>Mental Health, Religion & Culture, 15</i> , 689-707.	graduate students from an evangelical seminary in the Midwest.	Completed survey.	Spiritual Assessment Inventory, RCOPE	Trait	Dispositional forgiveness was positively correlated with 7-items on the positive religious coping scale, and uncorrelated with items on the negative religious coping scale.
Sandage, S. J., & Crabtree, S. (2012). Spiritual pathology and religious coping as predictors of forgiveness. <i>Mental Health, Religion & Culture, 15</i> , 689-707.	graduate students from an evangelical seminary in the Midwest.	Completed survey.	Spiritual Assessment Inventory, RCOPE	Trait	Positive religious coping (positive), spiritual instability(negative), and quadratic effect for spiritual grandiosity (negative) significantly predicted forgiveness.
Sharma, S., & Singh, K. (2018). Religion and wellbeing: The mediating role of positive virtues. Journal of Religion and Health.	220 adults in India.	Participants filled out an online questionnaire.	DSE, Religiosity	Trait	Spirituality, then gratitude, and finally forgiveness mediated between religiosity and wellbeing

doi:10.1007/s10943-018-0559-5

Toussaint, L. L.,
Marschall, J. C., &
Williams, D. R. (2012).
Prospective Associations
between
Religiousness/Spirituality
and Depression and
Mediating Effects of
Forgiveness in a
Nationally Representative
Sample of United States
Adults. Depression
Research and Treatment,
2012.
doi:10.1155/2012/267820

966 participants random sample.

Participated in a Religiosity/spi Trait telephone survey at rituality 2 time points.

Forgiveness of others mediated between R/S and depression at time 2.

van Laarhoven, H. W. M., Schilderman, J., Verhagen, C. A. H. H. V. M., & Prins, J. B. (2012). Comparison of attitudes of cancer guilt and forgiveness in cancer patients without evidence of disease and advanced cancer patients in a palliative care setting. Cancer Nursing, 35, 483-492.

152 patients (97 without disease, 55 advanced patients)

Participants completed paper questionnaires which were then returned to researchers.

Image of God Trait scale

With advanced cancer patients, higher forgiveness of others was correlated with higher religious salience and adherence to an image of an unknowable God. For advanced cancer patients, religious salience significantly predicted forgiveness.

		Trait and Sta	ate Forgiveness		
Buechsel, R. K. (2011). Development of an implicit measure of dispositional forgiveness. Retrieved from ProQuest Information & Learning, US.	undergradua te students at a private institution.	Complete a survey and IATs.	Religiousness Thermometer	Trait	R/S positively correlated with attitudes toward forgiveness, forgiveness scales, and the forgiveness IAT (FIAT).
		Self-Forg	iveness (SF)		
Farley, A. M. (2011). Predicting resiliency after brain injury: The relationship of forgiveness and religious coping. Retrieved from ProQuest Information & Learning, US.	9 adults who were in a brain injury day program.	Participants completed survey packets.	RCOPE	Trait	Negative religious coping and SF were positively correlated.
Kokoris, C. L. (2012). The emotional experience of god and self-forgiveness. Retrieved from ProQuest Information & Learning, US.	80 Christian participants.	Participants completed an online survey.	Attachment to God Inventory	Trait	Anxious attachment to God significantly predicted SF (less anxiety = more SF).

Lyons, G. C. B., Deane, F. 277
P., Caputi, P., & Kelly, P. partius and the treatment of substance use disorders: An exploration of forgiveness, resentment and purpose in life.

Addiction Research & Theory, 19, 459-469.

participants administ who were in SUD treatment programs in Australia.

Participants were administered surveys

Religious background and behavior questionnaire, DSE, Spiritual belief scale Trait

SF partially mediated between daily spiritual experiences and purpose in life.

Trait and Self-Forgiveness						
Escher, D. (2013). How does religion promote forgiveness? Linking beliefs, orientations, and practices. <i>Journal for the Scientific Study of Religion</i> , 52, 100-119.	1445 adult participants from around the U.S.	Trait and Se Participated in an in-person survey in 1998	Religious orientation/ pervasiveness	Trait	Current religious affiliation predicted more SF and other forgiveness. Adolescent (16 years old) religious affiliation predicted current trait forgiveness. Religious activity (prayer and religious service attendance) significantly	
Religion, 32, 100-119.					predicted SF and other	
					forgiveness. Collaborative orientation towards God predicted more SF and other forgiveness.	
					Pervasive view of religion (carry	
					religion into other dealings) predicted SF.	

Hayward, R. D., & Krause, N. (2013). Trajectories of change in dimensions of forgiveness among older adults and their association with religious commitment. <i>Mental Health, Religion</i> & <i>Culture, 16</i> , 643-659.	Wave 1: 1500 older adult participants in the U.S.; Wave 2: 1024; Wave 3: 969; Wave 4 - 718	Four waves of interviews were conducted inperson at participants' homes.	Religious Commitment (made)	Trait	Higher RC predicted more Other Forgiveness, less difficulty forgiving, less conditionality in forgiveness, and more SF. RC also predicted slower increase with age in forgiveness, slower decrease in difficulty in forgiving others, and slower increase in SF.
Lutjen, L. J., Silton, N. R., & Flannelly, K. J. (2012). Religion, forgiveness, hostility and health: a structural equation analysis. <i>Journal of Religion and Health</i> , <i>51</i> , 468-478.	1629 participants in the U.S.	Participants completed an online survey.	Single item religious affiliation, Religious behavior	Trait	Higher religiosity significantly positively predicted forgiving (others and self), which then significantly negatively predicted hostility, which significantly negatively predicted subjective physical health. Forgiveness and hostility mediated between religiosity and subjective health.

(ATS = Attitudes toward the Sacred Scale; ATFS = Attitudes towards Forgiveness Scale; DSE = Daily Spiritual Experience Scale; HFS = Heartland Forgiveness Scale; IAT = Implicit Association Test; RCI = Religious Commitment Inventory; REST = Relational Engagement of the Sacred for a Transgression Scale; SOSS = Similarity of Offender's Spirituality Scale; TNTF = Transgression Narrative Test of Forgiveness)

Chapter 2: Pressure to Forgive: How Religious Pressure Effects Moving from Decisional to Emotional Forgiveness

Within the past 25 years, the literature on forgiveness went from being a small literature with only a few empirical studies to an expansive literature spanning many of the subdisciplines of psychology (Fehr, Gelfand, & Nag, 2010). Despite much scientific progress, some of the early questions about how religion/spirituality (R/S) relates to forgiveness still remain unanswered (for reviews, see Choe, McLaughlin, McElroy, & Davis, in press; Davis, Worthington, Hook, & Hill, 2013; McCullough & Worthington, 1999). Although prior research has documented that R/S constructs tend to be correlated with forgiveness, little has been done to clarify the links between R/S and forgiveness. Therefore, in the present study, I draw on critiques suggesting the importance of examining how R/S may influence forgiveness through using more contextual R/S constructs. By contextual, I am referring to R/S constructs that are appraisals made of a specific situation from a R/S perspective, such as viewing an offense as a desecration. I also draw on strong critiques of the overreliance of cross-sectional methodologies to study forgiveness, given that it has been defined as involving *changes* in motivations towards an offender.

Research on How Religious Orientation May Influence Forgiveness

Although many religious traditions promote forgiveness as a virtue, in psychological literatures, forgiveness has been defined in purely secular terms. It involves a decrease in negative thoughts, emotions, motivations, and behaviors toward the person who has caused an offense (Exline, Worthington, Hill, & McCullough, 2003). Forgiveness is distinct from condoning, excusing, or justifying the offense (Wade, Worthington, & Meyer, 2005). Furthermore, it is distinct from reconciliation, which involves repair of trust in a relationship with the offender (de Waal & Pokorny, 2005).

Despite this secular framing, we should not forget that many people will understand and practice forgiveness within a religious worldview (Rye et al., 2000). For example, Worthington (1988) theorized that individuals strongly committed to a religious identity tend to view all aspects of life through a religious lens. Thus, they tend to imbue various aspects of life—objects, relationships, goals, and values—through the teachings and shared worldview of religious leaders, doctrine, and community. Within this article, I define religion as an organized system in which what is believed and how it is practiced is agreed upon by a religious group (Hill et al., 2000). Spirituality is often, but not always, viewed as a related construct that involves a general sense of connection with the Sacred (Hill et al., 2000). For religious individuals, a religious worldview may influence how people understand and practice forgiveness. For example, religious cultures may influence when people believe that forgiveness is morally obligated (Cohen, Malka, Rozin, & Cherfas, 2006).

Given that many religions promote forgiveness as a virtue, one of the earliest hypotheses tested in empirical scholarship on forgiveness was the idea that religious commitment ought to increase the degree to which one forgives an offense. Several systematic reviews have addressed the many studies on the relationship between religiosity and forgiveness. Twenty years ago, McCullough and Worthington (1999) pointed out a discrepancy in research on the relationship between religiosity and forgiveness: The relationship tended to be robust and moderate if forgiveness was measured as a trait-like construct (e.g., I am a forgiving person), but the relationship was less consistent when measured as a state. More recently, meta-analytic results corroborated this conclusion (r/s-trait forgiveness, r = .29; r/s-state forgiveness, r = .15; Davis et al., 2013). In addition, this review noted a shift towards studying the relationship between R/S and forgiveness using more contextual measures of R/S that have the potential to change within

religious individuals over time because they are specific to one situation at a time. Often the constructs were quite different from typical trait-like measures of religiosity. Examples of more contextual measures include appraisals of the degree to which victims appraise the offense as a desecration (e.g., Pargament, Magyar, Benore, & Mahoney, 2005), the offender as spiritually similar or dissimilar (Davis, Hook, van Tongeren, Gartner, & Worthington, 2012; Davis et al., 2014), or their relationship with the Sacred as being damaged by the offense (Davis et al., 2012). For such state-like constructs of R/S, the relationship between R/S and state forgiveness was stronger than when R/S was measured as a trait (r = .23; Davis et al., 2013). Once again, the authors noted that the field had not yet transitioned to testing theories or casual mechanisms using appropriate research designs, such as longitudinal or experimental designs. More stringent study designs and research methods are required to appropriately test for causality that is needed to further assess the relationship between R/S and forgiveness.

Most recently, Choe et al. (in press) reviewed the literature since Davis et al. (2013), focusing especially on questions remaining from McCullough and Worthington's (1999) paper and Davis et al.'s (2013) meta-analysis (e.g., when does R/S promote actual forgiveness; what is the causal mechanism linking R/S and forgiveness). They found that, with only a few exceptions, the vast majority of studies had not heeded advice of prior reviews to move towards research designs that could examine the temporal unfolding of forgiveness within religious individuals. This gap is especially concerning, given the compelling critique of existing forgiveness work. Namely, the construct is defined as change over time—thus, cross-sectional measures of unforgiveness cannot distinguish forgiveness from other related constructs such as forbearance (e.g., beginning and remaining low in unforgiveness; McCullough & Root, 2005). Therefore, in order to advance scholarship on the relationship between R/S and forgiveness, it is important to

heed the advice given nearly 20 years ago to study R/S constructs that may influence forgiveness.

R/S Factors that may Hinder Forgiveness

One key to understanding how R/S may influence forgiveness may include not just assuming a positive relationship (Davis et al., 2012). If we hone in on R/S constructs that may change over time, many R/S constructs may amplify the degree to which a person experiences unforgiveness. Furthermore, R/S constructs may impair a person's ability to process unforgiving thoughts, emotions, and motivations. Existing work has documented that spiritual appraisals may evoke more negative reactions after an offense. For example, a victim may appraise an offense as a desecration, view the offense as causing a sacred loss, or come to view the offender as spiritually dissimilar (Worthington & Sandage, 2016).

In the current paper, I consider another factor that may put religious individuals at risk for difficulties with forgiveness—feeling religious pressure to forgive. One of the early concerns about using forgiveness therapeutically involved contexts of abuse. Through forgiveness, victims might feel pressure to cope with an exploitive situation. Even after leaving an abusive relationship, pressure to forgive might constitute a second offense (Freedman & Zarifkar, 2016; Tomm, 1999). What was never fully addressed conceptually or empirically is the possibility that religious pressure might sometimes exert a coercive pressure.

Some religious traditions may teach that forgiveness is obligated unconditionally. For example, within Christianity, many people interpret the Lord's Prayer ("forgive us our debts as we forgive our debtors") as making divine forgiveness contingent on being willing to forgive others unconditionally (Worthington, 2006). Even if the victim has appropriate safeguards to limit future exploitation, pressure to forgive may undermine a healthy grieving process (Vitz,

2018). For example, in Enright's process model of forgiveness, which involves 20 steps, victims are encouraged to spend time attending to the painful feelings before moving towards forgiveness (Enright & Fitzgibbons, 2015).

A conceptual distinction that may ease the moral pressure to forgive immediately is the distinction between decisional forgiveness, which is defined as deciding to commit energy towards forgiving another and can occur the instant a person makes a decision to forgive (Davis et al., 2015), and emotional forgiveness, which involves a process of replacing negative, unforgiving emotions with positive, other-oriented emotions, such as empathy, sympathy, compassion, or gratitude. Anyone can make a decision to forgive, but some offenses are so painful and severe that the victim may not actualize full emotional forgiveness (Baumeister, Exline, & Sommer, 1998; Worthington, Witvliet, Pietrini, & Miller, 2007).

Only a few studies have studied decisional forgiveness. Some initial scale development established the construct of decisional forgiveness and distinguished it from other types of forgiveness (e.g., emotional forgiveness; Davis et al., 2015). When specifically considering how decisional and emotional forgiveness may be related to R/S constructs, only one study has examined these relationships. Conway (2012) conducted a cross-sectional study with 105 highly religious Christian participants, where she examined the relationship between decisional and emotional forgiveness and various R/S constructs (i.e., cognitive experience of God, emotional experience of God, religious coping). Correlational results found that positive cognitive and emotional experiences of God were positively correlated with both decisional and emotional forgiveness (rs = .20 to .29). Similarly, negative cognitive and emotional experiences of God were negatively correlated with decisional and emotional forgiveness (rs = -.44 to -.28). In a set of regression analyses that examined the influence of cognitive experiences of God, emotional

experiences of God, and religious coping on decisional and emotional forgiveness, Conway found that negative cognitive experiences of God significantly predicted lower decisional forgiveness ($\beta = -.53$, p < .001), which the author posited may be due to an individual's beliefs about God influencing their beliefs about justice, mercy, forgiveness, and ultimately on their decision to forgive. A second regression found negative religious coping was the most significant predictor of emotional forgiveness ($\beta = .25$, p < .001), however, this seemingly counterintuitive finding was not fully explored within the study. While this study showed initial evidence about the connections between religious constructs and decisional/emotional forgiveness, confusing results further clouded the nature of the relationship between forgiveness and R/S constructs. Despite theorizing about its potential importance for easing religious pressure, no studies have examined how R/S constructs are related to decisional and emotional forgiveness over time.

Initial Research on Religious Pressure to Forgive

We have conceptual reasons to expect religious pressure may influence how decisional and emotional forgiveness influence wellbeing within victims. Some early studies documented that many victims reported forgiving because of perceived pressure from religious values and close individuals (Enright, Santos, & Al-Mabuk, 1989; Gordon et al., 2008; Mullet, Hourdbine, Laumonier, & Girard, 1998). However, these studies did not examine the consequences that came from forgiving as a result of pressure. Forgiving because one feels pressured may interfere with an adaptive process of forgiveness and may even cause harm (Vitz, 2018). Namely, sometimes victims may experience community values of forgiveness as ego dystonic and coercive. Feeling ambivalent, victims of an offense may forgive half-heartedly, perhaps communicating forgiveness publicly while still ruminating about the offense. Drawing on object relations theory, Vitz posited that individuals tend to split internal representations of people:

They may tend to view friends as entirely good and enemies are entirely bad, without the nuance to see that all people have both positive and negative qualities. Accordingly, severe offenses, particularly for less mature individuals, may cause a shift in internal representation, which causes strong interpersonal resentment. Resentment can have short-term benefits (e.g., feeling of control, moral pride in one's self), but causes many problems if maintained chronically. According to Vitz, people sometimes become stuck if they feel external pressure to forgive while also experiencing interpersonal resentment as beneficial.

As intuitive as this theorizing may be, so far research results have not clearly documented the problem. In fact, one study offered evidence that pressure to forgive can increase forgiveness (Gordon et al., 2008). The sample included 113 Christian adults who completed measures of intrinsic (i.e., holding religious beliefs and values for the sake of the religion; Allport & Ross, 1967) and extrinsic religious orientation (i.e., using religion for personal benefit; Allport & Ross, 1967), state forgiveness, and social pressure to forgive (Gordon et al., 2008). Although intrinsic religious orientation correlated with forgiveness (i.e., higher benevolence [r = .25] and lower revenge [r = -.26]), extrinsic religious orientation correlated with lower forgiveness (lower benevolence [r = -.24] and higher revenge [r = .36]). Social pressure to forgive correlated with greater forgiveness (negative correlation with revenge and avoidance motivations and positive correlation with benevolence motivations; $r_{revenge} = -.16$, p = not significant; $r_{avoidance} = -.39$, p = -.39<.01; $r_{benevolence} = 51$, p < .01). Furthermore, extrinsic religious orientation increased the positive relationship between pressure to forgive and forgiveness. The study did not, however, examine the possibility that forgiveness under duress might result in negative consequences for wellbeing.

Pressure to forgive might be especially problematic in samples with severe offenses or even trauma. We could potentially adduce indirect evidence for this idea from a study of 278 childhood abuse survivors (Schwartzenberger, 2016). In a cross-sectional design, participants completed measures of self-esteem, anxiety, depression, anger, forgiveness, and parental abuse. Greater forgiveness of an abusive parent was associated with greater anxiety and depression (r anxiety = .27, p < .05; $r_{depression} = .40$, p < .01). Regression analyses that examined parental forgiveness and self-forgiveness as predictors of anxiety and depression also supported this finding. Results suggested that parental forgiveness predicted increases in both anxiety and depression ($\beta_{anxiety} = .34$, p < .05; $\beta_{depression} = .48$, p < .01), while self-forgiveness only significantly predicted decreases in anxiety ($\beta_{anxiety} = -.75$, p < .05). The authors interpreted these findings as consistent with their theorizing that forgiveness under moral duress can complicate and even hamper the process of forgiveness; however, pressure to forgive was not measured. Taken together, these studies corroborate the need for additional work to explore the complex ways that religious pressure to forgive may sometimes interfere with the healing process for victims of an offense.

The Present Study

The purpose of the present study was to simultaneously respond to several long-standing gaps in scholarship on how R/S factors may help or hinder forgiveness. Prior reviews have consistently called for longitudinal studies that assess both R/S and forgiveness over time. Consistent with recent theorizing, I focused on the idea of when R/S constructs may interfere with the temporal unfolding of forgiveness. I included two constructs of religious pressure to forgive (i.e., religious beliefs pressure, social religious pressure) to investigate how they might interact with beliefs about forgiveness differently in order to put victims at risk for poor mental

health outcomes, such as poorer relationship quality. Also, I focus on offenses within a romantic relationship to further specify the study parameters by only examining a single type of relationship. This also allowed us to focus on measures of relationship quality as indicators of well-being.

Accordingly, I will test the following hypotheses. The first hypothesis is that religious orientation will predict perceived religious social pressure to forgive. Specifically, extrinsic religious orientation will significantly predict higher perceived social pressure to forgive.

Considering Gordon et al.'s (2008) results, the more an individual is externally motivated to be a part of a religious organization and/or interpret their religious view from an extrinsic point of view, the more likely it is they will perceive more external pressure influencing their behaviors.

An example would be someone forgiving an offense due to the opinions of others or to appease others. At the same time, I hypothesized that intrinsic religious orientation would predict higher perceived religious pressure to forgive. The more an individual holds their religious beliefs as their core values, the more likely it is that religious teachings will influence their behaviors. For example, someone might deeply value forgiveness because they aspire to become someone that embodies the highest ideals of their faith tradition.

The second hypothesis was that decisional forgiveness will predict change in emotional (state) forgiveness over time. Specifically, higher decisional forgiveness will predict more forgiveness over time (steeper slope). Considering decisional forgiveness is the first step in the sequence of forgiveness, individuals with higher levels of initial decisional forgiveness will be more likely to experience more change in emotional forgiveness (more forgiveness). Individuals with lower levels of decisional forgiveness (or no decisional forgiveness) will likely need more

time to come to the decision to forgive an offense, which will slow down the overall forgiveness process.

The third hypothesis was that religious pressure to forgive will predict slower changes in emotional (state) forgiveness over time. Increased perceived pressure will lead to higher initial emotional forgiveness (higher intercept) and less change in forgiveness over time (flatter slope). While prior research is equivocal on the how pressure to forgive may influence forgiveness, the possible negative ramifications of pressure to forgive may be seen in less change over time (Vitz, 2018). On the other hand, the possibility of pressure to forgive leading to increased forgiveness may be due to initial superficial forgiveness (Schwartzenberger, 2016).

The fourth hypothesis was that initial levels of decisional forgiveness will predict more change in relationship quality over time.. The positive effects of forgiveness have been robustly documented throughout the literature (Fehr et al., 2010). Though decisional forgiveness is only the first step, deciding to forgive will relieve the individual from some of the psychological burden the offense has given them and improve the relationship quality between the two individuals. Therefore, higher decisional forgiveness will predict better initial levels of relationship quality and more change (steeper, positive slope) over time.

The fifth hypothesis is that pressure to forgive will negatively influence the intercept and slope of relationship quality over time. Namely, theory on decisional forgiveness would suggest that the more someone has decided to forgive, the more quickly the stress of unforgiveness would abate leading to more rapid changes in relationship quality. However, if decisions to forgive happen under psychological duress, then it stands to reason that the both initial levels of relationship quality may be lower and the slope of relationship quality might be less steep over time at higher levels of pressure to forgive.

Methods

Participants and Procedure

An initial total of 85 participants were successfully recruited for the study. After cleaning data for participants who completed a minimum of 3 out of 4 possible time points, as well as answered the survey questions about a romantic relationship and the same, singular offense each time, there was a final total of 72 participants (83.3% female). Participants' ages ranged from 19 to 44 years old, and were racially/ethnically diverse (38.9% Black/African American, 34.7% White American, 11.1% Asian American/Pacific Islander, 8.3 Hispanic/Latinx, and 6.9% Other). The sample was predominately religious, with 63.4% of participants identifying as being both religious and spiritual; 15.5%, spiritual but not religious; and 15.5%, religious but not spiritual; 2.8%, not religious and did not report on spirituality; 2.8%, neither religious nor spiritual.

Participants were recruited online through SONA and were undergraduate students (at least 18 years old) who were given the option of participating in a variety of psychological studies in exchange for class credit. Recruitment started at the beginning of each semester and participants had the option to volunteer for participation if they met the inclusion criteria. Participants first completed a general survey completed by all people in the SONA pool that semester. The general survey included an informed consent and collected demographic information, including whether people met inclusion criteria for the study (i.e., in a romantic relationship; experienced a recent offense; identified as religious/spiritual), as well as a variety of other measures. Display logic was then used to give participants who met inclusion criteria some additional measures related to their relationship. They selected a recent offense and completed several measures regarding that offense (e.g., degree of forgiveness, decisional forgiveness, pressure to forgive). They also completed measures of relationship quality and religious

orientation. These participants (N = 281) were emailed an opportunity to participate in the study by completing follow-up assessments (i.e., forgiveness, decision to forgive, pressure to forgive, and relationship quality) at one-, two-, and three weeks after the initial assessment.

Measures

Demographic information. General demographic information was collected from participants at Time 1. Age, sex, gender, religious/spiritual identification, relationship status, racial/ethnic identity, sexuality, and religious affiliation was gathered.

Religious orientation. Religious orientation will be measured using the 12-item New Indices of Religious Orientation measure (NIRO; Francis, 2007). This scale consists of two subscales measuring extrinsic and intrinsic religious orientation, each with six-items. The items are scored on a 5-point Likert scale ranging from 1 = disagree strongly to 5 = agree strongly, with higher scores indicating stronger identification with each orientation type. An example item of extrinsic religious orientation is, "While I am a religious person, I do not let religion influence my daily life." An example item of intrinsic religious orientation is, "My religious beliefs really shape my whole approach to life." The scale has been shown to be internally consistent, with Cronbach's alphas ranging from .84 to .91 (Francis, 2007). The NIRO subscales were all found to be internally consistent in this study with Cronbach's alphas ranging from .60 (extrinsic) to .81 (intrinsic). The alpha for extrinsic orientation was lower than expected and reported in previous studies. McDonald's omegas were also calculated and indicated stronger evidence of internal reliability with omegas for extrinsic orientation being .68 and intrinsic orientation as .82. The NIRO has also shown construct validity, with the subscales being associated with religious attendance, prayer, and self-reported religious orientation, with intrinsic orientation increasing with these activities, while extrinsic orientation decreased (Francis, 2007).

State forgiveness. State forgiveness will be measured using the 19-item Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998; McCullough & Hoyt, 2002). Participants are usually prompted to recall a hurtful transgression. However, for the purposes of this study, participants will be prompted to recall a recent (defined as within 3 weeks), hurtful, romantic offense they have experienced. They will then estimate how much time has passed since the incident and to rate the hurtfulness of the event. Participants then rate their motivations (e.g., intentions to forgive) towards the offender on a 5-point Likert-like scale ranging from I = Strongly disagree to S = Strongly Agree. An example item is, "I did my best to put aside the mistrust." The TRIM consists of three subscales: avoidance motivations, revenge motivations, and benevolence motivations. Higher scores for the avoidance and revenge motivations subscales indicate more unforgiveness, with higher scores for the benevolence motivations subscale indicating more forgiveness. The TRIM has shown internal reliability with Cronbach's alphas ranging from .84-.96 for all three subscales (McCullough et al., 1998; McCullough & Hoyt, 2002). The measure has also shown three-week temporal stability ranging from .79-.86 for the avoidance and revenge subscales and .52-.87 for the benevolence subscale (McCullough et al., 1998; McCullough, Fincham, & Tsang, 2007). The scale also showed evidence of construct validity, showing significant correlational relationships with other forgiveness measures (rs = -.67 to -.41) and relationship satisfaction (rs = -.46-.31; McCullough et al., 1998).

Decision to forgive. Decision to forgive will be measured using the 6-item Decisional Forgiveness Scale (DFS; Davis et al., 2015). Participants rate each item on a 5-point Likert-like scale ranging from $I = Strongly \, Disagree$ to $S = Strongly \, Agree$, with higher scores indicated more forgiveness. An example item is, "I have made up my mind to forgive him or her." The

scale was found to have good internal reliability with Cronbach's alphas ranging from .92 - .94 and showed strong evidence of construct validity with significant correlational relationships with other forgiveness measures and with DFS predicting forgiveness after one week after controlling for initial forgiveness (Davis et al., 2015).

Pressure to Forgive. Pressure to forgive will be assessed with two sets of scales. First, religious social pressures to forgive will be measured using a modified version of the six-item Social Pressures to Forgive scale (Gordon et al., 2008). The original measure was adapted from Stanley and Marksman's (1992) Commitment Inventory and assesses the amount of pressure to forgive that an individual feels from others. The modified version for this study will assess specifically the pressures an individual feels from their religious community to forgive another. Participants rate the items on a 7-point scale ranging from I = Strongly Disagree to T = Strongly Agree, with higher scores corresponding with feeling more pressure. An example item is, "It would be difficult for my religious group to accept me not forgiving this person." This scale was found to have internal reliability with Cronbach's alpha of .85 (Gordon et al., 2008).

Second, religious pressure to forgive will be assessed using the three item Forgiveness-Related Spiritual Beliefs subscale of the Factors Related to Forgiveness Inventory (FRFI; Blatt & Wertheim, 2015). This measure evaluates the extent an individual feels forgiveness is important according to their religious and/or spiritual teachings. Participants rate each item on a 5-point scale ranging from $I = Strongly \, Disagree$ to $S = Strongly \, Agree$, with higher scores indicating more pressure felt. An example item is, "My religious or spiritual beliefs encourage me to forgive." This subscale was shown to have internal reliability with Cronbach's alpha of .90 and showed strong construct validity with other variables, such as the Piedmont Spirituality scale with significant, positive correlations (i.e., rs = .45 to .75; Blatt & Wertheim, 2015). Both

measures of pressure will be used to differentiate between the social, religious pressures and religious pressure felt by an individual at differing developmental stages.

Relationship Quality. Relationship quality will be measured using two different measures. First, relationship satisfaction will be measured using the 16-item Couples Satisfaction Index (CSI-16; Funk & Rogge, 2007). This scale measures relationship quality and was developed using item response theory. The items are summed together for a total score. A higher score indicates better perceived relationship quality. An example item is, "I have a warm and comfortable relationship with my partner." This scale has been found to have good internal reliability, with a Cronbach's alpha of .95, and showed strong convergent reliability with other measures of satisfaction (rs = .84 to .97; Funk & Rogge, 2007).

Second, relationship trust will be measured using the eight item Dyadic Trust Scale (DTS; Larzelere & Huston, 1980). Participants rate each item on a 5-point Likert-like scale ranging from 1 = strongly disagree to 5 = strongly agree. An example item is, "My partner treats me fairly and justly." This scale has internal reliability with a Cronbach's alpha of .93 and also has shown evidence of construct validity with other relationship quality measures such as love, self-disclosure, and relationship status (rs = .19 to .48; Larzelere & Huston, 1980).

Results

Preliminary Analyses

The longitudinal data was first prepared and analyzed within the Statistical Package of Social Science (SPSS) 25.0. Time 1 data were combined with Time 2-4 data in a univariate or "long" format. The data were then initially analyzed for reliability, means, and intercorrelations of the measures. See Table 2.1 for a summary of these results. Missing data analyses were conducted. The Little's MCAR test results suggested that data were missing completely at

random ($\chi^2 = 988.74$, p = .122). Out of 243 items, only 15 items were missing from the data (6.17% of cases or .12% of the overall data). Considering the low-level item-level missingness, mean substitution was used for imputation rather than a more complicated imputation method (Parent, 2013).

Primary Analyses

The first hypothesis was that an individual's religious orientation would predict social and religious pressure to forgive. To test this hypothesis multiple regression analyses were conducted. First assumptions of linearity, normality of residuals, multicollinearity, autocorrelation, and homoscedasticity were tested. Based on correlation results and the Durbin-Watson test ($d_{RPF} = 1.75$; $d_{SPF} = 1.96$) suggested that the predictor and dependent variables had a linear relationship, had little to no multicollinearity, and had little to no autocorrelation. However, results from a Kolmogorov-Smirnov test indicated that both dependent variables were shown to have non-normal residuals $(D_{RPF}(249) = .401, p < .001; D_{SPF}(250) = .092, p < .001).$ To address this concern, both religious pressure to forgive (RPF) and social religious pressure to forgive (SPF) were transformed using a Box-Cox transformation (Box & Cox, 1964; Osborne, 2010). Multiple regression analysis was then conducted using the transformed variables. In two separate multiple regression analyses, RPF and then SPF at time 1 were regressed on extrinsic and intrinsic orientation. Results showed that for RPF, the religious orientations were significant positive predictors (F [2, 68] = 6.54, p < .005, $R^2 = .161$) and accounted for 16.1% of the variation in perceived religious pressure to forgive. Specifically, as predicted intrinsic religious orientation was found to be a significant predictor of RPF ($\beta = .30$, p < .05), while extrinsic religious orientation was not a significant predictor ($\beta = .13$, p = .367). However, for SPF,

neither extrinsic nor intrinsic religious orientation were a significant predictor (F [2, 69] = 2.49, p = .091, $R^2 = .067$).).

The next four hypotheses examined the various effects decisional forgiveness and pressure to forgive had on initial levels and changes in outcomes over time, including state forgiveness and relationship quality (see Appendix D for model formulas). To test these hypotheses longitudinal growth models were tested using Multilevel Modeling analyses in R. A series of growth curve models were tested that included two levels. Level 1 accounted for time and changes in state forgiveness (revenge, avoidance, and benevolence motivations) and relationship quality over time. Level 2 accounted for individual-level differences: decisional forgiveness, religious pressure to forgive, and religious social pressure to forgive. All predictors were grand-mean centered to aid in interpretation of results. Models were built with increasing complexity added at each step and model fit was used to compare and retain the most parsimonious model (Bliese & Polhart, 2002). Each model was built using five steps: (1) Estimate intraclass correlation coefficient; (2) test whether outcome variable generally increased or decreased with time (has a relationship with time); (3) test whether individuals had different rates of change over time (slope variability); (4) test for autocorrelation and heteroscedasticity; (5) test predictors of the intercept and slope variation.

Table 2.2 summarizes the results of the growth models for the outcome variables and summarized the fixed effects, while Table 2.3 summarized the random effects of the growth models. ICCs for the null models ranged from .63 to .81, suggesting approximately 63% to 81% of variance in outcomes were due to individual differences between subjects. All of the forgiveness subscales showed better model fit with slope variability and autocorrelation, while

couples satisfaction (CSI) showed evidence of slope variability and dyadic trust (DTS) did not have evidence of either.

State forgiveness over time. Initial growth curves were first modeled and results suggested that all three motivations had a significant linear relationship with time (estimate_{revenge} = -.04, p < .001; estimate_{avoidance} = -.08, p < .005; estimate_{benevolence} = .08, p < .001). All three models did not show a significant quadratic relationship with time. Using the linear relationship, slope variability was modeled and found to be significant and showed better model fit ($p_{revenge}$ = .04; $p_{avoidance} < .001$; $p_{benevolence} = .007$). Next, autocorrelation was modeled and was also found to be significant and allowed for a better model fit ($p_{revenge} < .001$; $p_{avoidance} < .001$; $p_{benevolence}$ < .001). The final model showed that, at Time 1, individuals had an average initial revenge motivation value of 6.83 (scores ranged from 5 to 20 with higher scores being less forgiveness), an average initial avoidance motivation value of 13.80 (scores ranged from 7 to 35 with higher scores being less forgiveness), and an average initial benevolence motivation value of 27.54 (scores ranged from 7 to 35 with higher scores being more forgiveness). Overall, individuals seemed to show high initial forgiveness (low revenge and avoidance motivation, high benevolence motivation) for their romantic partners. This model also indicated that generally forgiveness increased over time, with revenge and avoidance motivations decreasing and benevolence motivations increasing.

The second hypothesis predicted that decision to forgive would significantly influence initial levels of emotional/state forgiveness and changes in forgiveness over time. To test the second hypotheses, the time-invariant covariate of decisional forgiveness at Time 1 was added first as a predictor of intercept and then slope. To help with interpretation of results, all predictors were grand-mean centered. Decisional forgiveness was associated with the intercept

for all three subscales of forgiveness-related motivations (estimate_{revenge} = -.19, p < .001; estimate_{avoidance} = -.64, p < .001; estimate_{benevolence} = .74, p < .001). Likewise, decisional forgiveness was associated with a steeper, negative slope for all three motivations (estimate_{revenge} = -.01, p = .001; estimate_{avoidance} = .02, p = .009; estimate_{benevolence} = .01, p = .035).

To better help with interpretation of results, the proportional reduction in variance (PRV) was calculated for significant models (Peugh, 2010; Roberts et al., 2011). PRV (R^2) allows for a local effect size estimate to be made by calculating the approximate reduction of variance the addition of predictors creates. This value was then converted to f^2 for an overall effect size of the model and interpreted based on guidelines that suggest 0.02 is a small effect, 0.15 is a medium effect, and 0.35 is a large effect (Cohen, 1992; Lorah, 2018). The residual estimates, R^2 , and f^2 are summarized in Table 3. Decisional forgiveness had a medium to large effect on the intercept of the forgiveness motivations ($f^2 = .19$ to 1.54). While a wide range, these significant lower intercept variance for all three forgiveness motivations suggest decisional forgiveness has a significant impact on initial forgiveness. Decisional forgiveness also had a medium to large effect on slope of forgiveness ($f^2 = .19$ to 1.38), asserting decisional forgiveness's significant influence on emotional forgiveness over time.

The third hypothesis stated that religious pressure and religious social pressure to forgive would significantly predict slower changes over time in state forgiveness. Similar to the second hypothesis, the two pressure to forgive variables were independently first added as predictors of the intercept and then slope. Religious pressure to forgive was not associated with the intercept or the slope for any of the forgiveness-related motivations (ps = .308 to .955). Social pressure was a significant predictor of initial forgiveness for all motivators (estimate_{revenge} = -.07, p = .034; estimate_{avoidance} = -.28, p < .001; estimate_{benevolence} = .31, p < .001). However, it was not

associated with the slope of any forgiveness motivations (ps = .162 to .821). Social pressure had a small to medium effect on the intercept of the forgiveness motivations ($f^2 = .06$ to .23). Thus, these results suggest that religious social pressure to forgive has a significant effect on initial levels of forgiveness motivations.

Relationship Quality Over Time. Similar to the second and third hypotheses, the fourth and fifth hypotheses were tested by initial modeling a growth curve for both measures (CSI & DTS). However, initial models for both CSI and DTS suggested both variables did not have a significant linear relationship with time (estimate_{CSI} = -.03, p = .656; estimate_{DTS} = .02, p = .629). Though slope variability and change over time could not be examined (i.e., not enough variability to suggest moving forward with the analyses), the effects of the predictors on initial levels of relationship quality were still examined. For both CSI and DTS, decisional forgiveness and social pressure to forgive were significantly associated with the intercepts, with both variables predicting a higher initial level of relationship quality. However, these had variable effect sizes. While decisional forgiveness had a medium effect on intercept variance for CSI (f² = .22), it had no effect on variance for DTS (f² = .05 to .08). These results suggest that while social pressure had a significant influence on initial levels of both CSI and DTS, decisional forgiveness only really had an effect on CSI's intercept.

Discussion

The purpose of the present study was to test the possibility that different types of religious pressure to forgive might interfere with an adaptive process of forgiveness of an offense committed by a romantic partner. Prior work on the question was unclear, especially given that no longitudinal studies had examined how religious pressure to forgive was associated with

subsequent changes in forgiveness over time. Therefore, in a sample of undergraduates who had experienced a recent hurt in a romantic relationship, we examined how intrinsic religious orientation, extrinsic religious orientation, decisional forgiveness, religious pressure to forgive, and social religious pressure to forgive predicted changes in the intercept and slope of forgiveness-related motivations over about a month.

As predicted, we found that that decisional forgiveness was associated with the intercept and slope of all three subscale of the TRIM. People who had made a stronger commitment to forgive not only started with greater forgiveness, but their rate of change over time was also more rapid. In terms of prior theorizing on forgiveness, this is the first study to document longitudinal evidence for Worthington's theorizing on the importance of distinguishing two types of forgiveness (i.e., decisional and emotional forgiveness). Based on dual process theories of cognition (e.g., two types of thinking, one that is automatic and fast versus another that is slower and deliberate; Evans & Stanovich, 2013), decisional forgiveness or making a commitment to forgive may be one process that can occur in a moment. In contrast, the process of emotional forgiveness often occurs gradually over time (Worthington, 2006) and may be indicative of a slower more deliberate process.

An unexpected, but interesting result found was the relationship between decisional forgiveness and the slope of avoidance motivations over time. In general, revenge and avoidance motivations are indicators of unforgiveness and expected to have similar patterns. Yet, decisional forgiveness had a positive association with the slope of avoidance motivations, differing from the negative association it with the slope of revenge motivations. A positive association signals an increase in avoidance motivations over time, specifically indicating the individual's need for space from the offender. One explanation for this result may be due to the environment during

which the data was collected for this study. The study was conducted largely during the 2020 COVID-19 pandemic, in which many couples were forced to quarantine/isolate together in close proximity for an extended period of time. Individuals in this situation may have felt pressured to forgive offenses because they were literally stuck with their partners within a physical space. Another possibility is that forgiveness may look different for everyone. If there is an inherent pressure to protect a relationship by forgiving a partner even though trust has been broken, that may lead to an individual deciding to forgive and moving towards certain aspects of emotional forgiveness but not all. Gordon and colleagues (2005) noted that forgiveness may be multidimensional with a need to vary the definition of "optimal forgiveness" based on the context (i.e., optimal forgiveness may look different for individuals in diverse situations). If this is the case, for some deciding to forgive, not wanting revenge against their partner, but needing time and space to rebuild trust may be what their "optimal forgiveness" looks like. Of course, it is also difficult to fully conclude anything from this one study. With only a handful of longitudinal studies conducted on forgiveness and none examining the change in forgiveness specifically in couples, replication is needed to form more solid conclusions. Future studies could examine this phenomenon by examining whether the environmental context (e.g., physical space, contextual factors that affect definition of forgiveness) effects these relationships. Similarly, future replications can include a focus on examining the protective response between couples, and whether that is playing a significant moderating role.

On the other hand, I did not find strong evidence that religious pressure to forgive or social religious pressure to forgive interferes with forgiveness. Namely, religious pressure to forgive—or what others might refer to as sanctification of forgiveness (Davis et al., 2012)—was unrelated to the intercept or the slope. I did find that social religious pressure to forgive was

associated with more forgiveness at Time 1, which McCullough has previously interpreted as forbearance, or the phenomena when an individual starts off with high forgiveness of an offense and stays there over time (McCullough et al., 2010). If this finding replicates in future work, it may indicate that religious norms around forgiveness may help to reduce the buildup of unforgiveness by promoting forbearance. In other words, religious norms may increase trait forgiveness which helps an individual prevent high state unforgiving motivations because the person has generally become a more forgiving individual. This result would also certainly still remain compatible with theorizing that some people might experience harm if they are unable to conform to community standards. When people fail to forgive quickly, they may feel shame or invalidation, which may lead them to conceal their hurt. In future work, I could potentially use person-centered approaches, rather than variable-centered strategies, to explore how often such situations may occur. Person-centered approaches would allow for a more holistic picture to be painted with individual variations being accounted for and patterns in subgroups being identified (Meyer et al., 2013). However, at this stage, these theories remain speculative and only carefully designed studies that use more nuanced measures and more specified situations/samples will address the gap.

Finally, I did not find that religious pressure to forgive or social religious pressure to forgive exert much influence on relationship quality. In fact, there was not enough variability in slopes to test the influence of a level 2 covariate. Social religious pressure did show a small effect on the intercept of religious quality. I hesitate to make too much of these null findings. However, I speculate that while there may be several reasons for these findings, one major reason may be that there was insufficient time to properly assess for changes in relationship quality as measured in this study. Some research has been conducted within the field to examine

the reasons for and cost of daily fluctuations in relationship quality (Cooper et al., 2018; Kayabol et al., 2020). However, many of these studies have employed measures that were more specifically targeted at an individual's immediate experience of the relationships by prompting how they feel today (Cooper et al., 2018). The present study did not do so. It is possible that participants reported more generally rather than tuning into minute fluctuations in relationship quality, leading to no discernable pattern. Also, as noted before, there may be a protective response from individuals to protect the relationship or partner, especially when forced into constant, close contact over time, as such during a pandemic. These are factors that need to be addressed in future designs. An obvious next step is to employ a similar design using a more targeted measure of relationship quality. Another possibility is to design a similar study with a sample with greater commitment and more severe hurts, such as couples who report a major betrayal, such as infidelity. In this case, we might see more potential for religious constructs to influence the process of forgiveness in sometimes positive and sometimes negative ways.

Limitations and Future Directions

There are several limitations to this study. First, the sample size was small. Based on these preliminary results, it seems likely that the influence religion has on forgiveness is complex and may vary by person and situation. In this study, religious factors seemed to not be directly associated with changes in forgiveness, though social religious pressure did have some significant relationships with forgiveness over time. However, with a small sample size it is hard to conclude anything definitive. To explore this further, we may need to use person-centered approaches that can explore theory-derived predictions on contexts in which religious norms around forgiveness may burden victims more than helping them. For example, latent profile analysis can be used to identify groups of individuals with similar patterns of responses that may

shed light on how certain subgroups may respond differently to similar situations. This would allow for more hypotheses and speculations to be made about predicted outcomes.

Second, the sample included undergraduates who had experienced a recent offense. Focusing on recent offenses is important, because in many cases, forgiveness occurs rapidly, based on limited work tracking forgiveness over time (McCullough et al., 2010). Nonetheless, this decision likely influenced the severity of offenses being reported, especially as the severity was subjectively judged by individuals. Thus, a next step might be to begin with offenses that are more severe, such as people who experienced a painful breakup or some other significant betrayal. Another thing to consider with the severity of offenses is the timing of the study. Individuals were able to begin the study up to three weeks after an offense occurred. If an offense was less hurtful and occurred three weeks prior, an individual may have already proceeded through most of the forgiveness process prior to beginning the study. Future studies can account for timing of offenses more directly during recruitment of participants to reduce a possible complicating factor.

Third, I only used one method of measurement. In future work, I would like to explore pairing self-reports of forgiveness with audio recordings in which participants talk about their current feelings and thoughts. Coders could then rate key aspects of the forgiveness process, including guilt or shame for not forgiving in alignment with religious norms. I suspect process coding of this kind could help clarify when some people may experience conflict with their religious teachings on forgiveness. It would show up in their rumination patterns. Recent software innovations now automate the process of gathering experience sampling data (e.g., paging participants several times in a day to respond to questions via smart phone or smart watch), including gathering audio files from smartphones.

Conclusion

The literature on forgiveness and R/S continues to be explored. However, the limited number of studies utilizing longitudinal or experimental methods greatly restrict the understanding researchers have about the complicated relationship forgiveness has with R/S. The present study helps to continue pushing the boundaries of the field by utilizing a longitudinal design and examining the direct influence of R/S constructs on forgiveness as it unfolds. While this study had unanticipated findings, the results do start to help energize the field by raising unasked questions on the possible negative effects of R/S and finding hints of an answer on the horizon. Though improvements to the study to address limitations and multiple replications will be needed, this study is a step forward in the field with the addition of longitudinal data. Slowly, but surely, the veils hiding the intricate relationship between forgiveness and R/S have started to lift. With this study as part of a new line of thinking of how R/S factors influence changes in forgiveness over time, the field may move forward in this direction to delve into the unknown.

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Table 2.1

Means, SD, Reliabilities, and Intercorrelations of Measures

	М	SD	α	ω	1	2	3	4	5	6	7	8	9	10
1. TRIM Revenge	6.49	2.90	.88	.90	1.00	.57**	50**	54**	43**	42**	12	25**	.10	.11
2. TRIM	12.93	7.01	.92	.93		1.00	76**	69	71**	51**	06	39**	03	.02
Avoidance														
3. TRIM	28.61	6.19	.90	.91			1.00	.78**	.71**	.53**	.10	.50**	.05	.08
Benevolence														
4. DFS	24.69	5.94	.96	.96				1.00	.61**	.46**	.05	.38**	10	03
5. CSI	75.30	18.85	.98	.98					1.00	.64**	02	.44**	06*	11
6. DTS	27.34	9.16	.94	.94						1.00	02	.43**	06	05
7. RPF	4.70	.61	.90	.90							1.00	.08	.34**	.39**
8. SPF	27.76	8.27	.85	.82								1.00	.22	.24*
9. NIRO Extrinsic	19.59	4.20	.60	.68									1.00	.67**
10. NIRO Intrinsic	19.01	5.08	.81	.82										1.00

^{*}p < .05; **p < .01; TRIM = Transgression-Related Interpersonal Motivations Inventory; DFS = Decisional Forgiveness Scale; CSI = Couples Satisfaction Index; DTS = Dyadic Trust Scale; RPF = Religious Pressure to Forgive; SPF = Social Pressures to Forgive; NIRO = New Indices of Religious Orientation

Table 2.2

Results of all Growth Curve Models (Fixed Effects)

Outcome Variable	Model Variable	Estimate	SE	df	t	p
		Forgiveness	Outcomes			
Revenge	Intercept $(\beta_{00})^*$	6.97	0.34	170	20.75	<.001
ICC = .63	Time $(\beta_{10})^*$	-0.04	0.01	170	-3.27	<.001
	DFS $(\beta_{01})^*$	-0.19	0.03	169	-6.95	<.001
	RPF (β_{01})	-0.29	0.43	169	-0.68	.498
	SPF $(\beta_{01})^*$	-0.07	0.03	70	-2.16	.034
	Time x DFS $(\beta_{11})^*$	0.01	0.00	169	3.51	.001
	Time x RPF (β_{11})	0.02	0.03	168	0.60	.551
	Time x SPF (β_{11})	0.00	0.00	169	0.23	.821
Avoidance	Intercept $(\beta_{00})^*$	14.05	0.82	170	17.03	<.001
ICC = .65	Time $(\beta_{10})^*$	-0.08	0.03	170	-2.91	<.001
	DFS $(\beta_{01})^*$	-0.64	0.06	169	-10.70	<.001
	RPF (β_{01})	-0.41	1.09	169	-0.38	.704
	SPF $(\beta_{01})^*$	-0.28	0.07	70	-3.93	<.001

	Time x DFS $(\beta_{11})^*$	0.02	0.01	169	2.66	.009
	Time x RPF (β_{11})	0.07	0.07	168	1.02	.309
	Time x SPF (β_{11})	0.00	0.00	169	-1.17	.244
Benevolence	Intercept $(\beta_{00})^*$	27.43	0.74	170	37.13	<.001
ICC = .65	Time $(\beta_{10})^*$	0.08	0.02	170	3.17	<.001
	DFS $(\beta_{01})^*$	0.74	0.05	169	16.33	<.001
	RPF (β_{01})	-0.05	0.95	169	-0.06	.955
	SPF $(\beta_{01})^*$	0.31	0.06	70	5.27	<.001
	Time x DFS $(\beta_{11})^*$	0.01	0.01	168	2.12	.035
	Time x RPF (β_{11})	0.05	0.05	168	0.94	.350
	Time x SPF (β_{11})	0.01	0.00	169	1.41	.162
		Relationship	Outcomes			
CSI	Intercept $(\beta_{00})^*$	75.47	2.20	170	34.29	<.001
ICC = .81	Time (β_{10})	-0.00	0.06	170	-0.01	.993
	DFS $(\beta_{01})^*$	1.08	0.28	70	3.82	<.001
	RPF (β_{01})	-1.30	2.72	168	-0.48	.633

	SPF $(\beta_{01})^*$	0.62	0.19	70	3.19	.002
DTS	Intercept $(\beta_{00})^*$	27.00	1.07	170	25.13	<.001
ICC = .65	Time (β_{10})	0.02	0.04	170	0.66	.513
	DFS $(\beta_{01})^*$	0.38	0.15	70	2.57	.012
	RPF (β_{01})	-0.16	1.40	170	12	.909
	SPF $(\beta_{01})^*$	0.33	0.10	70	3.39	.001

^{*} Significant results; DFS = Decisional Forgiveness Scale; RPF = Religious Pressure to Forgive; SPF = Social Pressures to Forgive

Table 2.3
Variance Coefficients, PRV, and Effect Sizes of Growth Models (Random Effects)

Outcome Variable	Model	Residual (σ^2)	Intercept (π_{0i})	Slope (π_{1i})	$PRV(R^2)$	f^2
Revenge	Unconditional	2.96	5.06	-	-	-
	Level-1	7.84	0.00	0.00	0.02	.02
	Level-2: DFS	6.75	0.00	0.00	0.16	0.19
	Level-2: SPF	7.57	0.00	0.00	0.06	0.06
	Level-2: Time x SPF	6.77	0.00	0.00	0.16	0.19
Avoidance	Unconditional	17.37	31.96	-	-	-
	Level-1	49.20 0.00		0.00	0.00	0
	Level-2: DFS	27.94	0.00	0.00	0.43	0.75
	Level-2: SPF	42.44	0.00	0.00	0.14	0.16
	Level-2: Time x SPF	32.56	0.01	0.02	0.34	0.52
Benevolence	Unconditional	14.02	25.91	-	-	-
	Level-1	38.09	0.00	0.00	0.05	0.05
	Level-2: DFS	6.89	7.87	0.04	0.61	1.54
	Level-2: SPF	30.97	0.00	0.00	0.19	0.23
	Level-2: Time x SPF	7.03	8.83	0.05	0.58	1.38
CSI	Unconditional	67.14	279.20	-	-	-

	Level-1	47.99	200.63	-	0.29	0.41
	Level-2: DFS	47.90	156.41	-	0.18	0.22
	Level-2: SPF	48.72	181.58	-	0.07	0.08
DTS	Unconditional	29.00	54.52	-	-	-
	Level-1	29.14	54.25	-	0.00	0
	Level-2: DFS	29.01	49.84	-	0.00	0
	Level-2: SPF	29.00	46.40	-	0.05	0.05

DFS = Decisional Forgiveness Scale; SPF = Social Pressures to Forgive

Appendix A: Participant Measures Demographics

- 1. What is your sex?
 - a. Male
 - b. Female
- 2. What is your gender?
- 3. What is your age?
- 4. What is your race?
 - a. White/Caucasian
 - b. Black/African American
 - c. Asian/Pacific Islander
 - d. Hispanic/Latinx
 - e. Multiracial
 - f. Other
- 5. What is your current marital status?
 - a. Single
 - b. Married/Partnered
 - c. Separated
 - d. Divorced
 - e. Widowed
 - f. Other
- 6. What is your academic major?
- 7. What academic year are you in?
 - a. 1^{st} freshman
 - b. 2^{nd} sophomore
 - c. 3^{rd} junior
 - d. 4th senior
 - e. Graduate
 - f. Other
- 8. Which statement describes you best?
 - a. I consider myself spiritual and religious
 - b. I consider myself religious but not spiritual
 - c. I consider myself spiritual but not religious
 - d. I consider myself neither
- 9. I have a relationship with God or a higher being.
 - a. True
 - b. False
- 10. What is your religious/spiritual affiliation?

Appendix B: Participant Measures Time 1, non-repeated measures

New Indices of Religious Orientation measure (NIRO; Francis, 2007)

For the following items, indicate to what extent you agree with the statement. Use the following scale to indicate your agreement with each item.

- 1 =disagree strongly
- 5 = agree strongly
 - 1. While I am a religious person, I do not let religion influence my daily life
 - 2. Occasionally, I compromise my religious beliefs to protect my social and economic well-being
 - 3. One reason for me going to church is that it helps to establish me in the community
 - 4. I go to church because it helps me to feel at home in my neighborhood
 - 5. One reason for me praying is that it helps me to gain relief and protection
 - 6. I pray chiefly because it makes me feel better
 - 7. My religious beliefs really shape my whole approach to life
 - 8. I try hard to carry my religion over into all my other dealings in life
 - 9. I allow almost nothing to prevent me from going to church on Sundays
 - 10. The church is most important to me as a place to share fellowship with other Christians
 - 11. I pray at home because it helps me to be aware of God's presence
 - 12. I pray chiefly because it deepens my relationship with God
 - 13. I was driven to ask religious questions by a growing awareness of the tensions in my world
 - 14. My life experiences have led me to rethink my religious beliefs
 - 15. I value my religious doubts and uncertainties
 - 16. For me, doubting is an important part of what it means to be religious
 - 17. As I grow and change, I expect my religion to grow and change as well
 - 18. I am constantly questioning my religious beliefs

Appendix C: Participant Measures Time 1, 2, 3, 4, repeated measures

Recall Offense

Recall a very hurtful offense involving a salient cultural identity committed within the last month. A salient cultural identity may be your racial/ethnic identity or any other cultural identity you feel is significant in your life. Do not choose an event that meant so little that you have already forgotten about it.

In the section below, briefly describe what happened in as much detail as you would like to share. Please do not include any identifying information about the other parties involved.

Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998; McCullough & Hoyt, 2002)

<u>DIRECTIONS</u>: For the following questions, please indicate your **current thoughts and feelings** about the person who hurt you. Use the following scale to indicate your agreement with each of the questions.

- 1 = strongly disagree
- 2 = mildly disagree
- 3 = agree and disagree equally
- 4 = mildly agree
- 5 = strongly agree
 - 1. I'll make him or her pay.
 - 2. I wish that something bad would happen to him/her.
 - 3. I want him/her to get what he/she deserves.
 - 4. I'm going to get even.
 - 5. I want to see him/her hurt and miserable.
 - 6. I keep as much distance between us as possible.
 - 7. I live as if he/she doesn't exist, isn't around.
 - 8. I don't trust him/her.
 - 9. I find it difficult to act warmly toward him/her.
 - 10. I avoid him/her.
 - 11. I cut off the relationship with him/her.
 - 12. I withdraw from him/her.
 - 13. Even though his/her actions hurt me, I still have goodwill for him/her.
 - 14. I want us to bury the hatchet and move forward with our relationship.
 - 15. Despite what he/she did, I want us to have a positive relationship again.
 - 16. I have given up my hurt and resentment.
 - 17. Although he/she hurt me, I put the hurts aside so we could resume our relationship.
 - 18. I forgive him/her for what he/she did to me.
 - 19. I have released my anger so I could work on restoring our relationship to health.

Decisional Forgiveness Scale (DFS; Davis et al., 2015)

For the following questions, indicate your current thoughts about the person who hurt you. Use the following scale to indicate your level of agreement with each item.

- 1 = strongly disagree
- 5 = strongly agree
 - 1. I have decided to forgive him or her.
 - 2. I made a commitment to forgive him or her.
 - 3. I have made up my mind to forgive him or her.
 - 4. My choice is to forgive him or her.
 - 5. My choice is to release any negative feelings I have toward him or her.
 - 6. I have chosen not to intentionally harbor resentment toward him or her.

Social Pressures to Forgive modified scale (Gordon et al., 2008)

For the following items, consider how you perceive others around you are influencing your decision to forgive the person who hurt you. Use the following scale to indicate your agreement with each item.

- 1 = strongly disagree
- 4 = neither agree nor disagree
- 7 =strongly agree
 - 1. My religious/spiritual community would not mind it if I did not forgive this person.
 - 2. My religious/spiritual community would not care either way if this relationship ended.
 - 3. It would be difficult for my religious/spiritual community to accept it if I did not forgive this person.
 - 4. My religious/spiritual community want to see my relationship with my partner continue.
 - 5. My religious/spiritual community really wants this relationship to work.
 - 6. My religious/spiritual community would not care if I ended this relationship.

Forgiveness-Related Spiritual Beliefs subscale of the Factors Related to Forgiveness Inventory (FRFI; Blatt & Wertheim, 2015)

For the following items, consider how you feel about your religious/spiritual beliefs. Use the following scale to indicate your agreement with each item.

- 1 = strongly disagree
- 5 = strongly agree
 - 1. My religious or spiritual beliefs encourage me to forgive.
 - 2. God or a higher spiritual power would want me to forgive.
 - 3. My religious beliefs are one should forgive.

Couples Satisfaction Index (CSI-16; Funk & Rogge, 2007)

- 1. Please indicate the degree of happiness, all things considered, of your relationship. (0 = Extremely unhappy to 6 = Perfect)
- 0 =Never to 5 =All of the time
 - 2. In general, how often do you think that things between you and your partner are going well?
- 0 = Not at all true to 5 = Completely true
 - 3. Our relationship is strong.
 - 4. My relationship with my partner makes me happy.
 - 5. I have a warm and comfortable relationship with my partner.
 - 6. I really feel like part of a team with my partner.
- 0 = Not all to 5 = Completely
 - 7. How rewarding is your relationship with your partner?
 - 8. How well does your partner meet your needs?
 - 9. To what extent has your relationship met your original expectations?
 - 10. In general, how satisfied are you with your relationship?

For each of the following items, select the answer that best describes how you feel about your relationship. Base your responses on your first impressions and immediate feelings about the item.

11. Interesting	5	4	3	2	1	0	Boring
12. Bad	0	1	2	3	4	5	Good
13. Full	5	4	3	2	1	0	Empty
14. Sturdy	5	4	3	2	1	0	Fragile
15. Discouraging	0	1	2	3	4	5	Hopeful
16. Enjoyable	5	4	3	2	1	0	Miserable

Dyadic Trust Scale (DTS; Larzele & Huston, 1980)

Rate the following items using this scale.

- 1 = Strongly agree
- 5 = Strongly disagree
- 1. My partner is primarily interested in his (her) own welfare.
- 2. There are times when my partner cannot be trusted.
- 3. My partner is perfectly honest and truthful with me.
- 4. I feel that I can trust my partner completely.
- 5. My partner is truly sincere in his (her) promises.
- 6. I feel that my partner does not show me enough consideration.
- 7. My partner treats me fairly and justly.
- 8. I feel that my partner can be counted on to help me.

Appendix D: MLM Equations

Level 1:
$$Y_{it} = \pi_{0i} + \pi_{1i} (\underline{T}_{it}) + \sigma^{2}$$
$$\pi_{0i} = \beta_{00} + \beta_{01} (w_{i}) + r_{0i}$$

$$\pi_{1i} = \beta_{10} + \beta_{11} (w_i) + r_{1i}$$

Level 2:
$$\pi_{0i} = \beta_{00} + r_{0i}$$

 $\pi_{1i} = \beta_{10} + r_{1i}$

 Y_{it} = Outcome variable (TRIM or Relationship quality) for individual i at time t

 $\pi_{0i} = intercept$

 $\pi_{1i} = slope$

 T_{it} = time

 $\sigma^2 = \text{residual}$

 β_{00} = mean intercept

 β_{01} = expected shift in intercept due to TIC

 β_{10} = mean slope

 β_{11} = expected shift in slope due to TIC

 r_{0i} = level 2 random effects

 r_{Ii} = level 2 random effects

 w_i = Time Invariant Covariate (TIC)