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IMPLICIT THEORIES AS A MODERATOR
BETWEEN RELIGIOUS COMMITMENT AND FORGIVENESS
AMONG MUSLIMS EXPERIENCING A RELIGIOUS IDENTITY OFFENSE

By

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M.S., University of Kentucky, 2013
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A Dissertation Submitted to the Faculty of
The College of Education and Human Development of the University of
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Department of Counseling and Human Development
University of Louisville
Louisville, Kentucky

August 2021

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A Dissertation Approved on

July 12, 2021

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DEDICATION

This dissertation is dedicated to my parents, Jan and John Hart, who instilled in me the value of education and supported me through each of my degrees, and my wife, Kimi, who encouraged me to continue onward even though it meant sacrificing much of our time together as I pursued this degree.

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ABSTRACT

IMPLICIT THEORIES AS A MODERATOR BETWEEN RELIGIOUS COMMITMENT AND FORGIVENESS AMONG MUSLIMS EXPERIENCING A RELIGIOUS IDENTITY OFFENSE

John Michael Hart II

August 1, 2021

A recurrent finding in the literature on the relationship between religion and forgiveness is that religious people tend to describe themselves as forgiving while reporting less forgiveness in response to actual offenses (Davis, Worthington, Hook, & Hill, 2013; McCullough & Worthington, 1999). Scholars have suggested moderating factors may explain this discrepancy (Worthington et al., 2010), though the existing literature has been criticized as limited because much of the research is based on Christian samples (Carlisle & Tsang, 2013; Davis et al., 2013). Implicit theories, which have previously been found to be associated with forgiveness and theorized to be related to religion, were examined as a possible moderating variable in the relationship between forgiveness and religious commitment among a sample of Muslims who experienced a religious identity offense. An ethnically diverse sample of Muslims residing in the United States participated in an online survey that included measures of implicit theories, religious commitment, and forgiveness. Results showed that although religious commitment and implicit theories were associated with forgiveness, implicit theories did not moderate the relationship between religious commitment and forgiveness.

Additionally, results from an exploratory factor analysis conducted on correlations of scores from the measure of forgiveness suggested the nature of the construct as operationalized by the measure may not be clear as the factor structure differed from that identified in the measure's validation study.

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CHAPTER 1

REVIEW OF THE LITERATURE

Muslims in the United States represent a small minority of the nation's population, and they have faced increased discrimination in the first two decades of the 21st century, on both interpersonal (Kishi, 2016, November 21) and systemic levels (*Legislating fear: Islamophobia and its impact in the United States*, 2013). For example, the Federal Bureau of Investigation reported a 67% increase in anti-Muslim hate crimes in 2015 compared to the previous year (Kishi, 2016, November 21). One way Muslims may cope when they have experienced an offense against them based on their religious identity is forgiveness. Although research exists on forgiveness for offenses related to an identity (e.g., Burrow & Hill, 2012; Davis et al., 2015; Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Powell, Banks, & Mattis, 2017), this literature has largely centered on intergroup forgiveness, with less research focusing on forgiveness of interpersonal offenses related to an individual's identity from individuals belonging to outside groups. Because forgiveness is a virtue in Islam, devoted Muslims may forgive for an offense based on their identity; however, scholars of forgiveness have noted an inconsistent relationship between measures of religion and state forgiveness, which might be explained by moderating variables (Worthington et al., 2010). A variable that may moderate the relationship between religion and state forgiveness is the construct of

implicit theories, which are core assumptions people have that impact their perceptions and behavior (Dweck, Chiu, & Hong, 1995a). For example, researchers have operationalized implicit theories of such qualities as intelligence and morality, as well as of persons as a whole (see Dweck et al., 1995a). Researchers have examined the relationship between implicit theories and forgiveness in several studies, though with varying results and without examining the possible role of religion in this relationship (see Burnette & Franiuk, 2010; Finkel, Burnette, & Scissors, 2007; Ng & Tong, 2013; Ryazanov & Christenfeld, 2018; Wohl et al., 2015). Thus, further inquiry into implicit theories and forgiveness may be useful in clarifying the relationship between these variables, which could contribute to identifying ways for mental health professionals to support Muslims who are experiencing distress related to an offense based on their religious identity. The purpose of this study was to examine the relationship between implicit theories, religious commitment, and forgiveness in a sample of Muslims living in the U.S. in relation to an offense they experienced based on their religious identity.

Social cognitive theory

The proposed study utilizes a social cognitive theoretical framework, which assumes that human functioning is produced through the reciprocal interactions of three factors: intrapersonal influences, individual behavior, and the environment (Bandura, 2018). Intrapersonal influences involve beliefs, values, expectations, and other cognitive elements. An individual's behavior is that which can be observed, such as their performance in a class or their verbal response to a question. Environmental factors include, but are not limited to, family members, friends, and teachers, as well as systemic factors, such as the media.

Through the lens of social cognitive theory, individuals have agency, or the ability to shape outcomes through their actions, an assumption underscored by the fact that two of the three factors of the framework are part of or extensions of the individual. The agentic component of social cognitive theory includes forethought, which involves individuals developing plans and anticipating likely outcomes of their behavior; self-reactiveness, or the ability to self-regulate behavior based on standards they choose to evaluate their performance against; and self-reflectiveness, which involves an individual reflecting on their perceived self-efficacy in situations, their values, and the meaning they make of their experiences (Bandura, 2018). Individuals self-regulate and develop self-efficacy in response to interactions with the environment, which can directly reinforce or punish individual behavior as well as indirectly reinforce the individual through vicarious learning. In vicarious learning, an individual observes another person perform a behavior and receive reinforcement or punishment for that behavior, which can then have a causal effect on the individual's self-efficacy and self-regulation. Modeling can occur on an interpersonal level or on a broader level, such as through public health campaigns utilizing popular television shows (Bandura, 2005).

As this study will utilize a sample of Muslims, it is worth noting that social cognitive theory has been described as fitting well with the implicit personality theory of Islam (Smither & Khorsandi, 2009). Social cognitive theory's promotion of individual agency and cognitive factors, such as those involved in self-regulation, align with the Islamic emphasis on choice. From a social cognitive perspective, Muhammad can be understood as modeling the ideal behavior and qualities of Muslims: humility, truthfulness, modesty, kindness, and self-discipline (Smither & Khorsandi, 2009). As

with other major religions, Islam specifically models forgiveness as a desired behavior by teaching that people are to forgive one another for offenses (Enright et al., 1991).

In the proposed study, a person experiencing an offense based on their identity as a Muslim might initially feel distressed (e.g., sad, angry) about the offense and consider acting in an unforgiving manner toward the offender. However, upon reflecting on guidance from Islam, which promotes forgiveness as beneficial for the forgiver (Davary, 2004), the individual might instead pursue the response modeled through Islamic teaching and forgive the offender. In social cognitive theory, an individual's decision to engage in a behavior that has been modeled depends on cognitive factors; in this case, a Muslim's decision to behave in accordance with Islamic principles will depend in part on the strength of their commitment to Islam. That is, the greater their commitment to Islam, which includes their religious beliefs and values, the more likely the individual will be to follow the behavior modeled by its teachings because that behavior will be more salient to them. Additionally, the reciprocal interactions posited by social cognitive theory suggest that, just as the strength of a Muslim's commitment to Islam may influence their behavior in forgiving, modeled behavior is expected to play a role in the strength of their commitment to Islam. For example, members of a Muslim's family and community are among the environmental influences that both directly and vicariously reinforce their religious beliefs.

Religious beliefs theoretically play an important role in forgiveness for a Muslim, but they are one among various cognitive factors that may influence a Muslim's process of forgiveness. Another cognitive factor that may influence a Muslim's path toward forgiveness are implicit theories, which have been found to be associated with

forgiveness in studies that did not include religion as a variable (e.g., Burnette & Franiuk, 2010; Ng & Tong, 2013; Ryazanov & Christenfeld, 2018). Implicit theories may play a role in forgiveness for a Muslim, such as through influencing predictions about an offender's future behavior. For example, a Muslim who holds an implicit theory that people are inherently incapable of change might be less likely to forgive when someone has committed an offense against them because they believe the offender is likely to repeat the offense. In this study, an interaction of a Muslim's religious commitment and their implicit theories about people are hypothesized to influence their forgiveness.

Forgiveness

Researchers have found that forgiveness is associated with numerous mental and physical health benefits. Among the literature examining the relationship between forgiveness and physical health, researchers have found associations between forgiveness and lower blood pressure (Friedberg, Suchday, & Shelov, 2007; Lawler et al., 2003) and heart rate (Witvliet, Ludwig, & Vander Laan, 2001). Among studies examining the relationship between forgiveness and mental health, researchers have reported associations between forgiveness and lower levels of depression (Brown, 2003; Tse & Cheng, 2006), anxiety (Subkoviak et al., 1995), substance abuse (Kendler et al., 2003), and anger (Carson et al., 2005). Researchers have also reported that forgiveness is related to greater life satisfaction (Brown & Phillips, 2005; Krause & Ellison, 2003; Toussaint, Williams, Musick, & Everson, 2001) and well-being (Lawler-Row & Piferi, 2006; Rye et al., 2001). A meta-analysis examining the efficacy of therapeutic forgiveness interventions found that, while such interventions do not target mental health symptoms directly, they can result in decreased symptoms of depression and anxiety and

increased hope (Wade, Hoyt, Kidwell, & Worthington, 2014). The effect of forgiveness interventions on mental health outcomes makes sense when considering that a lack of forgiveness is central to the stress experienced in response to an interpersonal offense, and stress is related to decreased mental health (Toussaint & Webb, 2005).

Although much research has been generated on outcomes related to forgiveness, questions remain related to forgiveness and the nature of the transgressions experienced, such as whether forgiveness is effective relative to the severity of harm experienced (Wade et al., 2014). In the existing literature, forgiveness has been examined in samples experiencing diverse types of offenses. For example, research on forgiveness therapy has been conducted with individuals who perceived their parents as emotionally distant during childhood (Al-Mabuk, Enright, & Cardis, 1995), incest survivors (Freedman & Enright, 1996), men hurt by their partners' decisions to have an abortion (Coyle & Enright, 1997), women who experienced emotional abuse (Reed & Enright, 2006), adult children whose parents were alcoholics (Osterndorf, Enright, Holter, & Klatt, 2011), and adult children whose parents divorced (Graham, Enright, & Klatt, 2012). One realm of forgiveness research has focused on forgiveness for offenses related to an identity held by the victim, such as their ethnic or national identity. Inquiry in this area has largely centered on forgiveness of a group, such as in relation to religious conflict (e.g., Northern Ireland; McLernon, Cairns, Hewstone, & Smith, 2004), war between ethnic groups (e.g., the Yugoslav Wars; Cehajic, Brown, & Castano, 2008), political repression and violence (e.g., the former dictatorship in Chile; Manzi & González, 2007); and racial discrimination (e.g., discrimination by White Americans toward Black Americans; Leach, Baker, & Zeigler-Hill, 2010). Researchers have also examined forgiveness for

identity-based offenses on an interpersonal level, such as in response to experiencing microaggressions (e.g., Schoulte, Schultz, & Altmaier, 2011). The extant research has demonstrated that forgiveness can serve as a beneficial response to such identity-based offenses, and scholars have called for more literature focused on forgiveness for transgressions of a sociopolitical nature, such as discrimination (Hammond, Banks, & Mattis, 2006).

Conceptualizations of forgiveness are diverse. Researchers have found that lay definitions of forgiveness include: accepting, dealing with, getting over, coming to terms with, or moving on from an offense; letting go of negative feelings and grudges; getting back to or continuing a relationship with an offender; and forgetting about an offense (Younger, Piferi, Jobe, & Lawler, 2004). These lay definitions vary and consist of cognitive, affective, and behavioral processes. In the empirical literature, there is similar variance in how forgiveness is defined. Researchers have recognized that forgiveness is not restricted to targeting a single external offender. In addition to interpersonal forgiveness, where a single offender is the target of forgiveness, forgiveness of the self and of groups has also been examined. Self-forgiveness has been defined as a process through which an individual is decreasingly motivated to avoid the victim of an offense they committed or related stimuli and less motivated to retaliate against the self, while acting in a more benevolent manner toward the self (Hall & Fincham, 2005). In intergroup forgiveness, an individual forgives a group they perceive as homogenous that is responsible for an offense (Leach et al., 2010).

Within the literature on interpersonal forgiveness, varying definitions of forgiveness have been put forward (Riek & Mania, 2012; Worthington, 2005). Enright,

an early researcher in the field of forgiveness (Worthington, 2005), viewed forgiveness as a process that involves replacing negative affect, behavior, and cognitions related to an offense with more positive affect, behavior, and cognitions (Enright & Fitzgibbons, 2000). Another group of forgiveness researchers, led by Worthington, theorized that forgiveness takes two forms: decisional and emotional (Worthington & Scherer, 2004). In the view of Worthington and colleagues, decisional forgiveness is a position of commitment to forgive an offender, though it does not necessarily change negative emotions, thoughts, or motivations related to the offender. Although decisional forgiveness has the potential to lead to changes in emotion and behavior, emotional forgiveness occurs when negative thoughts, feelings, and motivation become more positive (Worthington, Witvliet, Pietrini, & Miller, 2007). Decisional forgiveness, then, is a step in the process toward full forgiveness, which occurs through emotional forgiveness. Another model of forgiveness, proposed by McCullough and colleagues, suggested that forgiveness involves adopting more positive motivations toward the offender (McCullough et al., 1998). Specifically, the model put forward by McCullough and colleagues focuses on avoidance of and revenge toward the offender, with forgiveness occurring when an individual is not highly motivated toward avoiding or seeking revenge against their offender. These models of forgiveness conceptualize forgiveness as a state; alternatively, forgiveness has also been examined as a trait, such as with the construct of willingness to forgive, which is defined as a predisposition toward engaging in the release of resentment about interpersonal offenses (DeShea, 2003), and forgivingness, which has been defined as a disposition toward forgiveness when experiencing an offense (Roberts, 1995).

Across the varying definitions of interpersonal forgiveness, there is largely agreement among researchers that forgiveness involves decreasing emotions, cognitions, and motivations based in resentment toward the offender, and—in contrast to lay understandings of forgiveness—there is agreement that forgiveness does not involve excusing, exonerating, condoning, or reconciling (Worthington et al., 2007). Clearly distinguishing forgiveness from related constructs such as reconciliation is important because some would argue that forgiveness puts a victim at risk of further harm, which is an argument that seems to rely on the expectation that forgiveness means the victim will reconcile with the offender (Riek & Mania, 2012). If forgiveness included reconciliation, the potential benefits of forgiveness would need to be weighed against the possible risks involved with resuming a relationship with the offender; however, it is possible both to forgive and abstain from continuing a relationship and to forgive someone with whom an individual does not have a close relationship.

Because forgiveness is understood as a reduction in resentment-based emotions, thoughts, and behavior, it is therefore a way to cope after experiencing an offense. How does someone follow forgiveness as a path to cope with an offense? Ho and Fung (2011) proposed that forgiveness is a dynamic process in which sociocultural factors influence cognitive, emotional, motivational, and behavioral components that lead to forgiveness. This dynamic process model of forgiveness draws upon Gross's (1998) emotion regulation model, which posits that emotion stems from an evaluation of emotion cues that in turn produce emotional, physiological, and behavioral responses. According to the dynamic process model of forgiveness, when an individual experiences an offense or transgression, they respond by appraising details about the offense, such as its severity,

and the offender, such as their intention and their closeness to the individual. These appraisals produce emotional responses, and individuals regulate these emotions through reappraisal. The model also suggests that social and cultural context can moderate the appraisals, emotional responses, and motivations that are related to forgiveness.

The current study used the dynamic process model of forgiveness (Ho & Fung, 2011) as a framework to consider how religious beliefs, values, and behaviors may interact with implicit theories to play a role in the process of forgiveness. The current study also aimed to address the need for inquiry into forgiveness in response to transgressions of a sociopolitical nature (Hammond et al., 2006). Specifically, the current study examined forgiveness in the context of Islamophobia in the United States.

The relationship between religion and forgiveness

Prior to becoming a subject of scientific inquiry in the 1980's, forgiveness was viewed as being within the domain of religion (Worthington, 2005). That is, forgiveness was considered a virtue promoted by religions and, theoretically, practiced by its followers. Given the roots of forgiveness in the religious realm, it is not surprising that since researchers began examining forgiveness, one avenue of this literature has journeyed into the relationship between forgiveness and religion. Research on forgiveness and religion began by seeking answers to questions about which group of religious people was most forgiving, and researchers have found that Christians describe themselves as more forgiving compared to other religions (Worthington et al., 2010). Researchers also generally reported that religious people are more forgiving than those who are not religious (Worthington et al., 2010); however, a review of research on forgiveness and religion conducted by McCullough and Worthington (1999) highlighted

that while religious people were more forgiving than those who identified as less religious, a gap existed regarding a religious individual's reported willingness to forgive and their actual forgiveness for an offense.

In their review of research, McCullough and Worthington (1999) reported a phenomenon in which religious people described themselves as generally forgiving (i.e., they would be characterized as possessing trait forgiveness), though when asked about their forgiveness for a specific offense these individuals generally did not forgive any more than did less religious individuals. In other words, while religious people claimed to be forgiving, they did not consistently forgive for specific offenses. This phenomenon was further explored in a meta-analysis examining religion/spirituality and forgiveness (Davis, Worthington, Hook, & Hill, 2013), and, consistent with McCullough and Worthington's (1999) findings, the authors reported a greater effect size for the relationship between religion/spirituality and trait forgiveness (Pearson's $r = .29$) than for religion/spirituality and state forgiveness ($r = .15$). McCullough and Worthington's (1999) findings led researchers to question whether the discrepancy observed in religious individuals' trait versus state forgiveness was a matter of hypocrisy (Worthington et al., 2010), but Davis and colleagues (2013) suggested that this discrepancy was instead the result of a methodological issue. Davis and colleagues (2013) reported that the effect size of the relationship between religion/spirituality and state forgiveness was higher ($r = .31$) when religion/spirituality was also measured as a state rather than a trait. Other measurement issues have been noted that may contribute to the discrepancy in the findings on religious individuals' trait versus state forgiveness, such as the use of measures of religiosity that do not capture whether an individual will behave in a way

consistent with their religion. For example, measures of an individual's religious affiliation (i.e., whether or not they identify as religious and, if so, which religion they identify with) used in relationship with forgiveness are problematic because they assume that an individual's religious identity means they hold actual beliefs and values consistent with that religion (Escher, 2013). Thus, the use of more comprehensive measures of religiosity may more fully capture the relationship between religion and forgiveness.

In addition to methodological issues, scholars have suggested that other factors, such as the individual's appraisal of the offense or the offender, may overshadow or moderate the relationship between religion and state forgiveness, resulting in the inconsistent findings between these variables (Worthington et al., 2010). Through the lens of the dynamic process model of forgiveness (Ho & Fung, 2011), religious beliefs and values are just some of the sociocultural factors among many that can influence the process of forgiveness. In addition to internalizing a religious belief system that promotes forgiveness, being socialized into forgiving behavior and internalizing other beliefs that encourage forgiveness may also lead someone to be more inclined to forgive (Escher, 2013). The larger effect size in the relationship between religion/spirituality and trait forgiveness versus that of religion/spirituality and state forgiveness may result from these other factors. When self-reporting on their trait forgiveness, religious individuals are not actually engaging in forgiveness but instead indicating how forgiving they consider themselves in general, but when self-reporting on state forgiveness for a specific offense, whether imagined or real, other factors are then weighed with their religious beliefs and values, and these factors may at times compete with or complement the virtues espoused by their religion. For example, an offense committed intentionally

rather than by accident would make it more difficult to empathize with the offender, which would in turn decrease the likelihood of forgiveness (Carone & Barone, 2001).

Another shift that occurred within the literature on the relationship between religion and forgiveness was recognizing and addressing how religions view forgiveness differently (Worthington et al., 2010). Forgiveness is understood and valued differently across major religions, including the conditions in which one is expected to forgive. To summarize religious definitions of forgiveness: Judaism conceptualizes forgiveness as the removal of an offense such that while the victim might remember the transgression, they accept the offender and would be open to a relationship with them; Christianity views forgiveness as a pardon from an offense; Islam defines forgiveness as a closing of an offense against God, a person or persons, society, other living creatures, or the environment in general; Hinduism usually combines the word for forgiveness with words representing mercy or compassion; and in Buddhism forgiveness is not easily defined due to the various languages used within the religion (Rye et al., 2000). Forgiveness is considered to have a central role in Judaism and to be at the core of Christianity, and it is viewed as important in Hinduism, where forgiveness is required to be righteous, and in Islam, where forgiving is a sign of magnanimity and is viewed as bringing happiness and respect; although forgiveness is not central in Buddhism, the related concepts of forbearance and compassion are foundational (Rye et al., 2000). While Christians are required to forgive regardless of interpersonal context (e.g., even if the offender refuses to apologize), Jews view forgiveness as a requirement only when the offender has repented (Worthington et al., 2010). In Islam, forgiveness does not require repentance between two people, though forgiveness from God requires repentance (Rye et al., 2000).

Buddhism does not require repentance or remorse for forbearance, and Hinduism is less clear, with certain texts providing examples of forgiveness following repentance and others demonstrating forgiveness without repentance (Rye et al., 2000).

Despite the recognition in the literature that forgiveness is understood differently across religions, one noted limitation regarding much of the existing research is that studies have been based on predominately white, Christian samples, leading to calls for research based on samples with other groups (Carlisle & Tsang, 2013; Davis et al., 2013). Although not exclusive to those who are religious, forgiveness is a construct that is deeply embedded in and informed by religion. The forgiveness literature's reliance on Christian samples restricts our understanding of forgiveness because it is an understanding largely built on the Christian view of forgiveness. Thus, research on forgiveness within Muslim samples is important because it may broaden our understanding of forgiveness to include the Islamic context. Researchers have also indicated a need for research on the relationship between religion and forgiveness in the context of intergroup conflicts (Davis et al., 2013). Examining the role of forgiveness in intergroup conflicts, which could range in scale from wars to interpersonal situations such as when members of a dominant group oppress a marginalized group (as is the case with Muslims in the U.S.), may provide knowledge about the breadth of forgiveness in coping with offenses. That is, forgiving someone for an offense based on a victim's sociocultural identity is potentially different for the forgiver than forgiving for another kind of offense.

Although the current study did not examine differences between trait and state forgiveness, the call for an examination of moderating factors in the relationship between

religion and state forgiveness (Worthington et al., 2010) inspired the current study's exploration of implicit theories as a possible moderating factor in the relationship between these variables. Additionally, the current study sought to address the limitation of the current literature on forgiveness and religion as being largely based on white, Christian samples (see Carlisle & Tsang, 2013; Davis et al., 2013). Through examining forgiveness in a sample of Muslims, the current study aimed to broaden the scope of the literature on religion and forgiveness.

Muslims in the United States

In 2015, Muslims accounted for approximately one-quarter of the world's population, or 1.8 billion people, making Islam second only to Christianity in number of followers (Lipka & Hackett, 2017, April 6). With Muslims making up more than 50% of the population in nearly 50 countries, and the largest populations found in such varied countries as Indonesia, Pakistan, and Egypt (*The future of the global Muslim population*, 2011), Muslims comprise a diversity of ethnicities and races, which is also reflected in the Muslim population in the United States. In 2016, an estimated 3.3 million Muslims lived in the U.S., composing about 1% of the country's population (Mohamed, 2016, January 6), though estimates can vary widely and depend in part on whether identifying Muslims generally, or American Muslims specifically. More than 75% of Muslims in the U.S. identify as either African American, Arab, or South Asian (T. Johnson, 2011, September 19). Although Muslims constitute a relatively small religious group in the U.S., they have increasingly experienced oppressive acts on both interpersonal and systemic levels.

During the past three decades, overt discrimination against ethnic minority groups in the U.S. has seen an overall decrease, though an opposite trend has been true for Muslims (Awad & Amayreh, 2016). In the years following the terrorist attacks of September 11, 2001, Muslims in the U.S. experienced an increase in discrimination (Disha, Cavendish, & King, 2011). Scholars have argued that increased discrimination toward Muslims after 9/11 was not a new trend but instead followed a pattern in Western countries that began at least as far back as the 1979 revolution in Iran (Poynting & Mason, 2007). Other scholars suggest Western perceptions of Islam, such as those seen in media presentations of Muslims as others who are associated with terrorism, reflect an even older phenomenon known as *Orientalism*, which is a historical European perception of Eastern cultures, including those in the Middle East, as backward curiosities (Nurullah, 2010). The promotion of negative stereotypes about Muslims in Western media coincides with findings that Americans view Muslims less favorably than Jews, Catholics, Protestants, evangelical Christians, Buddhists, Hindus, and Mormons (Lipka, 2017, May 26). At the same time, American politicians have pursued policies targeting Islamic communities in the U.S.

Shortly after his inauguration as president of the U.S., Donald Trump signed an executive order that barred citizens from six predominately Muslim countries from entering the U.S. ("Trump travel ban comes into effect for six countries," 2017, June 30). Trump's executive order was signed following a campaign in which he repeatedly used anti-Islamic rhetoric (J. Johnson & Hauslohner, 2017, May 20). After the executive order was challenged in courts, the Supreme Court eventually ruled in favor of a modified version of the order. Trump may have been unusual in the overt nature of his anti-

Muslim rhetoric, but he was certainly not the first politician in the U.S. to implement policies targeting Muslims. State and federal policies have targeted Muslims for years. For example, during the years 2011 and 2012, 78 pieces of legislation vilifying Islam were introduced in more than half of the country's state legislatures and in Congress (*Legislating fear: Islamophobia and its impact in the United States*, 2013). An example of these proposed pieces of legislation included a prohibition on the use of Sharia law in state courts that was signed into law in some states (Pedrioli, 2012). Within this environment in which Muslims are othered in the media and through government policies, they have faced increased discrimination and hostility in the U.S.

Data from the Federal Bureau of Investigation indicated that in 2015 physical assaults against Muslims in the U.S. reached their highest level since 2001 (Kishi, 2016, November 21). Corresponding with the increased oppression toward Muslims, a body of research has developed examining discrimination toward Muslims. Researchers in Australia, a country similar to the U.S. in that it is a former colony of the United Kingdom with a majority of its population identifying with a European ethnicity and a Christian religious group, reported results from a study indicating that participants showed increased aggression toward markers of Islam (specifically, while playing a video game in which the player shoots at armed people, participants shot more often at targets wearing turbans; Unkelbach, Forgas, & Denson, 2008). In studies related to employment, researchers in the U.S. reported that when sending resumes with religious affiliation included to employers advertising a job opening, Muslims received a third fewer responses than a control group (Wright, Wallace, Bailey, & Hyde, 2013); that women wearing Hijabs were negatively associated with permission to complete a job

application, an employer's perceived interest, expectations to receive a job offer, and perceived negativity (Ghumman & Ryan, 2013); and that hypothetical job applicants with typically Muslim names were judged less favorably by employers than those with European American names when presented with negative information about the applicants (Park, Malachi, Sternin, & Tevet, 2009). In another study examining discrimination based on typically Muslim names, researchers in Canada reported that inquiries into rental housing resulted in the greatest amount of discrimination via nonresponse or additional rental conditions when the name presented to the landlord sounded Muslim or Arabic (Hogan & Berry, 2011).

Each of the aforementioned studies on discrimination against Muslims relies in some way on stereotypical perceptions of Muslims. For example, Unkelbach and colleagues (2008) used the turban as a marker for Islam even though the wearing of turbans is neither exclusive to Islam nor practiced by all Muslim men. The reliance in research on stereotypical perceptions of Muslims brings up the issue of the conflation of Arab or Middle Eastern cultures with Islam within discrimination research (Awad & Amayreh, 2016), which is a methodological issue in some studies (e.g., Martin, 2015). However, based on the results of the studies noted in the prior paragraph, there is evidence that Muslims who are more easily identifiable as such by non-Muslims may be more likely to report experiencing discrimination. Zainiddinov (2016) reported finding differences in perceived discrimination among Muslim Americans based on racial/ethnic identity, gender, and age, with Asian Muslims reporting the least discrimination, women reporting less discrimination than men, and older Muslims reporting less discrimination than younger Muslims. Recognizing these differences in perceived discrimination,

scholars have accounted for the effect of demographic variables in their research, such as by controlling for a Muslim's nation of origin (e.g., Hodge, Zidan, & Husain, 2016). However, the author of one study on discrimination against Muslims in health care settings reported finding no relationship between perceived discrimination among Muslim Americans and gender, country of birth (i.e., U.S. born or non-U.S. born), or wearing of clothing that could be associated with Muslims, though nearly three-quarters of the individuals in the study indicated not experiencing discrimination in a health care setting (Martin, 2015). Additionally, authors of a study on workplace discrimination against Muslims in the U.S. found no difference in perceived workplace discrimination among Muslim women who wore a hijab versus those who did not (Ali, Yamada, & Mahmood, 2015). In comparing the results of the studies by Zainiddinov (2016), Martin (2015), and Ali and colleagues (2015), it is noteworthy that the former based their study on a sample of more than 1,000 participants, while the other two studies were based on much smaller sample sizes and focused on discrimination in specific settings (i.e., health care settings and places of employment).

Qualitative researchers have reported that Muslims in the U.S. describe experiencing unique microaggressions based on their religious identity, such as suggesting that Muslims are terrorists, pathologizing or exoticizing Islam, making assumptions about Muslims being a homogenous group, using Islamophobic language, and treating Muslims as if they are aliens (Nadal et al., 2012). These experienced microaggressions highlight unique stressors faced by Muslims in the U.S., such as challenges to practicing their religion (e.g., praying five times daily), feeling alienated, misconceptions by others about Muslims and Islam, a sense that their values are

incompatible with those of American society, and a lack of education and services designed for Muslims (Haque, 2004). Scholars conducting qualitative research have also highlighted discrimination experienced by Muslim American adolescents in schools from teachers, administrators, and peers (Aroian, 2012).

Scholars studying the impact of discrimination on Muslims in the U.S. have found that perceived discrimination has been associated with paranoia (Rippy & Newman, 2006) and that some kinds of discrimination toward Muslims, such as being called offensive names or being targeted by law enforcement officials, is associated with depression, while other kinds of discrimination, such as people acting suspicious toward them or security targeting them, does not have such a deleterious effect (Hodge et al., 2016). There appears to be a need for greater research on the mental health impacts of discrimination against Muslims in the U.S., as much of the research in this area focuses on ethnic groups that are majority Muslim (e.g., Padela & Heisler, 2010), as opposed to specifically Muslims, or on Muslims living in other Western countries. While their religious identity is the target of the discrimination they experience, Muslims' religious beliefs have qualities that can serve as protective factors.

Islam compels Muslims to develop positive qualities, such as faith, repentance, patience, gratitude, contentment, and justice, all of which are virtues that can foster mental health (Haque, 2004). Forgiveness is also a virtue in Islam, one that has been described as the “essence” of Islam because the Qur'an emphasizes it above some of the ethical pillars (i.e., prayer and almsgiving; Davary, 2004, p. 129). The Qur'an uses multiple words related to the concept of forgiveness, including “afw” (pardon or amnesty), “safhu” (turning from sin or ignoring a wrong), and “ghafara” (covering up or

erasing sin; Abu-Nimer & Nasser, 2013). The Qur'an refers to forgiveness from the perspective that committing an offense against another is an act that does harm to the self, and thus to forgive is an act of giving in spirit to an offender who is in need because of the harm they have done to the self (Davary, 2004). Although referenced and modeled throughout Islamic texts, forgiveness is not obligatory in Islam (Davary, 2004), and pursuing punishment rather than forgiveness is not considered a sin (Abu-Nimer & Nasser, 2013). However, Islamic texts suggest that forgiveness is foremost beneficial for the forgiver and brings them bliss (Davary, 2004). Forgiveness, though, is considered to be conditional in Islam, in that a Muslim would not be expected to forgive an individual who will continue to do harm (Abu-Nimer & Nasser, 2013). Therefore, the extent to which a Muslim determines that they will forgive an offender may depend in part on their perception of the individual as likely to re-offend. In cases in which a Muslim is offended based on their religious identity, the degree to which an offender will continue to offend may be difficult for them to discern. An individual would likely rely on cues from the offender's behavior to determine whether their transgression is typical or instead something that is likely to change over time. Among the variables that may influence the individual's attribution of an offender's behavior in a situation as typical versus extraordinary are their implicit theories about other people.

In light of the oppressive environment faced by Muslims in the U.S. during the past three decades, the current study sought to examine forgiveness as a way one might cope with experiences in which they are targeted because of their religious identity. In doing so, the current study aimed to address a limitation in the existing literature in which Muslim identities are conflated with Arab or Middle Eastern cultures by assessing the

experiences of Muslims in the U.S. broadly, rather than a specific ethnic group that is predominately Muslim. Additionally, the current study's examination of implicit theories as a possible moderating variable in a relationship between Muslims' religious commitment and forgiveness was chosen to account for the conditional nature of forgiveness in Islam, in which Muslims are not expected to forgive if they believe the offender will continue to do harm (Abu-Nimer & Nasser, 2013).

Implicit theories

Implicit theories are core assumptions people hold about themselves, others, and the world that influence their inferences, judgments, and reactions (Dweck et al., 1995a). These assumptions are disparate from learned knowledge about the world in that, unlike information learned in school that is assumed to be relatively the same across individuals (e.g., mathematics), implicit theories can be very different from person to person (Dweck, 2012). They are called *implicit* theories because they are not directly expressed by the individual (Miller, Burgoon, & Hall, 2007); other terms used to describe implicit theories are "lay theories," "folk beliefs," "naïve theories," and "mindsets" (Plaks, 2017). Drawing from Kelly's (1955) work on personality and Heider's (1958) work on social perception, Dweck and colleagues (1995a) posited that implicit theories provide frameworks through which individuals define their reality and perceive their experiences, and they identified two distinct kinds of implicit theories: *incremental* and *entity*. In an incremental theory, an individual believes that a trait or person is inherently capable of change. When an individual holds an entity theory, they believe a quality or person is, at its core, fixed, or unable to change. These theories are about perceived control over attributes (Dweck, 2012): Entity theorists do not believe that the trait in question can be

controlled, whereas incremental theorists believe that with effort the trait can be controlled. Dweck (2012) reported that her research has found that generally 40% of people endorse holding an entity theory, 40% endorse holding an incremental theory, and 20% do not clearly endorse either theory.

An individual's implicit theories are not necessarily universal across domains but are instead domain specific (Dweck et al., 1995a). For example, an individual can hold an entity theory of intelligence while having an incremental theory of personality. Researchers have reported evidence suggesting that an individual's implicit theories remain stable over time. For example, Robins and Pals (2002) reported data from a longitudinal study that tracked students throughout college and found no differences in their implicit theories over time. Implicit theories may remain stable over long periods, but either theory can be activated for a time, and while a theory is active the individual is biased toward information aligned with that theory (Plaks, 2017). Although incremental theories were associated with positive outcomes in studies examining implicit theories about intelligence (e.g., Dweck & Leggett, 1988), neither theory is "correct" but are instead different perceptions of reality (Dweck et al., 1995a). Individuals look for different information in making attributions depending on the theory they hold, with entity theorists tending to see behavior as caused by an internal trait and incremental theorists having more consideration of the context of the behavior (Miller et al., 2007; Plaks, 2017). Incremental theories are not always advantageous. For example, an incremental theory about people could be problematic if it leads an individual to remain in a harmful relationship due to the belief that the other person will change (Dweck, Chiu, & Hong, 1995b). Researchers have reported finding that implicit theories influence

motivation, cognition, affect, and behavior, and that they have the greatest impact when individuals are presented with a challenge or difficulty (Dweck, 2012).

Early work on implicit theories examined their relationship with students' motivation, testing a social-cognitive model that the theories people hold about themselves will influence the goals they set (Dweck & Leggett, 1988). Specifically, researchers found that when children held an incremental theory of intelligence (i.e. they believed that intelligence is something controllable) they were more likely to work to increase their competence in something when challenged, whereas children holding an entity theory of intelligence (i.e., they believe that intelligence is fixed and cannot be controlled) were more likely to work toward being evaluated positively (see Dweck & Leggett, 1988). This seminal work by Dweck and Leggett (1988) paved the way for later work that expanded investigations of implicit theories into other domains, including personality and moral character (see Dweck et al., 1995a).

One area of implicit theories research that researchers have explored focuses on how they are related to responses to conflict or transgressions. Researchers studying implicit theories and their relationship with responses to transgressions have generally found that incremental theories are associated with more positive responses toward a transgressor. Scholars have found that entity theorists are more likely to take a punitive stance for a negative social behavior (Erdley & Dweck, 1993; Gervy, Chiu, Hong, & Dweck, 1999), to have a stronger desire for revenge (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011), and to have a hostile attributional bias (Yeager, Miu, Powers, & Dweck, 2013). Researchers have also reported that interventions promoting an incremental theory have led to reduced desire for revenge (Yeager et al., 2011) and

reduced hostile intent attributions and aggressive desires (Yeager et al., 2013). Implicit theories impact an individual's responses to transgressions via attributions and emotions about transgressors as well as about the self (Yeager & Dweck, 2012). An incremental theory about people when faced with conflict might lead individuals to believe they can take steps to influence the other person to change in a favorable way, whereas a fixed theory might lead them to resign to accepting the negative behavior of the other person and withdraw from them or retaliate (Dweck, 2012).

Scholars have also examined implicit theories in the context of the conflict between Israelis and Palestinians, with results suggesting incremental beliefs can have positive effects for individuals in this conflict. For example, researchers reported that in a sample of Israeli Jews malleability beliefs (an alternative term for incremental theories) were associated with hope about the Israeli-Palestinian conflict and support for concessions (Cohen-Chen, Halperin, Crisp, & Gross, 2013). Researchers have also reported that inducing an incremental theory among Israelis and Palestinians led to more favorable attitudes toward the out-group, which predicted willingness to compromise for peace (Halperin, Russell, Trzesniewski, Gross, & Dweck, 2011; Levontin, Halperin, & Dweck, 2013). Recognizing the potential value of transforming implicit theories as a method of coping with transgressions, several authors have examined this construct's relationship to forgiveness.

In an early discussion of how an individual's implicit theories could potentially impact their response to a transgression, Dweck and colleagues (1995a) noted that while some might expect entity theorists to be more willing to exonerate an offender because they hold the belief that the offender's behavior is a result of fixed traits, their belief in a

fixed trait may not necessarily lead to an expectation that trait-related behavior is outside the offender's control. That is, an entity theorist might believe an individual's traits are fixed while also believing the individual is capable of exercising freedom in choosing their behavior in a given situation. Thus far, the research on the role of implicit theories in forgiveness has not led to consistent results.

Researchers conducting an early study on implicit theories and forgiveness investigated the relationship between these constructs and attachment anxiety (Finkel et al., 2007). Finkel and colleagues (2007) reported that college students with strong destiny beliefs (an entity theory about relationships) were less likely to forgive when experiencing state attachment anxiety, whereas destiny beliefs were not associated with forgiveness for individuals experiencing state attachment security. In another study on implicit theories of relationships and forgiveness, researchers reported that college students holding a strong soulmate theory (reflecting an entity theory) are more reliant on their perception of partner fit when deciding whether to forgive, whereas incremental beliefs about relationships did not moderate the relationship between partner fit and forgiveness (Burnette & Franiuk, 2010). In both studies, entity theories were found to be related in some way to less forgiveness. In research examining the association between implicit theories and intergroup forgiveness, scholars found that Israeli Jews with greater beliefs in the malleability of groups (reflecting an incremental theory) were more likely to forgive in response to an apology by Palestinian leadership, and that college students believing in group malleability were more forgiving of a rival university in the presence of an apology (Wohl et al., 2015). In contrast to the findings that in certain situations those with entity theories are less likely to forgive (Burnette & Franiuk, 2010; Finkel et

al., 2007) while those with incremental theories are more likely to forgive (Wohl et al., 2015), other scholars have reported finding that incremental theories are associated with decreased forgiveness in certain situations. For example, scholars conducting an experimental study with female college students at a university in Singapore reported that those primed with incremental theories of personality were less forgiving of someone they know for a transgression that they felt deeply hurt by than those primed with entity theories and that this relationship was mediated by perceiving the transgressor as responsible for their actions (Ng & Tong, 2013). Similarly, researchers reported results from data with an online sample and a college sample that individuals with incremental theories are less forgiving of people displaying chronic failures, though forgiveness was not directly measured and this conclusion was instead based on how much the individuals blamed the person responsible for the failures (Ryazanov & Christenfeld, 2018). These discrepant findings regarding implicit theories and forgiveness suggests that the relationship between implicit theories and forgiveness may vary in different contexts.

A relationship between implicit theories and religion does not yet appear to have been investigated in the literature. However, scholars have posited that religion would foster certain implicit theories. For example, Vishkin, Bigman, and Tamir (2014) connected religion and implicit theories in a discussion of emotion regulation, suggesting that religion promotes an incremental theory of emotion by teaching its followers that they can change their emotions. Silberman, Higgins, and Dweck (2005) also suggested implicit theories may interact with religious beliefs in shaping which religious messages someone decides to follow (i.e., do they decide to invest in religious messages that promote revolution or that support the status quo?). Following these theorized

connections, it is possible one's religious beliefs could shape implicit theories related to forgiving and at the same time one's implicit theories might determine whether they act in a manner consistent with their religious beliefs.

Given the discrepant findings in the relatively limited literature on the relationship between implicit theories in forgiveness, the current study aimed to further clarify the nature of this relationship. In particular, the current study examined this relationship in the context of Muslims in the U.S., which expands the literature on this relationship. Additionally, the current study examined the theoretical connection between religion and implicit theories (see Silberman et al., 2005; Vishkin et al., 2014), which has not previously been investigated.

Current study

The Muslim population in the U.S. is a vulnerable religious minority that faces oppression on multiple levels. Considering the oppression faced by Muslims in the U.S., there is need for research on the offenses experienced by Muslims based on their religious identity and how they cope with these offenses. One way in which Muslims in the U.S. might cope with offenses they experience based on their identity is through forgiveness. Although forgiveness for offenses based on identity has been researched within the field of intergroup forgiveness, less research has focused on such offenses occurring at an interpersonal level, and to the author's knowledge, no published studies exist that have examined forgiveness by Muslims for offenses based on their identity. Additionally, scholars of the relationship between religion and forgiveness have called for more studies in this area based on non-Christian samples (Davis et al., 2013), and they have indicated that moderating variables may better explain the relationship between

religion and state forgiveness (Worthington et al., 2010). One potential moderating variable between religion and state forgiveness is an individual's implicit theories about people. Several studies have examined the relationship between implicit theories and forgiveness, though the authors of these studies have reported divergent results (Burnette & Franiuk, 2010; Finkel et al., 2007; Ng & Tong, 2013; Ryazanov & Christenfeld, 2018; Wohl et al., 2015).

Further research clarifying the role of implicit theories in forgiveness could be valuable, particularly because two of the major therapeutic forgiveness models (i.e., Enright & Fitzgibbons, 2015; Worthington, 2001) include steps in which the individual works toward seeing their transgressor in an empathetic way that goes beyond associating them with the transgression, suggesting that viewing the transgressor as capable of change (i.e., taking an incremental view) may be important in forgiving. To the extent that implicit theories about people play a role in the relationship between religious commitment and forgiveness, further research might explore therapeutic interventions that focus on targeting the modification of this belief about people to promote healthier coping with an offense. Thus, the purpose of this study was to investigate whether the implicit theories about people held by Muslims in the U.S. moderate the relationship between their religious commitment and their forgiveness for an offense related to their religious identity. Below are the study's hypotheses (and research question):

- 1) Implicit theories about people will moderate the relationship between religious commitment and forgiveness for an offense related to religious identity, after controlling for demographic variables, how long ago the offense occurred, how much hurt the participant experienced related to the offense, and how much they

perceived the individual as likely to re-offend in the same way. Specifically, the study hypothesized that holding implicit theories that were more incremental would strengthen the relationship between religious commitment and forgiveness.

- 2) Implicit theories about people will be significantly related to an individual's perception of the offender's likelihood to re-offend in a similar manner.
- 3) What are the factor structures of scores from the Forgiveness Scale (Rye et al., 2001) and the "Kind of Person" Implicit Theory Scale (Dweck, 1999) from a sample of Muslims?

CHAPTER 2

METHOD

Sample

Planning for recruitment of the study's sample began with an a priori power analysis using G*Power (Faul, Erdfelder, Buchner, & Lang, 2013), which provides an estimated sample size needed for a study based on number of variables, desired effect size, and alpha and power levels. For the primary analysis, which utilized multiple regression, for a medium effect size ($f^2 = .15$; Cohen, 1988), alpha at .05, power at .80 (per Cohen, 1992), and 11 predictors (two independent variables, an interaction effect of these two variables, and eight controls; details on these variables to follow), G*Power reported a minimum sample size of 123. A medium effect size was selected based on Davis and colleagues' (2013) meta-analysis on the relationship between religion/spirituality and state forgiveness, in which they reported finding an effect size in the relationship between these variables that was between the low and moderate range. As factor analyses were planned on correlations of scores from the measures of implicit theories and forgiveness due to the lack of literature on these measures with Muslims, a larger sample than the 123 indicated for the primary analysis was sought. Researchers have reported that, for exploratory factor analysis, the necessary sample size for accurate estimates of pattern and structure coefficients depends on characteristics of the data, and

a sample size of 100 may be adequate in situations with three factors and up to four variables each when communalities are at least .7, though larger samples would be recommended with communalities below .5 (Bandalos & Finney, 2010). Although a smaller sample size may have been sufficient, the current study aimed for a sample size of 200, per the recommendations by Meyers, Gamst, and Guarino (2006) of at least 10 responses per item and a sample size of 200.

The sample was obtained via multiple sources, with data collection ongoing for approximately six months. Initially, the survey was shared as a Human Intelligence Task (HIT) on Amazon's Mechanical Turk (MTurk), via posts on Islam-related discussion forums on Reddit, and by use of snowball sampling through contacting Islamic student organizations at universities across several states in the Midwest and the South.

Researchers have argued Reddit is a valuable sample source when seeking specific demographics because of its diverse subreddits (Shatz, 2017). Researchers studying the use of MTurk for survey data have reported MTurk can produce a sample more diverse than other online recruitment methods or sampling college students and that it can yield data of equal quality compared to traditional or other online samples (Berinsky, Huber, & Lenz, 2017; Buhrmester, Kwang, & Gosling, 2011; Casler, Bickel, & Hackett, 2013).

Prior to recruiting participants, the Institutional Review Board (IRB) approved the study and the recruitment message. After several months of recruitment using MTurk, Reddit, and contacting Islamic student organizations, recruitment efforts were expanded due to limited numbers of completed surveys. While continuing to recruit participants using the aforementioned methods, recruitment expanded through posts on Facebook groups related to Islam (with permission from moderators of the groups, some of whom offered

to share the survey outside of Facebook) and also by sharing the survey on two listservs of psychology organizations relevant to the study (the American Psychology Association's Society for the Psychology of Religion and Spirituality and the American Arab, Middle Eastern, and North African Psychological Association).

Participants

The total sample consisted of 152 Muslim adults living in the United States, with a smaller sub-sample used for the primary analysis. A sub-sample was utilized in the study because a number of participants partially completed the survey, and their responses could be used for the factor analyses though there was not enough data in their responses to be included in the primary analysis. The sub-sample utilized for the primary analysis consisted of 146 Muslim adults living in the United States. Among the sub-sample used for the primary analysis, 66.4% identified as female ($n = 97$), 32.2% as male ($n = 47$), and 1.4% as genderqueer/nonbinary/non-conforming ($n = 2$). The mean age of this sub-sample was 30.82 ($SD = 8.24$). The ethnic identities of this sub-sample included 28.1% Arab/Arab American ($n = 41$), 24% White/Caucasian ($n = 35$), 17.1% Asian/Asian American ($n = 25$), 8.9% Black/African American ($n = 13$), 2.1% Hispanic/Latinx ($n = 3$), 2.1% Persian/Persian American ($n = 3$), 2.1% Turkic/Turkish American ($n = 3$), and 1.4% biracial/multiracial ($n = 2$). A number of participants selected more than one ethnic identity (8.2%, $n = 12$), in some cases not identifying as biracial/multiracial, and 6.2% of this sub-sample indicated their ethnicity as "Other" ($n = 9$). An open comment field allowed participants to type in ethnicities that were not provided among the responses, and 2.7% ($n = 4$) responded that they identified as South Asian (other identities provided here included Afghan/Afghan American, East Indian, Palestinian, and Somali).

Regarding national origin, 72.6% ($n = 106$) indicated being born in the United States and 27.4% ($n = 40$) indicated they were born in another country. Regarding level of education, 47.9% ($n = 70$) reported having a college degree, 42.5% ($n = 62$) reported having a graduate or professional degree, and 9.6% ($n = 14$) reported having a high school degree; no individuals reported having less than a high school degree.

The total sample of 152 Muslim adults living in the United States was used for the factor analyses, and the overall sample included 65.1% who identified as female ($n = 99$), 31.6% as male ($n = 48$), and 1.3% as genderqueer/nonbinary/non-conforming ($n = 2$). The mean age of the total sample was 30.87 ($SD = 8.16$). The ethnic identities of the sample included 27.6% Arab/Arab American ($n = 41$), 23% White/Caucasian ($n = 35$), 16.4% Asian/Asian American ($n = 25$), 8.6% Black/African American ($n = 13$), 2% Hispanic/Latinx ($n = 3$), 2% Persian/Persian American ($n = 3$), 2% Turkic/Turkish American ($n = 3$), and 1.3% biracial/multiracial ($n = 2$). Regarding national origin, 71.1% ($n = 108$) indicated being born in the United States and 27% ($n = 41$) indicated they were born in another country. Regarding level of education, 46.7% ($n = 71$) reported having a college degree, 42.1% ($n = 64$) reported having a graduate or professional degree, and 9.2% ($n = 14$) reported having a high school degree; no participants reported having less than a high school degree. Three participants included in the factor analyses did not provide any demographic information.

Procedures

Data was collected online via a survey hosted on Qualtrics. Participants reached the survey by a web link included in either an email or a web posting. Participants first completed three screening items to ensure they met criteria for the study (these items

asked individuals to indicate their religious identity, their country of residence, and their experiences with offenses based on their religious identity) and a screening item to confirm the participant was a human and not a bot (this item asked for the answer to a simple math problem and used images for the responses rather than text-based responses). Upon answering any of these items in a way suggesting they did not meet study criteria or in which they failed to correctly answer the simple math problem, participants were directed to a message thanking them for their interest in the survey and were not permitted to participate further.

After successfully completing the screening items, participants reviewed an IRB-approved recruitment message with information about the study (described below). Participants then clicked to confirm they understood the details about the study and that they were an adult living in the U.S. who identified as Muslim and had experienced an offense related to being Muslim. The survey was counterbalanced to control for survey effects, with separate blocks consisting of: 1) demographic information items, 2) the implicit theories measure, 3) the religious commitment measure, and 4) items about the offense, including the forgiveness measure. The block with items about the offense also included an item asking participants to recall a past incident in which someone committed an offense against them based on their identity as a Muslim and then write two to three brief sentences describing the offense, for the purpose of increasing its salience before they responded to questions about the offense. Following recommendations on fair payment for MTurk workers (Goodman, 2014), participants on MTurk were paid \$1.00 for completing the survey, a rate which was selected to provide payment roughly equal to the minimum wage in the U.S. Participants completing the

survey on MTurk only received payment if they completed all sections of the survey, including the description of the offense they experienced, and their responses did not indicate they responded without effort (i.e., they passed most or all screening items and did not provide a clearly irrelevant response to the item asking for a description of the offense). An option in MTurk that prevents a user from completing the task more than one time with the same MTurk account was also utilized.

The recruitment message described the study inclusion criteria. The recruitment message also included the title of the study, the study purpose, the names of the investigators, IRB contact information for reporting complaints or concerns about the study, risks and benefits for participating (i.e., participation in the study required thinking about an offense they have experienced and that, for those completing the survey on MTurk, the participant benefited through payment), and a statement that minimal personal information would be collected and that all data would be stored on a password-protected computer in a locked room.

Measures

Demographic information – Participants completed several items related to their identities and background. Specifically, the survey asked participants to indicate their age, gender, race/ethnicity, nation of origin (a binary choice of U.S. or other), and education level. These variables were included as controls in the primary analysis as it was expected they may impact an individual's experience with an offense toward their religious identity based on the results of prior research that found differences in perceptions of discrimination among Muslims based on these variables (Hodge et al., 2016; Zainiddinov, 2016). Demographic information also allowed for a description of

the sample so that readers of published results from the study could consider the generalizability of the findings to the Muslim population in the U.S.

Forgiveness – State forgiveness was measured using the Forgiveness Scale (Rye et al., 2001), a 15-item self-report instrument designed to assess forgiveness toward a particular person. This instrument operationalizes forgiveness as letting go of negative emotions, cognitions, and behavior toward an offender, and moving toward positive responses toward that person. The items are measured on a 1-to-5 scale, with 1 representing Strongly Disagree and 5 being Strongly Agree. Eight items on the scale are reverse-coded. There are two subscales on the instrument, Absence of Negative (AN; e.g., “I can’t stop thinking about how I was wronged by this person”) and Presence of Positive (PP; e.g., “I pray for the person who wronged me”), scores on which reflect absence of negative or presence of positive responses to an offender, respectively. Higher total scores on the measure represent greater forgiveness toward an offender.

Authors of the Forgiveness Scale validated the measure with a sample of college students from a Catholic university, with about two-thirds of the participants identifying as female, about 90% Caucasian, and about 70% Catholic; less than 1% of the sample identified as Muslim. The authors reported that the scores generated from the measure produced Cronbach’s alphas of .87 for the total scale score, .86 for the AN subscale score, and .85 for the PP subscale score. The authors also reported results from the factor analytic study supported a two-factor solution, and one item was removed from the scale due to low factor loadings on both factors. The subscale items were determined based on their factor loadings in this model, with 10 items placed in the AN subscale and five in the PP subscale, though one item related to anger had similar loadings on both subscales

and was placed with the subscale that the authors considered to increase conceptual clarity (two other items related to anger also had high loadings on both factors). The authors reported computing test-retest reliability coefficients after administering the measure a second time just more than two weeks after the initial administration, resulting in test-retest reliability coefficients of .80 for the total scale score and .76 for scores from both subscales. The authors reported validity evidence of the scores from the measure's subscales through their positive, significant correlations with other measures of forgiveness (AN, $r \geq .52, p < .001$; PP, $r \geq .53, p < .001$), as well as with measures of religiousness (AN, $r = .16, p < .01$; PP, $r = .29, p < .001$), hope (AN, $r = .35, p < .001$; PP, $r = .11, p < .05$), and spiritual well-being (AN, $r \geq .20, p < .001$; PP, $r \geq .21, p < .001$), and through negative, significant correlations with measures of anger (AN, $r \leq -.34, p < .001$; PP, $r \leq -.13, p \leq .05$). Later studies have demonstrated that scores from the measure show good evidence of reliability and validity, and translations of the measure have been validated for use with diverse populations and cultures (Worthington et al., 2014). For example, in a study based on undergraduate students, Ross and colleagues (2004) found scores from the Forgiveness Scale produced a Cronbach's alpha of .87, and that the scale's scores were significantly positively associated with scores from four other measures of forgiveness of others ($r \geq .31, p < .001$). In a study based on a sample of adults at workplaces and community groups in England, scores from the Forgiveness Scale produced a Cronbach's alpha of .82 (Maltby, Day, & Barber, 2004). In another study, which was based on adults age 25 to 50 who participated in a forgiveness intervention, researchers used the AN and PP subscales and found the AN subscale scores produced a Cronbach's alpha of .79 and the PP subscale scores produced a Cronbach's

alpha of .82 (Harris et al., 2006). The internal consistency reliability coefficient of the Forgiveness Scale scores in this study was .83.

Implicit theories – Participants' implicit theories about people was measured using the "Kind of Person" Implicit Theory Scale (Dweck, 1999). The "Kind of Person" Implicit Theory Scale includes eight items that measure an individual's implicit theories about people's ability to change and grow. The measure has two subscales, one representing a fixed mindset (or entity implicit theory) and the other representing a growth mindset (or incremental implicit theory); each subscale has four items. An example of a fixed mindset item is "The kind of person someone is, is something very basic about them and it can't be changed very much"; an example of a growth mindset item is "Everyone, no matter who they are, can significantly change their basic characteristics". Items are scored on a 6-point scale where 1 is Strongly Agree and 6 is Strongly Disagree, and the growth mindset subscale items are reverse-coded. Subscale scores are calculated by averaging the scores for each item of the subscale; a total growth mindset score is attained by adding together and then averaging the two subscale scores or averaging the scores for all items on the measure. Higher scores indicate a growth mindset, while lower scores indicate a fixed mindset. Scores from the measure have been reported to show high internal consistency reliability with undergraduate students ($\alpha = .93$; Levy, Stroessner, & Dweck, 1998), and the test re-test reliability coefficient was .82 over a 1-week period and .71 over a 4-week period (Levy & Dweck, 1997). Of note, the authors of the aforementioned studies did not report information regarding the religious identities of their samples.

The “Kind of Person” Implicit Theory Scale was developed as a more robust version of a shorter measure of implicit theories about people (Dweck et al., 1995a), which consists of three of the items now included in the fixed mindset subscale. Although scores from the longer measure have typically been used as a continuous variable, researchers often discuss the scores as describing two separate groups (Plaks, 2017). With the shorter version of the measure, average scores above 4 indicate someone with an incremental theory and scores below 3 indicate someone holding an entity theory; scores ranging from 3.1 to 3.9 are considered to reflect an individual without a clear implicit theory about people. Researchers have noted that such an artificial categorization of scores from a continuous variable can be problematic. For example, MacCallum and colleagues (2002) pointed out how an individual who scores just above a cutoff value on a measure using a median split such as that used with this scale is treated the same as someone scoring near the maximum value. Given such problems with the categorization of participants as holding an entity theory or incremental theory, the current study did not categorize participants in this way. Dweck and colleagues (1995a) reported that scores from the shorter measure produced internal consistency reliability coefficients (α) ranging from .90 to .96, and they found a reliability coefficient of .82 from its scores when it was administered to participants twice over a two-week span. The authors reported results from the validation studies demonstrated the measure’s scores were significantly correlated with other measures of implicit theories (e.g., implicit theories of intelligence and implicit theories of morality). The authors also reported that scores from the measure were not significantly correlated with potential confounding variables, including academic aptitude, socially desirable responding, optimism about

human nature, self-esteem, or ideological rigidity or political stance. In this study, internal consistency of the “Kind of Person” Implicit Theory Scale scores was .59.

Religious commitment – Religious commitment was measured using the Religious Commitment Inventory-10 (RCI-10; Worthington et al., 2003), a self-report inventory consisting of two subscales, Intrapersonal Religious Commitment and Interpersonal Religious Commitment, each composed of items related to the role of someone’s religion in their life (e.g., “I enjoy spending time with others of my religious affiliation”, or “My religious beliefs lie behind my whole approach to life”). Although designed to provide separate measures of intrapersonal religious commitment and interpersonal religious commitment, the authors stated they did not advocate use of subscale scores due to the subscale scores having very high inter-correlations in the validation studies, with the Pearson correlation coefficient ranging from .72 to .86. Items on the RCI-10 are scored on a five-point Likert-type scale, and a sum score is calculated to determine level of religious commitment. Higher sum scores indicate greater religious commitment.

The RCI-10 was adapted from a longer measure of religious commitment with the aim of creating a more concise, psychometrically sound instrument (see Worthington et al., 2003, for a review). The authors validated the measure with samples encompassing diverse religious faiths, including those identifying as nonreligious, though most of the samples identified as Christian (relevant to this study, there were 12 Muslims in one of the validation samples). The authors reported that results from the validation studies for the RCI-10 suggested scores from the measure are reliable, with internal consistency for the full-scale score ranging from .88 to .98. Test-retest reliability coefficients were reported as .87 with a three-week interval, and .84 with a five-month interval. Although

there were few Muslims in the samples of the validation studies, researchers in various fields have since reported results from studies including Muslims in which the RCI-10 was used as a measure of religious commitment, with scores from these studies demonstrating good evidence of reliability, with coefficient alphas of at least .88 (e.g., Alaedein-Zawawi, 2015; Ali et al., 2015; Hart & Leach, 2017).

The developers of the RCI-10 reported evidence of validity through its scores being significantly correlated with scores from a single-item measure of participation in religious services ($r = .75, p < .01$), a single-item measure of religious commitment ($r = .84, p < .01$), and a single-item measure of intensity of spirituality ($r = .74, p < .01$). The authors also reported evidence of validity in the significant positive correlation of the measure's scores with participants' spontaneously reported religious behaviors in open-ended responses to a scenario that described the participant returning home and discovering it had been robbed ($r = .30, p < .01$). The developers also completed confirmatory factor analyses on correlations of scores from the measure and reported that a two-factor model with correlated errors was a good fit for the data ($\chi^2[33] = 73.03, p < .001, NFI = .95, NNFI = .96, CFI = .97$) and that it fit better than did a single-factor model; however, due to the previously noted high correlations between the two factors, the authors advised against use of the sub-scale scores. The internal consistency of the RCI-10 scores in this study was .90.

Items about offense – Consistent with other studies of forgiveness, several single-item measures were used to better understand—and control for—variables related to the offense experienced by participants. One of these items asked participants to indicate how much hurt they experienced as they thought about the offense, on a five-point scale

(1 = No hurt, 5 = Extremely hurt). Another item asked participants to indicate how likely they believed the offender was to commit other offenses of this kind (1 = Not at all likely, 5 = Very likely), which was intended to account for the fact that Islam does not promote forgiving an individual if it is expected they will continue to do harm (Abu-Nimer & Nasser, 2013). Finally, an item asked participants to estimate how long ago the offense occurred (“Within the past month,” “1-6 months,” “6-12 months,” “More than one year”).

Screening items – The survey included several items at different points designed to detect participants who did not complete the survey with sufficient effort, following recommendations for data screening (DeSimone, Harms, & DeSimone, 2015). Specifically, the survey included items that directed participants to select a specific answer option or that have only one clearly correct answer (e.g., “Please select Disagree below”) and an item that asked them whether they had answered items without reading them. Incorrect answers on these items suggest individuals may not have been reading the survey items carefully. Additionally, one item was included that asked participants to identify which of the responses was not a pillar of Islam. This item was included both as an indication of attention as well as to identify participants who may have speciously reported identifying as Muslims.

Data analysis

After completing data collection, data analysis started by reviewing the data to determine cases to remove due to not representing the population of interest, per Field (2009). There were two separate sets of data to review: One from individuals who participated via MTurk and a second for all other participants. The MTurk data had its own data set because the survey used with MTurk participants featured a unique feature

at the end in which these participants received an identifier that was used to verify their completion of the survey for payment in MTurk.

Among the MTurk data, any responses that did not receive payment at the time of completion of the survey were excluded from the analysis. Among MTurk responses that received payment, responses were excluded for several reasons. First, responses were excluded from the analysis if the response shared the same Internet Protocol (IP) address as another response in which the participant did not pass the screening items (e.g., if a participant failed to enter the survey due to not identifying as Muslim in the screening items and then returned and answered the screening items correctly and then finished the survey for payment; $n = 9$). These responses were removed because the response behavior suggested the participant may have been deceptive after initially failing to pass the screening criteria in order to receive payment. Second, a few responses ($n = 3$) were excluded that selected at the end of the survey wishing to withdraw from the study. Third, IP addresses were examined to determine whether any participants completed the full survey more than one time, and two such cases were found with completed surveys that had the same demographic information; in these instances, the second cases were excluded from the analyses. Finally, the narrative responses to the item prompting participants to describe the offense they experienced were reviewed, and cases were excluded in which the participants provided a response that was irrelevant to the prompt, nonsensical, or indicated in some way that the individual misunderstood the instructions ($n = 7$).

Among the data collected from other sources, responses were first examined to identify any cases sharing an IP address, and two pairs of responses sharing an IP address

were identified. One of these pairs included two incomplete responses and was excluded due to the responses being incomplete. The second of these pairs included two fully complete responses that had the same demographic information on both responses, and due to the evidence that these responses may have come from the same individual, the second of these responses was excluded from the analyses. Next, one response was removed that was completed by an individual who indicated they were not an adult. Finally, the narrative responses to the item prompting participants to describe the offense they experienced were reviewed, and one case was excluded in which the participant provided an irrelevant response.

After these initial steps, cases among both datasets were examined in which participants provided incorrect responses to the attention items. First, in response to critical feedback from some participants about the item assessing participants' knowledge of the pillars of Islam, cases in which this was the only attention item missed were not excluded (the specific feedback came from participants who stated that this item was problematic because it used the Arabic terms for the pillars and not all Muslims would know the Arabic terms). Next, the remaining cases with incorrect responses to attention items were examined using a threshold for removal of more than one missed attention item. Using this criterion, a few cases were removed that missed more than one attention item ($n = 3$).

The two data sets were then merged and prepared the data for analysis using SPSS Statistics V22. Next, the variables were coded and dummy-coded as necessary for analysis, including reverse-scoring for the Forgiveness Scale and the Implicit Theory Scale scores. For the ethnicity variable, because participants were able to select multiple

ethnicities, any responses that selected more than one ethnicity were coded as “multiracial/biracial”. After coding variables, cases were examined for missing data. Per Osborne (2010), patterns indicating missing data related to a specific sub-group within the sample were assessed by dummy-coding a variable for missing data and examining correlations between this variable and the variables of interest. No significant correlations were found between the dummy-coded variable for missing data and the variables of interest. Following recommendations for handling data for that are missing cases (Kelley & Maxwell, 2010; Schlomer, Bauman, & Card, 2010), multiple imputation was used to replace missing cases.

After performing multiple imputation, total scores were computed for the Forgiveness Scale, Implicit Theory Scale, and RCI-10. Descriptive statistics and frequencies were run on the data. Cronbach’s alpha of the scores from the Forgiveness Scale, Implicit Theory Scale, and RCI-10 were computed to examine internal consistency.

The primary analysis examined the relationship between two independent variables (religious commitment, implicit theories about people) and one dependent variable (forgiveness). Specifically, the primary analysis sought evidence that the participant’s religious commitment was related to their forgiveness for an offense based on their identity as a Muslim, and that their implicit theory about people moderated that relationship, while controlling for how hurt the individual felt about the offense, how likely they believed the offender was to repeat a similar offense, how long ago the offense occurred, and the individual’s age, gender, race/ethnicity, nation of origin (U.S. or other), and education level. Multiple regression was chosen for this analysis as it

allows for explaining or predicting the relationship between a dependent variable and multiple predictors (Pituch & Stevens, 2016), and it is appropriate for testing moderated effects (Kelley & Maxwell, 2010).

Prior to running the multiple regression analysis, the data was prepared for analysis by mean-centering the independent variable total scores, assessing for outliers, and checking for violations of multiple linear regression assumptions. First, because the analysis examined a moderation effect, mean-centering was performed on the scores for the RCI-10 and Implicit Theory Scale to account for the fact that the coefficients for these variables are conditional rather than the main effects (Kelley & Maxwell, 2010). After mean-centering, the means of the mean-centered RCI-10 and Implicit Theory Scale scores were examined to confirm both equaled zero, per Field (2019). Next, a variable representing the interaction between the mean-centered RCI-10 and Implicit Theory Scale scores was computed.

After preparing variables to assess for a moderation effect, the fit of the model to the data was assessed by examining for outliers and influential cases. To assess for outliers, which can bias the model by affecting the estimated regression coefficient values, the standardized residuals were examined for any scores with absolute values greater than three (Field, 2009) and found one such case, which was subsequently removed. Then, the standardized residuals were reviewed to determine whether more than 1% of the standardized residuals had absolute values greater than 2.5 or whether more than 5% had absolute values greater than 2, as either instance would be evidence that the model was a poor fit for the data (Field, 2009). No other cases were found with standardized residuals that had absolute values greater than 2.5 beyond the case removed

that had an absolute value greater than three and three other cases with standardized residuals that had absolute values greater than 2, which was below the 5% mark. Thus, there was no evidence based on this assessment indicating the model did not fit the data. To assess for influential cases, Cook's distance scores were examined for any values greater than one, which suggests a case with concerning influence on the model (Field, 2009); no cases had Cook's distance values greater than one.

After assessing for outliers and influential cases, the data were reviewed to determine whether it met the assumptions of a multiple regression analysis. First, regarding the assumption that the predictors have variation in their scores (Field, 2009), descriptive statistics for the scores of the RCI-10, the Implicit Theories Scale, and the control variables were reviewed, and none of their variances equaled zero, indicating this assumption was met. Next, the assumption that multicollinearity did not exist among scores from the predictor variables was assessed by examining the variance inflation factor (VIF) values, all of which were well below 10, suggesting no concerns with multicollinearity (Myers, 1990). To assess the assumption of homoscedasticity, a scatterplot of the residuals was examined, and it showed a random collection of data points around zero rather than a "funnel," which indicates this assumption was met (Field, 2009). Multiple regression also assumes independence of error terms, which was assessed through the Durbin-Watson statistic. The value of the Durbin-Watson statistic was 1.70, indicating the data met the assumption of independent error terms. The assumption of normal error distributions was assessed by examining the histogram and P-P plots of the residuals for the data, which showed a normal distribution and a straight line, respectively, indicating this assumption was met (Field, 2009). Another assumption

of multiple regression is independence of cases; as noted above, cases sharing the same IP address were removed if they reported the same demographic information, and this step should have removed any surveys repeated by the same individual. Finally, the assumption of linearity in the relationship between the predictor variable and the outcome variable was examined through assessing the scatterplots, which supported the assumption of linearity as the plot was not curvilinear (Field, 2009).

When running the multiple regression analysis, hierarchical multiple regression was used, entering the covariates (how hurt the individual felt as they thought about the offense, how likely they believed the offender was to repeat a similar offense, how long ago the offense occurred, and the individual's age, gender, race/ethnicity, nation of origin, and education level) first. Next, the mean-centered religious commitment and implicit person theory scores were entered. In the final block, the interaction between religious commitment and implicit person theory scores was entered, representing the moderation effect. After running the analysis, the model summary was examined to determine how well each variable predicted forgiveness. Predictors with significant F changes indicate a significant relationship with forgiveness, and R^2 is a measure of how much variability in forgiveness is accounted for by the respective predictor. To assess for the presence of a moderation effect, the results were examined for a significant F change with the interaction variable of religious commitment and implicit theory.

To address the third research question of the study, exploratory factor analyses were conducted on the scores of the Forgiveness Scale and the Implicit Theory Scale. The factor analyses were conducted on the scores from these measures as both have limited—or no prior published—data on their use with Muslims. A principal component

factor analysis with orthogonal (Varimax) rotation was computed on correlations of scores from the Forgiveness Scale, which is consistent with factor analyses completed with this measure in prior research, including the initial study in which the measure was developed (Rye et al., 2001). Although the eight-item version of the Implicit Theory Scale has been used in many studies since its development (e.g., Braddy, Sturm, Atwater, Smither, & Fleenor, 2013; Heslin, Latham, & Vandewalle, 2005; Heslin & Vandewalle, 2011; Heslin, Vandewalle, & Latham, 2006; Plaks, Grant, & Dweck, 2005), researchers have not previously conducted exploratory factor analyses on correlations of scores from this version of the measure. The only published study to include factor analysis on correlations of scores from the eight-item version of the measure known to this researcher is Hughes' (2015) study, in which confirmatory factor analysis was completed with correlations of scores from the measure with a sample of ethnically diverse university students (i.e., 54% Hispanic, 36.5% Caucasian, and 9.5% identified as either African American, Native American, or Asian). Notably, the developers of the measure reported not conducting factor analysis with the earlier, three-item version of the measure (Dweck et al., 1995a); however, researchers in a later study reported completing exploratory factor analysis on correlations of scores from the briefer, three-item version using principal axis factoring, extracting with both oblique (Promax) and orthogonal (Varimax) rotations (Schroder, Dawood, Yalch, Donnellan, & Moser, 2015). Following this prior research on the briefer version of the measure, which shares three of the items included in the extended measure, the current study examined correlations of scores from the Implicit Theory Scale using principal axis factor analysis. Although Schroder and colleagues

(2015) reported results from both oblique and orthogonal rotations, only results from an orthogonal (Varimax) rotation are reported in this study.

CHAPTER 3

RESULTS

Descriptive statistics and correlations

Table 1 presents means, standard deviations, and intercorrelations of the composite scores for the measures of forgiveness, religious commitment, and implicit theories, as well as items about the offense. The mean score for forgiveness was 55.14 ($SD = 9.64$), which indicates a moderate amount of forgiveness reported by the sample, considering that the maximum score on the scale is 75 (scores ranged from 28 to 75). In the initial validation study of the Forgiveness Scale, which was based on a sample of undergraduate students at a Catholic university in the U.S. (not all participants identified as Catholic) who had experienced a variety of offenses that ranged from feeling let down by a friend or family member to sexual assault (the researchers did not screen participants for specific offenses), researchers reported only mean scores for the subscales (AN, 36.6, $SD = 7.8$; PP, 16.7, $SD = 4.4$). In a study of Muslims in Indonesia, Razak and colleagues (2020, October) reported a mean total scale score of 38.7 ($SD = 5.9$), though the authors did not report the nature of the offense for which participants were reporting forgiveness.

The mean score for religious commitment in the current study was 36.12 ($SD = 9.39$) out of a maximum score of 50 on the scale, indicating the sample was somewhat to moderately committed to their religion (scores ranged from 11 to 50). In the initial

validation studies of the RCI-10, researchers reported a mean score of 22.8 ($SD = 10.5$) with a sample of undergraduate students at a large urban university in the U.S. that included both religious and nonreligious individuals (there were 12 individuals in this sample who identified as Muslims, and they had a mean score of 29.7, $SD = 15.1$). In a later study with a sample of college students in Jordan who identified as Muslims, Alaedein-Zawawi (2015) reported a mean score of 32.34 ($SD = 3.76$) on an Arabic version of the RCI-10.

The mean score for implicit theories in the current study was 29.76 ($SD = 5.59$), or 3.72 if computed as an item-mean score rather than a mean of the sum score (the mean score for this measure is often reported this way as it is used to categorize individuals as holding either entity or incremental beliefs, as noted previously, though a sum score was used in this study as the variable was not used to categorize participants). This score indicates the sample somewhat leaned toward an incremental implicit theory about others (scores ranged from 11 to 41). In the development of the original, three-item measure, the authors reported mean scores for the Implicit Theories Scale ranging from 3.11 ($SD = 1.27$) to 3.81 ($SD = 1.28$) across four studies (Dweck et al., 1995a). There are no known prior studies that have used the eight-item version of the Implicit Theories Scale with a sample of Muslims to use as a basis of comparison, and the mean score from the measure is sometimes not reported (presumably because the measure is at times used to categorize individuals as holding either entity or incremental beliefs). However, in organizational research the eight-item version of the measure has been used in several studies in which researchers have reported mean scores ranging from 3.17 ($SD = .96$) to 3.89 ($SD = .98$) in samples of organization managers (e.g., Heslin et al., 2006). The mean score for hurt

experienced when thinking about the offense was 2.12 ($SD = 1.21$), which indicates a moderate amount of hurt. Given there were a variety of types of offenses described by participants, it is noteworthy that fewer than 10% of the sample reported experiencing no hurt from the offense, with the rest of the participants reporting a range of hurt from somewhat hurt to extremely hurt. The mean score for the perception of likelihood that the offender would commit similar offenses in the future was 2.79 ($SD = 1.1$), suggesting the sample saw it as very likely the offender would commit a similar offense. Finally, the mean score for the length of time since the offense occurred was 1.86 ($SD = 1.15$), suggesting the average offense occurred 6-12 months ago.

Forgiveness was not significantly associated with religious commitment, which conflicts with the hypothesis, though it was associated with implicit theories ($r = .37, p < .01$), supporting the hypothesis that incremental theories would predict forgiveness. Forgiveness was also negatively associated with the amount of hurt experienced when thinking about the offense ($r = -.28, p < .01$). Also in contrast with the hypothesis, religious commitment was not associated with implicit theories, though it was associated with the amount of hurt experienced when thinking about the offense ($r = -.18, p < .05$). Finally, the amount of hurt experienced when thinking about the offense was associated with the perception of likelihood that the offender would commit similar offenses in the future ($.26, p < .01$).

Table 1
Descriptive Statistics and Correlations for Forgiveness, Religious Commitment, Implicit Theories, and Items About the Offense

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Forgiveness	55.14	9.64	—					

2. Religious Commitment	36.12	9.39	.12	_____				
3. Implicit Theories	29.76	5.59	.37**	-.06	_____			
4. Hurt experienced when thinking about offense	2.12	1.21	-.28**	-.18*	-.11	_____		
5. Perception of likelihood offender would commit similar offenses	2.79	1.10	-.04	-.09	.09	.26**	_____	
6. Length of time since offense occurred	1.86	1.15	_____	_____	_____	_____	_____	_____

* $p < .05$, ** $p < .01$

Religious commitment, implicit theories, and forgiveness

Tables 2 and 3 report the results of the primary analysis, which investigated the relationship between Muslims’ religious commitment, implicit theories about people, and their forgiveness for an offense based on their religious identity, controlling for how hurt the individual felt as they thought about the offense, how likely they believed the offender was to repeat a similar offense, how long ago the offense occurred, and the individual’s age, gender, race/ethnicity, nation of origin, and education level. Forgiveness was regressed on the control variables, religious commitment, and implicit theories about people. The control variables, which were the first step entered in the regression, were a statistically significant set of predictors of forgiveness, accounting for 29% of the variance in forgiveness [$\Delta R^2 = .29$, $F(20, 124) = 2.56$, $p < 0.05$], with an unstandardized coefficient of 61.65 ($t = 13.92$, $p < 0.05$). Implicit theories and religious commitment were the next step entered in the model. Together, religious commitment and implicit theories were a statistically significant predictor in the model, accounting for 12% of the variance in forgiveness [$\Delta R^2 = .12$, $F(2, 122) = 12.59$, $p < 0.05$]. Both

implicit theories and religious commitment significantly predicted forgiveness. Implicit theories had an unstandardized coefficient of .58 ($t = 4.39, p < 0.05$) and religious commitment had an unstandardized coefficient of .19 ($t = 2.46, p < 0.05$). In the final step, the interaction of implicit theories and religious commitment was entered and did not account for a significant increase of the variance in forgiveness [$\Delta R^2 = .00, F(1, 121) = .41, p > 0.05$] with an unstandardized coefficient of .01 ($t = .64, p > 0.05$). The result of a nonsignificant increase in the variance of forgiveness from the interaction of implicit theories and religious commitment conflicts with the hypothesis that implicit theories would mediate the relationship of religious commitment with forgiveness.

Table 2
Multiple Regression Model Summary

	R	R Square	Adjusted R Square	SE of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
Step 1	.54	.29	.18	8.53	.29	2.56	20	124	.00
Step 2	.64	.41	.31	7.83	.12	12.59	2	122	.00
Step 3	.65	.42	.30	7.85	.00	.41	1	121	.52

Table 3
Coefficients

	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
Step 1					
Constant	61.65	4.43		13.92	.00
Hurt experienced when thinking about offense	-1.95	.66	-.25	-2.95	.00
Perception of likelihood offender would commit similar offenses	-.14	.72	-.02	-.20	.84

Length of time since offense occurred - 1 to 6 months	-3.13	2.56	-.12	-1.22	.22
Length of time since offense occurred - 6 to 12 months	-4.20	2.36	-.19	-1.78	.08
Length of time since offense occurred – More than one year ago	2.21	2.16	.12	1.02	.31
Age	-.08	.10	-.07	-.81	.42
Gender – Male	-2.58	1.73	-.13	-1.49	.14
Gender – Genderqueer	11.97	6.50	.15	1.84	.07
Race/ethnicity – Black/African American	.88	2.84	.03	.31	.76
Race/ethnicity – Hispanic/Latinx	1.75	5.52	.03	.32	.75
Race/ethnicity – Asian/Asian American	.98	2.52	.04	.39	.70
Race/ethnicity – Arab/Arab American	-2.74	2.25	-.13	-1.22	.23
Race/ethnicity – Persian/Persian American	2.47	5.45	.04	.45	.65
Race/ethnicity – Turkic/Turkish American	-5.48	5.72	-.08	-.96	.34
Race/ethnicity – South Asian	.54	3.56	.01	.15	.88
Race/ethnicity – Biracial/multiracial	.24	3.15	.01	.08	.94
Race/ethnicity – Other	-4.97	4.96	-.09	-1.00	.32
Nation of origin	2.04	1.96	.10	1.04	.30

Education –					
Graduate or professional degree	3.28	1.68	.17	1.95	.05
Education – High school degree	3.86	2.71	.12	1.43	.16
Step 2					
Constant	59.69	4.13		14.44	.00
Hurt experienced when thinking about offense	-1.39	.62	-.18	-2.24	.03
Perception of likelihood offender would commit similar offenses	-.47	.66	-.05	-.70	.48
Length of time since offense occurred - 1 to 6 months	-1.98	2.36	-.08	-.84	.40
Length of time since offense occurred - 6 to 12 months	-3.50	2.17	-.16	-1.61	.11
Length of time since offense occurred – More than one year ago	2.76	2.00	.15	1.38	.17
Age	-.04	.09	-.03	-.44	.66
Gender – Male	-2.77	1.60	-.14	-1.73	.09
Gender – Genderqueer	10.83	5.98	.14	1.81	.07
Race/ethnicity – Black/African American	1.40	2.62	.04	.53	.60
Race/ethnicity – Hispanic/Latinx	-1.01	5.11	-.02	-.20	.84
Race/ethnicity – Asian/Asian American	1.53	2.32	.06	.66	.51
Race/ethnicity – Arab/Arab American	-3.53	2.09	-.17	-1.69	.09

Race/ethnicity – Persian/Persian American	4.77	5.04	.07	.95	.35
Race/ethnicity – Turkic/Turkish American	-6.32	5.25	-.10	-1.20	.23
Race/ethnicity – South Asian	-3.54	3.42	-.09	-1.04	.30
Race/ethnicity – Biracial/multiracial	-.23	2.89	-.01	-.08	.94
Race/ethnicity – Other	-4.22	4.63	-.07	-.91	.36
Nation of origin	1.97	1.80	.09	1.10	.28
Education – Graduate or professional degree	4.23	1.56	.22	2.71	.01
Education – High school degree	3.02	2.50	.10	1.21	.23
Implicit theories	.58	.13	.35	4.39	.00
Religious commitment	.19	.08	.19	2.46	.02
Step 3					
Constant	59.73	4.14		14.42	.00
Hurt experienced when thinking about offense	-1.37	.62	-.18	-2.21	.03
Perception of likelihood offender would commit similar offenses	-.49	.67	-.06	-.74	.46
Length of time since offense occurred - 1 to 6 months	-1.57	2.45	-.06	-.64	.52
Length of time since offense occurred - 6 to 12 months	-3.39	2.18	-.16	-1.56	.12
Length of time since offense occurred – More than one year ago	2.77	2.00	.15	1.38	.17

Age	-.04	.09	-.04	-.49	.62
Gender – Male	-2.89	1.61	-.14	-1.79	.08
Gender – Genderqueer	10.89	5.99	.14	1.82	.07
Race/ethnicity – Black/African American	1.54	2.64	.05	.58	.56
Race/ethnicity – Hispanic/Latinx	-1.33	5.15	-.02	-.26	.80
Race/ethnicity – Asian/Asian American	1.54	2.32	.06	.66	.51
Race/ethnicity – Arab/Arab American	-3.34	2.12	-.16	-1.57	.12
Race/ethnicity – Persian/Persian American	4.71	5.05	.07	.93	.35
Race/ethnicity – Turkic/Turkish American	-6.05	5.28	-.09	-1.15	.26
Race/ethnicity – South Asian	-3.21	3.46	-.08	-.93	.36
Race/ethnicity – Biracial/multiracial	-.50	2.93	-.01	-.17	.87
Race/ethnicity – Other	-3.65	4.72	-.06	-.77	.44
Nation of origin	2.02	1.81	.10	1.12	.27
Education – Graduate or professional degree	4.29	1.57	.23	2.73	.01
Education – High school degree	3.22	2.52	.10	1.28	.20
Implicit theories	.57	.14	.34	4.20	.00
Religious commitment	.19	.08	.19	2.44	.02
Interaction of implicit theories and religious commitment	.01	.01	.05	.64	.52

Factor analyses of the Forgiveness Scale and the Implicit Theory Scale

The factor analyses on correlations of the scores from the Forgiveness Scale and Implicit Theory Scale were completed using SPSS version 22. Prior to conducting the analyses, the data were screened for possible assumption violations. The variable-to-cases ratio was deemed to be adequate, per Meyers, Gamst, and Guarino (2006), as each item for both the Forgiveness Scale and the Implicit Theory Scale had at least 10 responses, though the sample size was below their recommendation of 200. As noted previously, the current study aimed to obtain a sample of 200 for the factor analyses; however, difficulties with recruitment, which were exacerbated by the COVID-19 pandemic as this prevented any in-person recruitment efforts (e.g., at Islamic centers), resulted in a sub-sample of 152 for the factor analyses.

For the principal component analysis with orthogonal (Varimax) rotation conducted on correlations of scores from the Forgiveness Scale, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .84, indicating the data were suitable for factor analysis, based on Kaiser (1970, 1974), who reported that values greater than .70 suggest such adequacy. Similarly, Bartlett's Test of Sphericity was significant (Approx. $\chi^2 = 954.89, p < .001$), indicating sufficient correlation between the variables to proceed with the analysis. Principal axis factor analysis with both oblique (Promax) and orthogonal (Varimax) rotations were conducted on correlations of scores from the Implicit Theories Scale, though as the results from both rotations were nearly identical only the results from the orthogonal rotation are reported here (coefficients for the oblique rotation can be provided upon request). The KMO measure of sampling adequacy was .78, which indicates the data was suitable for PCA. As with the

correlations of scores from the Forgiveness Scale, Bartlett's Test of Sphericity was significant for the Implicit Theories Scale score correlations (Approx. $\chi^2 = 459.65$, $p < .001$), which indicates sufficient correlation between the variables for factor analysis. Table 4 reports the factor coefficients, communalities, and means and standard deviations for the Forgiveness Scale items subjected to the principal components analysis. Communalities were fairly high for the items, ranging from .48 to .72. The Kaiser-Guttman retention criterion of eigenvalues greater than 1.0 suggested a three-factor solution (Kaiser, 1991), as did an examination of the Scree Plot (Cattell, 1966); however, results from a parallel analysis suggested two components should be retained. The factor structure coefficients ranged from .57 to .82 for Factor 1, .73 to .79 for Factor 2, and from .55 to .72 for Factor 3. Factor 1, which comprised eight items, had an eigenvalue of 4.87 and accounted for 30.32% of the variance. Factor 2 was composed of four items, had an eigenvalue of 3.10, and accounted for 19.08% of the variance. Factor 3, which had three items, had an eigenvalue of 1.14 and accounted for 11.35% of the variance. These three factors accounted for 60.74% of the total variance. Factor 1 was composed of eight items of the measure's Absence of Negative subscale, which was so named as it contains items describing the absence of negative thoughts, feelings, and behaviors toward an offender. This subscale consists of 10 items that were identified as a single factor in the measure's validation study (Rye et al., 2001). Factor 2 was composed of four items that are part of the measure's Presence of Positive subscale, which were developed based on a second factor of five items identified by researchers in the measure's validation study that describe the presence of positive thoughts, feelings, and behavior toward an offender (Rye et al., 2001). The third factor consisted of three items, two from the Absence of

Negative subscale and one from the Presence of Positive subscale. These three items relate to feeling at peace, letting go of anger, and perceiving that emotional wounds have healed, respectively. An underlying theme among these items is that they relate to emotions; however, these are not the only items on the measure related to emotions. Researchers in another study in who conducted exploratory factor analysis on an Italian version of the Forgiveness Scale with adolescent students also found a differing factor structure compared to the original validation study for the measure, though in this case they reported evidence supporting a two-factor solution based on 11 items (Cabras, Loi, & Sechi, 2019).

Table 4
*Coefficients, Communalities, Means, and Standard Deviations
 for the Forgiveness Scale*

Item	Factor 1	Factor 2	Factor 3	<i>h</i> ²	<i>M</i>	<i>SD</i>
14	.82	.07	-.14	.70	4.33	1.06
10	.80	-.05	.28	.72	3.76	1.26
8	.79	-.10	.23	.68	4.00	1.15
3	.78	.13	-.27	.69	4.28	1.09
12	.74	.31	-.01	.64	3.93	1.20
1	.73	-.07	.19	.57	3.49	1.26
5	.68	-.16	.20	.52	3.56	1.39
4	.57	.39	-.02	.48	3.39	1.24
2	.06	.78	.22	.66	3.59	1.12
13	.05	.78	.29	.70	3.39	1.11
15	.17	.73	.19	.60	3.74	1.09
6	-.22	.73	.06	.59	3.19	1.28

11	.13	.16	.72	.55	3.63	1.17
7	-.09	.30	.64	.51	2.81	1.22
9	.22	.37	.55	.49	3.84	1.17
Eigenvalues	4.87	3.10	1.14			
% of variance after rotation	30.32	19.08	11.35			

Note: h^2 = communalities. Coefficients greater than .40 are in bold; these are used for the interpretation of the factors

Table 5 reports the factor coefficients, communalities, and means and standard deviations for the Implicit Theory Scale items subjected to the principal axis factor analysis. Communalities for six of the items were above .50, while two of the items had communalities of .33 and .23. Using the Kaiser-Guttman retention criterion of eigenvalues greater than 1.0, a two-factor solution was supported. Although an examination of the Scree Plot suggested possibly three factors, the two-factor solution aligned with the theoretical structure of the measure, and results from a parallel analysis also supported retaining two factors. The factor structure coefficients ranged from .74 to .88 for Factor 1 and from .47 to .75 for Factor 2. Factor 1, which comprised four items, had an eigenvalue of 2.65 and accounted for 33.09% of the variance. Factor 2 was also composed of four items and had an eigenvalue of 1.65 and accounted for 20.60% of the variance. In total, the two factors accounted for 53.69% of the total variance. As noted previously, no known prior studies have conducted exploratory factor analyses on correlations of scores from the eight-item version of this measure. Although there are not prior studies with which to compare the current study's factor analysis results, the two factors identified in the current study mirrored the measure's two subscales, with the first factor comprising the measure's four fixed mindset items and the second factor comprising the measure's four growth mindset items.

Table 5
*Coefficients, Communalities, Means, and Standard Deviations
 for the Implicit Theory Scale*

Item	Factor 1	Factor 2	h^2	M	SD
1	.88	-.11	.79	4.03	1.36
2	.85	-.12	.73	3.89	1.34
6	.76	-.12	.59	4.05	1.29
4	.74	-.02	.55	3.99	1.33
7	-.14	.75	.58	3.48	1.37
5	-.05	.70	.50	3.44	1.45
3	-.03	.57	.33	3.38	1.44
8	-.08	.47	.23	3.42	1.43
Eigenvalues	2.65	1.65			
% of variance (after rotation for Varimax)	33.09	20.60			

Note: h^2 = communalities; coefficients greater than .40 are in bold; these are used for the interpretation of the factors

CHAPTER 4

DISCUSSION

The primary objective of this study was to assess whether implicit theories about people moderated a relationship between Muslims' religious commitment and their forgiveness for an offense based on their religious identity. Muslims in this study reported being moderately committed to their religion, experiencing a moderate amount of hurt in relation to an offense based on their religious identity that occurred on average 6-12 months prior to the study, and being moderately forgiving for that offense. Although religious commitment and implicit theories both predicted forgiveness, the interaction of these variables did not. Thus, the primary hypothesis of this study was rejected, and these results indicate implicit theories did not strengthen the relationship between Muslims' religious commitment and their forgiveness for offenses related to their religious identity.

From the perspective of social cognitive theory, these results suggest implicit theories may not be a cognitive factor interacting with a Muslim's religious commitment to increase the likelihood that they engage in forgiveness. The significant relationship between religious commitment and forgiveness in this sample indicates that behaviors, beliefs, and values related to Islam predicted participants' engagement in forgiveness, which was expected as Islam models forgiveness. Implicit theories were hypothesized as

a moderating cognitive factor in this relationship that might help individuals navigate the conditional nature of forgiveness in Islam (i.e., it is not expected that Muslims will forgive an offender who will continue doing harm; Abu-Nimer & Nasser, 2013). The hypothesized moderating relationship was based on the study's second hypothesis that implicit theories about others would be associated with the participants' perspectives of the likelihood of the offenders to engage in a similar offense in the future, as their implicit theories about others may help them determine the offenders' likelihood of re-offending. Although implicit theories were associated with forgiveness, the lack of evidence supporting their role as a moderating variable between religious commitment and forgiveness suggests they may not be a cognitive factor interacting with religious behaviors, beliefs, and values to facilitate forgiveness.

In light of the lack of evidence in this study supporting implicit theories about others as a moderator between religious commitment and forgiveness, relationships between these variables beyond those hypothesized in this study are worth considering. For example, it may be that—rather than implicit theories promoting forgiveness—engaging in forgiveness leads to changes in someone's implicit theories. Future studies might examine trait forgiveness and implicit theories about others to assess for such a relationship. Additionally, although implicit theories and religious commitment were not significantly related in this study, researchers studying these variables in the future might examine whether religious commitment moderates a relationship between implicit theories and forgiveness.

The second hypothesis of this study, that Muslims' implicit theories about people would be significantly related to their perception of an offender's likelihood to re-offend

in a similar manner, was rejected as there was no significant relationship between implicit theories about people and the perception of an offender's likelihood to re-offend in a similar manner (as a note, individuals in this study perceived their offenders as very likely to commit a similar offense in the future). This finding indicates that individuals in this study saw their offenders as very likely to commit a similar offense based on someone's Muslim identity in the future regardless of whether they broadly viewed people as capable or incapable of change. It could be that even when individuals in this study saw others as capable of change, they did not necessarily view their offender as likely to change the hurtful behavior in which they engaged. Alternatively, individuals in this study may have broadly viewed people as capable of change (the sample leaned slightly toward holding an incremental versus entity theory about people) while specifically viewing the offender as incapable of change. Such a perspective would make sense in the sociopolitical context of the United States during the time of this study, in which Muslims continued to be vilified by American leaders, such as President Donald Trump signing an executive order in 2017 banning citizens of seven predominantly Muslim countries from entering the U.S. Disentangling a specific offense against their religious identity from the systemic oppression toward Muslims in the U.S. may have been difficult for participants.

The significant relationship between this sample's religious commitment and their forgiveness is consistent with results reported by researchers from numerous prior studies in which there has been a relationship between religiosity and forgiveness (see Davis et al., 2013), albeit generally with predominantly white, Christian samples, as well as with another study examining Muslims' religious commitment and variables theorized to

indicate forgiveness (Alaedein-Zawawi, 2015). The results of this study contribute to the literature through its use of a sample that identified as Muslim and that was composed of diverse ethnicities, with the sub-sample used for the primary analysis consisting of less than 25% individuals identifying as White/Caucasian and no ethnic group making up more than 30% of the sub-sample. Given the population limitations of much of the prior research on religion and forgiveness, the findings of the current study provide some support that the existing literature may be generalizable beyond white, Christian samples, though further research is warranted.

The results of the current study also contribute to the literature on religiosity and forgiveness because of the nature of the offense experienced by participants in this sample. Forgiveness for an offense based on someone's identity is unique from forgiveness for other types of offenses, as highlighted by Hammond and colleagues (2006). For example, an offense targeting an identity may result in different attributions about the offender given the othering effect that such an offense may have. Additionally, offenses related to identity may be perceived on the level of an individual offense as well as a broader level of offense against the group associated with that identity. The case of offenses against Muslims based on their religious identity is unique in that, to the extent that the individual perceives the offense as broadly toward Islam, the nature of the process of forgiveness may shift markedly because forgiveness from God requires repentance in Islam (Rye et al., 2000). That is, if a Muslim views the offense as broadly against Islam, they may be less inclined to forgive without evidence of repentance from the offender, particularly given that forgiveness is not obligatory in Islam (Davary, 2004)

and pursuing punishment rather than forgiveness is not viewed as sinful (Abu-Nimer & Nasser, 2013).

Another important finding regarding this sample's perception of their offender as very likely to commit a similar offense in the future is that Muslims in this study were moderately forgiving of the offender despite perceiving them in this way. This is a noteworthy finding because of the conditional nature of forgiveness in Islam. The existence of a moderate amount of forgiveness among participants despite their perception that the offender would be likely to do similar harm in the future suggests they may not have adhered to these conditions of forgiveness in Islam. Perhaps a sample that is more highly committed to Islam would endorse a lower level of forgiveness of an offender perceived in this manner.

Although results from this study did not support a moderating role of implicit theories about people in a relationship between religious commitment and forgiveness, implicit theories about people were significantly related to forgiveness. Thus, implicit theories about people may still play a moderating role in relationships between religion and forgiveness in certain situations and may be worth exploration in future studies. A moderating relationship of implicit theories between religious commitment and forgiveness may emerge with more highly religious individuals or with individuals from other religious identities. However, researchers may be advised to take a tentative approach in future studies examining implicit theories about people as a possible moderating variable between religion and forgiveness due to the lack of a significant relationship in this study between implicit theories about people and religious commitment. The current study's findings are the only data to the author's knowledge on

the relationship between implicit theories and religion, and these findings suggest there may not be a relationship between implicit theories about people and religious commitment among Muslims, in contrast with a theorized interaction between implicit theories and following of religious messages (Silberman et al., 2005). Although this study's hypothesized relationship between implicit theories about people and religious commitment is different than the theorized relationship between implicit theories and following of religious messages suggested by Silberman and colleagues (2005), the current study's results suggest relationships between implicit theories and religion may exist only in narrow applications. It is possible a relationship between religion and other types of implicit theories might emerge in future studies. For example, implicit theories of morality, which have been operationalized in a measure developed by Dweck and colleagues (1995a), may be more likely to have a relationship with religion due to religion's role in framing morality.

One notable issue in the present study was that scores from the Implicit Theory Scale showed somewhat questionable internal consistency, which should be considered by future researchers using this measure. The relatively low internal consistency of scores from this measure may have impacted the study's findings, such as by attenuating correlations with other variables. Although limited by the reliability of scores from the measure used in this study, the results of this study offer further evidence consistent with prior research that incremental theories are associated with forgiveness (Wohl et al., 2015) and that entity theories are associated with less forgiveness (Burnette & Franiuk, 2010; Finkel et al., 2007). Further research may build on these findings by further exploring the role of implicit theories as a cognitive factor in the attribution process

within a dynamic process model of forgiveness (Ho & Fung, 2011) in other populations and contexts. Future research should also explore whether interventions aimed at instilling incremental theories could lead to forgiveness, which is an important consideration given the benefits of forgiveness.

Due to the lack of prior research with Muslims and the Implicit Theories Scale and limited research with Forgiveness Scale among this population, exploratory factor analyses were conducted. Correlations of scores from the Implicit Theories Scale showed a factor structure that aligned with the theorized structure of this measure, with the incremental and entity items loading on separate factors. These results are noteworthy in that they appear to be the only exploratory factor analyses completed with the eight-item version of this measure. Results from the factor analysis of correlations of scores from the Forgiveness Scale indicated a three-factor solution, which contrasts with the two-factor solution supported by researchers in the initial validation study of this measure (Rye et al., 2001). Although these results were limited by the relatively small sample size used for the factor analysis ($n < 200$), a fairly conservative cut-off for factor loadings was used and there were at least 10 participants for every item of the scale. These factor analysis results suggest the nature of the construct measured by the Forgiveness Scale is not clear. Results of this study may have differed if the separate factor scale scores were used for the analyses rather than the total score that was based on the two-factor solution reported in the validation study. Future researchers using the Forgiveness Scale with Muslim samples should be cautious in their interpretations of scores from this measure given the results of this study.

A couple methodological issues related to recruitment merit mention. First, the study initially relied on MTurk as a primary form of recruitment for participants, and MTurk proved to be less fruitful than the author hoped when planning the study. Although the difficulties of this study in recruiting Muslims among MTurk workers are too limited to draw broad conclusions, they at least suggest the possibility that MTurk may not be a good source of Muslim participants for studies. There were no available data on the religious identities of MTurk workers during the planning of the study, and research on the religious identities of MTurk workers may be helpful for future studies seeking to use MTurk for research related to religion. It should also be noted that this study was conducted during the COVID-19 pandemic. One way the pandemic directly impacted study recruitment is that the author was unable to attempt in-person recruitment (e.g., at Islamic centers) due to protocols around the U.S. restricting in-person gatherings and guidance from government agencies on limiting contact with individuals outside households.

Several notable limitations of this study should be highlighted. First, the study did not account for the possibility that participants may have viewed the offense they experienced primarily or partly as an offense toward Islam or God, which may have impacted the results. As noted above, in Islam offenses toward God require repentance, and if participants viewed the offense as in part an offense toward God, the offender's repentance (or lack of) would likely have been important. Future studies in this area may address this consideration by controlling for this perception with an item or items in the survey as it may be unrealistic to assume participants can identify an offense toward their religious identity that is not in some way perceived as also being an offense toward their

religion broadly. Another limitation of this study is that the implicit theories measure was not framed directly in relation to the offender. That is, while participants were asked to respond to forgiveness items specifically in relation to their forgiveness of the offender, the implicit theories items were assessed at a global level about people generally. This methodological issue resulted due to a lack of existing measures for assessing implicit theories on an interpersonal level. As noted previously regarding differences in the effect sizes of relationships between religiosity and forgiveness when these variables are measured at different levels (Davis et al., 2013), examining a relationship between implicit theories and forgiveness when one is measured on a global level and another on an individual level may have resulted in a smaller measured effect size. Finally, this study was limited in its broad inclusion of types of offenses toward the participants' religious identities. Because participants were asked simply to identify a time in which they experienced an offense based on their identity as a Muslim, the resulting sample included individuals whose narrative responses indicated a wide array of offenses, which ranged from microaggressions to overt discrimination. This was intentional in the plan of the study to limit anticipated barriers to recruiting study participants, and the current study attempted to account for these different forms of offenses by controlling for the hurt the individuals reported experiencing; nonetheless, there were a wide range of offenses experienced that were broadly categorized as offenses based on religious identity, and the findings may be less generalizable given the breadth of offenses included. A qualitative analysis of these offenses was beyond the scope of this study, though future studies with greater recruiting resources may benefit from a more targeted approach.

REFERENCES

- Abu-Nimer, M., & Nasser, I. (2013). Forgiveness in the Arab and Islamic contexts. *Journal of Religious Ethics, 41*, 474-494.
- Al-Mabuk, R. H., Enright, R. D., & Cardis, P. A. (1995). Forgiveness education with parentally love-deprived late adolescents. *Journal of Moral Education, 24*, 427-444.
- Alaedein-Zawawi, J. (2015). Religious commitment and psychological well-being: Forgiveness as a mediator. *European Scientific Journal, 11*, 117-141.
- Ali, S. R., Yamada, T., & Mahmood, A. (2015). Relationships of the practice of hijab, workplace discrimination, social class, job stress, and job satisfaction among Muslim American women. *Journal of Employment Counseling, 52*, 146-157.
doi:10.1002/joec.12020
- Aroian, K. J. (2012). Discrimination against Muslim American adolescents. *The Journal of School Nursing, 28*, 206-213. doi:10.1177/1059840511432316
- Awad, G. H., & Amayreh, W. M. (2016). Discrimination: Heightened prejudice post 9/11 and psychological outcomes. In M. M. Amer & G. H. Awad (Eds.), *Handbook of Arab American psychology* (pp. 63-75). New York, NY: Routledge.
- Bandalos, D. L., & Finney, S. J. (2010). Factor analysis: Exploratory and confirmatory. In G. R. Hancock & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 93-114). New York, NY: Routledge.

- Bandura, A. (2005). The evolution of social cognitive theory. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 9-35). Oxford, UK: Oxford University Press.
- Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science, 13*, 130-136.
doi:10.1177/1745691617699280
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2017). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis, 20*, 351-368. doi:10.1093/pan/mpr057
- Braddy, P. W., Sturm, R. E., Atwater, L. E., Smither, J. W., & Fleenor, J. W. (2013). Validating the feedback orientation scale in a leadership development context. *Group & Organization Management, 38*, 690-716.
doi:10.1177/1059601113508432
- Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin, 29*, 1-13.
- Brown, R. P., & Phillips, A. (2005). Letting bygones be bygones: Further evidence for the validity of the Tendency to Forgive scale. *Personality and Individual Differences, 38*, 627-638.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*, 3-5. doi:10.1177/1745691610393980

- Burnette, J. L., & Franiuk, R. (2010). Individual differences in implicit theories of relationships and partner fit: Predicting forgiveness in developing relationships. *Personality and Individual Differences, 48*, 144-148.
doi:10.1016/j.paid.2009.09.011
- Burrow, A. L., & Hill, P. L. (2012). Flying the unfriendly skies?: The role of forgiveness and race in the experience of racial microaggressions. *The Journal of Social Psychology, 152*, 639-653.
- Cabras, C., Loi, G., & Sechi, C. (2019). Testing the factor structure of the Forgiveness Scale among Italian adolescent students. *Mental Health, Religion & Culture, 22*, 580-590. doi:/10.1080/13674676.2018.1524861g
- Carlisle, R. D., & Tsang, J. A. (2013). The virtues: Gratitude and forgiveness. In K. I. Pargament (Ed.), *APA handbook of psychology, religion, and spirituality* (Vol. 1: Context, theory, and research, pp. 423-437). Washington, DC: American Psychological Association.
- Carone, D. A. J., & Barone, D. F. (2001). A social cognitive perspective on religious beliefs: Their functions and impact on coping and psychotherapy. *Clinical Psychology Review, 21*, 989-1003.
- Carson, J. W., Keefe, F. J., Goli, V., Fras, A. M., Lynch, T. R., Thorp, S. R., & Buechler, J. L. (2005). Forgiveness and chronic lower back pain: A preliminary study examining the relationship of forgiveness to pain, anger, and psychological distress. *The Journal of Pain, 6*, 84-91.
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-

- face behavioral testing. *Computers in Human Behavior*, 29, 2156-2160.
doi:10.1016/j.chb.2013.05.009
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Cehajic, S., Brown, R., & Castano, E. (2008). Forgive and forget? Antecedents and consequences of intergroup forgiveness in Bosnia and Herzegovina. *Political Psychology*, 29, 351-367.
- Cohen-Chen, S., Halperin, E., Crisp, R. J., & Gross, J. J. (2013). Hope in the Middle East. *Social Psychological and Personality Science*, 5, 67-75.
doi:10.1177/1948550613484499
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Erlbaum.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Coyle, C. T., & Enright, R. D. (1997). Forgiveness intervention with postabortion men. *Journal of Consulting and Clinical Psychology*, 65, 1042-1046.
- Davary, B. (2004). Forgiveness in Islam: Is it an ultimate reality? *Ultimate Reality and Meaning*, 27, 127-141. doi:10.3138/uram.27.2.127
- Davis, D. E., DeBlaere, C., Hook, J. N., Burnette, J., Van Tongeren, D. R., Rice, K. G., & Worthington, E. L., Jr. (2015). Intergroup forgiveness of race-related offenses. *Journal of Counseling Psychology*, 62, 402-412. doi:10.1037/cou0000081
- Davis, D. E., Worthington, E. L., Hook, J. N., & Hill, P. C. (2013). Research on religion/spirituality and forgiveness: A meta-analytic review. *Psychology of Religion and Spirituality*, 5, 233-241. doi:10.1037/a0033637

- DeShea, L. (2003). A scenario-based scale of willingness to forgive. *Individual Differences Research, 1*, 201-217.
- DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice recommendations for data screening. *Journal of Organizational Behavior, 36*, 171-181. doi:10.1002/job.1962
- Disha, I., Cavendish, J. C., & King, R. D. (2011). Historical events and spaces of hate: Hate crimes against Arabs and Muslims in post-9/11 America. *Social Problems, 58*, 21-46.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press.
- Dweck, C. S. (2012). Implicit theories. In P. A. M. V. Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *The handbook of theories of social psychology* (Vol. 2, pp. 43-61). Thousand Oaks, CA: SAGE Publications.
- Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995a). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological Inquiry, 6*, 267-285.
- Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995b). Implicit theories elaboration and extension of the model. *Psychological Inquiry, 6*, 322-333.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.
- Enright, R. D., Al-Mabuk, R., Conroy, P., Eastin, D., Freedman, S., Golden, S., . . . Sarinopoulos, I. (1991). The moral development of forgiveness. In W. M.

- Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 123-152). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide for resolving anger and restoring hope*. Washington, DC: American Psychological Association.
- Enright, R. D., & Fitzgibbons, R. P. (2015). *Forgiveness therapy: An empirical guide for resolving anger and restoring hope*. Washington, DC: American Psychological Association.
- Erdley, C. A., & Dweck, C. S. (1993). Children's implicit personality theories as predictors of their social judgments. *Child Development, 64*, 863-878.
- Escher, D. (2013). How does religion promote forgiveness? Linking beliefs, orientations, and practices. *Journal for the Scientific Study of Religion, 52*, 100-119.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2013). G*Power (Version 3.1.7). Retrieved from <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>
- Field, A. (2009). *Discovering statistics using SPSS*. Thousand Oaks, CA: Sage Publications.
- Field, A. (2019). Milton rocks: A repository of materials for my statistics textbooks.
- Finkel, E. J., Burnette, J. L., & Scissors, L. E. (2007). Vengefully ever after: Destiny beliefs, state attachment anxiety, and forgiveness. *Journal of Personality and Social Psychology, 92*, 871-886. doi:10.1037/0022-3514.92.5.871
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology, 64*, 983-992.

- Friedberg, J. P., Suchday, S., & Shelov, D. V. (2007). The impact of forgiveness on cardiovascular reactivity and recovery. *International Journal of Psychophysiology, 65*, 87-94.
- The future of the global Muslim population.* (2011). Retrieved from <http://www.pewforum.org/2011/01/27/the-future-of-the-global-muslim-population/>
- Gervey, B. M., Chiu, C., Hong, Y., & Dweck, C. S. (1999). Differential use of person information in decisions about guilt versus innocence: The role of implicit theories. *Personality and Social Psychology Bulletin, 25*, 17-27.
- Ghumman, S., & Ryan, A. M. (2013). Not welcome here: Discrimination towards women who wear the Muslim headscarf. *Human Relations, 66*, 671-698.
doi:10.1177/0018726712469540
- Goodman, J. K., & Paolacci, G. (2014). *Questioning the Turk: Conducting high quality research with Amazon Mechanical Turk*. Paper presented at the Association for Consumer Research North American Conference, Baltimore, MD.
- Graham, V., Enright, R. D., & Klatt, J. S. (2012). An educational forgiveness intervention for young adult children of divorce. *Journal of Divorce & Remarriage, 53*, 618-638.
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology, 74*, 224-237.
- Hall, J. H., & Fincham, F. D. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology, 24*, 621-637.

- Halperin, E., Russell, A. G., Trzesniewski, K. H., Gross, J. J., & Dweck, C. S. (2011). Promoting the Middle East peace process by changing beliefs about group malleability. *Science*, *333*, 1767-1769. doi:10.1126/science.1202925
- Hammond, W. P., Banks, K. H., & Mattis, J. S. (2006). Masculinity ideology and forgiveness of racial discrimination among African American men: Direct and interactive relationships. *Sex Roles*, *55*, 679-692. doi:10.1007/s11199-006-9123-y
- Haque, A. (2004). Religion and mental health: The case of American Muslims. *Journal of Religion and Health*, *43*, 45-58.
- Harris, A. H., Luskin, F., Norman, S. B., Standard, S., Bruning, J., Evans, S., & Thoresen, C. E. (2006). Effects of a group forgiveness intervention on forgiveness, perceived stress, and trait-anger. *Journal of Clinical Psychology*, *62*, 715-733. doi:10.1002/jclp.20264
- Hart, J. M., & Leach, M. M. (2017). *Religious commitment and humility in Muslims' forgiveness of microaggressions*. Paper presented at the Great Lakes Regional Counseling Psychology Conference, Muncie, IN.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Heslin, P. A., Latham, G. P., & VandeWalle, D. (2005). The effect of implicit person theory on performance appraisals. *Journal of Applied Psychology*, *90*, 842-856. doi:10.1037/0021-9010.90.5.842
- Heslin, P. A., & Vandewalle, D. (2011). Performance appraisal procedural justice: The role of a manager's implicit person theory. *Journal of Management*, *37*, 1694-1718.

- Heslin, P. A., Vandewalle, D., & Latham, G. P. (2006). Keen to help? Managers' implicit person theories and their subsequent employee coaching. *Personnel Psychology*, *59*, 871-902.
- Hewstone, M., Cairns, E., Voci, A., Hamberger, J., & Niens, U. (2006). Intergroup contact, forgiveness, and experience of “The Troubles” in Northern Ireland. *Journal of Social Issues*, *62*, 99-120.
- Ho, M. Y., & Fung, H. H. (2011). A dynamic process model of forgiveness: A cross-cultural perspective. *Review of General Psychology*, *15*, 77–84.
doi:10.1037/a0022605
- Hodge, D. R., Zidan, T., & Husain, A. (2016). Depression among Muslims in the United States: Examining the role of discrimination and spirituality as risk and protective factors. *Social Work*, *61*, 45-52. doi:10.1093/sw/swv055
- Hogan, B., & Berry, B. (2011). Racial and ethnic biases in rental housing: An audit study of online apartment listings. *City & Community*, *10*, 351-372. doi:10.1111/j.1540-6040.2011.01376.x
- Hughes, J. S. (2015). Support for the domain specificity of implicit beliefs about persons, intelligence, and morality. *Personality and Individual Differences*, *86*, 195-203.
doi:10.1016/j.paid.2015.05.042
- Johnson, J., & Hauslohner, A. (2017, May 20). 'I think Islam hates us': A timeline of Trump's comments about Islam and Muslims. *Washington Post*. Retrieved from https://www.washingtonpost.com/news/post-politics/wp/2017/05/20/i-think-islam-hates-us-a-timeline-of-trumps-comments-about-islam-and-muslims/?utm_term=.f8b5610f8d9e

- Johnson, T. (2011, September 19). *Muslims in the United States*. Retrieved from <https://www.cfr.org/backgrounder/muslims-united-states>
- Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, *35*, 401-415.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, *39*, 31-36.
- Kaiser, H. F. (1991). Coefficient alpha for a principal component and the Kaiser-Guttman rule. *Psychological Reports*, *68*, 855-858.
- Kelley, K., & Maxwell, S. E. (2010). Multiple regression. In G. R. Hancock & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 281-297). New York, NY: Routledge.
- Kelly, G. A. (1955). *The psychology of personal constructs*. New York, NY: Norton.
- Kendler, K. S., Liu, X. Q., Gardner, C. O., McCullough, M. E., Larson, D., & Prescott, C. A. (2003). Dimensions of religiosity and their relationship to lifetime psychiatric and substance use disorders. *American Journal of Psychiatry*, *160*, 496–503.
- Kishi, K. (2016, November 21). *Anti-Muslim assaults reach 9/11-era levels, FBI data show*. Retrieved from <http://www.pewresearch.org/fact-tank/2016/11/21/anti-muslim-assaults-reach-911-era-levels-fbi-data-show/>
- Krause, N., & Ellison, C. G. (2003). Forgiveness by God, forgiveness of others, and psychological well-being in late life. *Journal for the Scientific Study of Religion*, *42*, 77–93.
- Lawler-Row, K. A., & Piferi, R. L. (2006). The forgiving personality: Describing a life well lived? *Personality and Individual Differences*, *41*, 1009-1020.
- Lawler, K. A., Younger, J. W., Piferi, R. L., Billington, E., Jobe, R., Edmondson, K., & Jones, W. H. (2003). A change of heart: Cardiovascular correlates of forgiveness

in response to interpersonal conflict. *Journal of Behavioral Medicine*, 26, 373-393.

Leach, M. M., Baker, A., & Zeigler-Hill, V. (2010). The Influence of Black racial identity on the forgiveness of Whites. *Journal of Black Psychology*, 37, 185-209. doi:10.1177/0095798410380201

Legislating fear: Islamophobia and its impact in the United States. (2013). Retrieved from <https://www.cair.com/legislating-fear-2013-report>

Levontin, L., Halperin, E., & Dweck, C. S. (2013). Implicit theories block negative attributions about a longstanding adversary: The case of Israelis and Arabs. *Journal of Experimental Social Psychology*, 49, 670-675. doi:10.1016/j.jesp.2013.02.002

Levy, S. R., & Dweck, C. S. (1997). *Implicit theory measures: Reliability and validity data for adults and children*. Columbia University. New York, NY.

Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74, 1421-1436.

Lipka, M. (2017, May 26). *Muslims and Islam: Key findings in the U.S. and around the world*. Retrieved from <http://www.pewresearch.org/fact-tank/2017/05/26/muslims-and-islam-key-findings-in-the-u-s-and-around-the-world/>

Lipka, M., & Hackett, C. (2017, April 6). *Why Muslims are the world's fastest-growing religious group*. Retrieved from <http://www.pewresearch.org/fact-tank/2017/04/06/why-muslims-are-the-worlds-fastest-growing-religious-group/>

- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods, 7*, 19–40.
doi:10.1037/1082-989X.7.1.19
- Maltby, J., Day, L., & Barber, L. (2004). Forgiveness and mental health variables: Interpreting the relationship using an adaptational-continuum model of personality and coping. *Personality and Individual Differences, 37*, 1629-1641.
doi:10.1016/j.paid.2004.02.017
- Manzi, J., & González, R. (2007). Forgiveness and reparation in Chile: The role of cognitive and emotional intergroup antecedents. *Peace and Conflict: Journal of Peace Psychology, 13*, 71-91.
- Martin, M. B. (2015). Perceived discrimination of Muslims in health care. *Journal of Muslim Mental Health, 9*. doi:10.3998/jmmh.10381607.0009.203
- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Wade, S., & Hight, T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology, 75*, 1586-1603.
- McCullough, M. E., & Worthington, E. L. (1999). Religion and the forgiving personality. *Journal of Personality and Social Psychology, 67*, 1141-1164.
- McLernon, F., Cairns, E., Hewstone, M., & Smith, R. (2004). The development of intergroup forgiveness in Northern Ireland. *Journal of Social Issues, 60*, 587-601.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*: Sage.

- Miller, C. H., Burgoon, J. K., & Hall, J. R. (2007). The effects of implicit theories of moral character on affective reactions to moral transgressions. *Social Cognition*, 25, 819-832.
- Mohamed, B. (2016, January 6). *A new estimate of the U.S. Muslim population*. Retrieved from <http://www.pewresearch.org/fact-tank/2016/01/06/a-new-estimate-of-the-u-s-muslim-population/>
- Myers, R. H. (1990). *Classical and modern regression with applications* (2nd ed. ed.). Boston, MA: Duxbury Press.
- Nadal, K. L., Griffin, K. E., Hamit, S., Leon, J., Tobio, M., & Rivera, D. P. (2012). Subtle and overt forms of Islamophobia: Microaggressions toward Muslim Americans. *Journal of Muslim Mental Health*, 4, 15-37.
- Ng, A. S., & Tong, E. M. W. (2013). The relation between implicit theories of personality and forgiveness. *Personal Relationships*, 20, 479-494. doi:10.1111/j.1475-6811.2012.01419.x
- Nurullah, A. S. (2010). Portrayal of Muslims in the media: "24" and the 'Othering' process. *International Journal of Human Sciences*, 7, 1020-1046.
- Osborne, J. W. (2010). Data cleaning basics: Best practices in dealing with extreme scores. *Newborn and Infant Nursing Reviews*, 10, 37-43. doi:10.1053/j.nainr.2009.12.009
- Osterndorf, C. L., Enright, R. D., Holter, A. C., & Klatt, J. S. (2011). Treating adult children of alcoholics through forgiveness therapy. *Alcoholism Treatment Quarterly*, 29, 274-292.

- Padela, A. I., & Heisler, M. (2010). The association of perceived abuse and discrimination after September 11, 2001, with psychological distress, level of happiness, and health status among Arab Americans. *American Journal of Public Health, 100*, 284-291.
- Park, J., Malachi, E., Sternin, O., & Tevet, R. (2009). Subtle bias against Muslim job applicants in personnel decisions. *Journal of Applied Social Psychology, 39*, 2174–2190.
- Pedrioli, C. A. (2012). Constructing the other: U.S. Muslims, anti-Sharia law, and the constitutional consequences of volatile intercultural rhetoric. *Southern California Interdisciplinary Law Journal, 22*, 65-108.
- Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences: Analyses with SAS and IBM's SPSS* (6th ed. ed.). New York, NY: Routledge.
- Plaks, J. E. (2017). Implicit theories: Assumptions that shape social and moral cognition. In J. Olson (Ed.), *Advances in experimental social psychology* (Vol. 56, pp. 259-310). Cambridge, MA: Academic Press.
- Plaks, J. E., Grant, H., & Dweck, C. S. (2005). Violations of implicit theories and the sense of prediction and control: Implications for motivated person perception. *Journal of Personality and Social Psychology, 88*, 245-262. doi:10.1037/0022-3514.88.2.245
- Powell, W., Banks, K. H., & Mattis, J. S. (2017). Buried hatchets, marked locations: Forgiveness, everyday racial discrimination, and African American men's

depressive symptomatology. *American Journal of Orthopsychiatry*, 87, 646-662.
doi:10.1037/ort0000210

Poynting, S., & Mason, V. (2007). The resistible rise of Islamophobia: Anti-Muslim racism in the UK and Australia before 11 September 2001. *Journal of Sociology*, 43, 61-86.

Razak, A., Lukman, M., & Mansyur, A. Y. (2020, October). *The Muslim communities forgiveness effect in Ramadan month* Paper presented at the 3rd International Conference on Education, Science, and Technology (ICEST 2019).

Reed, G. L., & Enright, R. D. (2006). The effects of forgiveness therapy on depression, anxiety, and posttraumatic stress for women after spousal emotional abuse. *Journal of Consulting and Clinical Psychology*, 74, 920-929.

Riek, B. M., & Mania, E. W. (2012). The antecedents and consequences of interpersonal forgiveness: A meta-analytic review. *Personal Relationships*, 19, 304-325.
doi:10.1111/j.1475-6811.2011.01363.x

Rippy, A. E., & Newman, E. (2006). Perceived religious discrimination and its relationship to anxiety and paranoia among Muslim Americans. *Journal of Muslim Mental Health*, 1, 5-20.

Roberts, R. C. (1995). Forgivingness. *American Philosophical Quarterly*, 32, 289-306.

Robins, R. W., & Pals, J. L. (2002). Implicit self-theories in the academic domain: Implications for goal orientation, attributions, affect, and self-esteem change. *Self and Identity*, 1, 313-336. doi:10.1080/1529886029010680

- Ross, S. R., Kendall, A. C., Matters, K. G., Wrobel, T. A., & Rye, M. S. (2004). A personological examination of self- and other-forgiveness in the five factor model. *Journal of Personality Assessment*, *82*, 207-214.
- Ryazanov, A. A., & Christenfeld, N. J. S. (2018). Incremental mindsets and the reduced forgiveness of chronic failures. *Journal of Experimental Social Psychology*, *76*, 33-41. doi:10.1016/j.jesp.2017.12.003
- Rye, M. S., Loiacono, D. M., Folck, C. D., Olszewski, B. T., Heim, T. A., & Madia, B. P. (2001). Evaluation of the psychometric properties of two forgiveness scales. *Current Psychology: Developmental, Learning, Personality, Social*, *20*, 260-277.
- Rye, M. S., Pargament, K. I., Amir Ali, M., Beck, G. L., Dorff, E. N., Hallisey, C., . . . Williams, J. G. (2000). Religious perspectives on forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice*. New York, NY: The Guilford Press.
- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, *57*, 1-10. doi:10.1037/a0018082.supp
- Schoulte, J. C., Schultz, J. M., & Altmaier, E. M. (2011). Forgiveness in response to cultural microaggressions. *Counselling Psychology Quarterly*, *24*, 291-300. doi:10.1080/09515070.2011.634266
- Schroder, H. S., Dawood, S., Yalch, M. M., Donnellan, M. B., & Moser, J. S. (2015). The role of implicit theories in mental health symptoms, emotion regulation, and hypothetical treatment choices in college students. *Cognitive Therapy Research*, *39*, 120-139. doi:10.1007/s10608-014-9652-6

- Shatz, I. (2017). Fast, free, and targeted: Reddit as a source for recruiting participants online. *Social Science Computer Review*, *35*, 537-549.
doi:10.1177/0894439316650163
- Silberman, I., Higgins, E. T., & Dweck, C. S. (2005). Religion and world change: Violence and terrorism versus peace. *Journal of Social Issues*, *61*, 761-784.
- Smither, R., & Khorsandi, A. (2009). The implicit personality theory of Islam. *Psychology of Religion and Spirituality*, *1*, 81-96. doi:10.1037/a0015737
- Subkoviak, M. J., Enright, R. D., Wu, C.-R., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, *18*, 641-655.
- Toussaint, L., & Webb, J. R. (2005). Theoretical and empirical connections between forgiveness, mental health, and well-being. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 349-362). New York, NY: Routledge.
- Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson, S. A. (2001). Forgiveness and health: Age differences in a U.S. probability sample. *Journal of Adult Development*, *8*, 249-257.
- Trump travel ban comes into effect for six countries. (2017, June 30). *BBC News*.
Retrieved from <http://www.bbc.com/news/world-us-canada-40452360>
- Tse, M. C., & Cheng, S. (2006). Depression reduces forgiveness selectively as a function of relationship closeness and transgression. *Personality and Individual Differences*, *40*, 1133-1141.
- Unkelbach, C., Forgas, J. P., & Denson, T. F. (2008). The turban effect: The influence of Muslim headgear and induced affect on aggressive responses in the shooter bias

paradigm. *Journal of Experimental Social Psychology*, 44, 1409-1413.

doi:10.1016/j.jesp.2008.04.003

- Vishkin, A., Bigman, Y., & Tamir, M. (2014). Religion, emotion regulation, and well-being. In C. Kim-Prieto (Ed.), *Religion and spirituality across cultures* (pp. 247-269). New York, NY: Springer.
- Wade, N. G., Hoyt, W. T., Kidwell, J. E., & Worthington, E. L. (2014). Efficacy of psychotherapeutic interventions to promote forgiveness: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 82, 154-170. doi:10.1037/a0035268
- Witvliet, C. V., Ludwig, T. E., & Vander Laan, K. L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, 12, 117-123.
- Wohl, M. J., Cohen-Chen, S., Halperin, E., Caouette, J., Hayes, N., & Hornsey, M. J. (2015). Belief in the malleability of groups strengthens the tenuous link between a collective apology and intergroup forgiveness. *Personality and Social Psychology Bulletin*, 41, 714-725. doi:10.1177/0146167215576721
- Worthington, E. L. (2001). *Five steps to forgiveness: The art and science of forgiving*. New York, NY: Crown.
- Worthington, E. L. (2005). Initial questions about the art and science of forgiving. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 25-38). New York, NY: Routledge.
- Worthington, E. L., Davis, D. E., Hook, J. N., Van Tongeren, D. R., Gartner, A. L., Jennings, D. J., & Greer, T. W. (2010). Forgiveness and religion: Update and

- current status. In M. R. Maamri, N. Verbin, & E. L. Worthington (Eds.), *A journey through forgiveness* (pp. 49-57). Oxford, UK: Inter-Disciplinary Press.
- Worthington, E. L., Lavelock, C., Witvliet, C. V., Rye, M. S., Tsang, J. A., & Toussaint, L. (2014). Measures of forgiveness: Self-report, physiological, chemical, and behavioral indicators. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 474-502). Oxford, UK: Academic Press.
- Worthington, E. L., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypotheses. *Psychology & Health, 19*, 385-405.
doi:10.1080/0887044042000196674
- Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., . . . O'Connor, L. (2003). The Religious Commitment Inventory—10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50*, 84-96. doi:10.1037/0022-0167.50.1.84
- Worthington, E. L., Witvliet, C. V., Pietrini, P., & Miller, A. J. (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *Journal of Behavioral Medicine, 30*, 291-302. doi:10.1007/s10865-007-9105-8
- Wright, B. R. E., Wallace, M., Bailey, J., & Hyde, A. (2013). Religious affiliation and hiring discrimination in New England: A field experiment. *Research in Social Stratification and Mobility, 34*, 111-126. doi:10.1016/j.rssm.2013.10.002

- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47, 302-314. doi:10.1080/00461520.2012.722805
- Yeager, D. S., Miu, A. S., Powers, J., & Dweck, C. S. (2013). Implicit theories of personality and attributions of hostile intent: A meta-analysis, an experiment, and a longitudinal intervention. *Child Development*, 84, 1651-1667. doi:10.1111/cdev.12062
- Yeager, D. S., Trzesniewski, K. H., Tirri, K., Nokelainen, P., & Dweck, C. S. (2011). Adolescents' implicit theories predict desire for vengeance after peer conflicts: correlational and experimental evidence. *Developmental Psychology*, 47, 1090-1107. doi:10.1037/a0023769
- Younger, J. W., Piferi, R. L., Jobe, R. L., & Lawler, K. A. (2004). Dimensions of forgiveness: The views of laypersons. *Journal of Social and Personal Relationships*, 21, 837-855. doi:10.1177/0265407504047843
- Zainiddinov, H. (2016). Racial and ethnic differences in perceptions of discrimination among Muslim Americans. *Ethnic and Racial Studies*, 39, 2701-2721. doi:10.1080/01419870.2016.1164877

CURRICULUM VITAE

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EDUCATION

Ph.D., Counseling Psychology, University of Louisville	anticipated: 2021
M.S., Counseling Psychology, University of Kentucky	2013
B.A., Mass Communication, Illinois State University	2005

SUPERVISED TRAINING EXPERIENCE

University of Denver Health and Counseling Center (Denver, CO) 8/2020-8/2021

Doctoral Intern

Supervisors: Anand Desai, Psy.D.; Wendy Morrison, Ph.D.; Chaney Cook, Psy.D.

- University healthcare center with integrated counseling, primary care, psychiatry, and prevention services
- Provided individual and group therapy, supervised a doctoral-level psychology practicum student, conducted psychological testing and assessment, developed and presented outreach programming, managed crisis calls, triaged and referred clients to services, and participated in interdisciplinary case conferences
- Services provided via telehealth due to the COVID-19 pandemic
- Clients included undergraduate and graduate students of diverse backgrounds
- Presenting concerns included anxiety, depression, relationship issues, grief, academic concerns, trauma, and suicidal ideation
- Assessment referral questions related to learning, attention, and memory

University of Louisville Counseling Center (Louisville, KY) 8/2018-5/2019

Graduate Assistant

Supervisors: Geetanjali Gulati, Psy.D.; Sarah Kolb, Ph.D.

- University counseling center
- Provided individual psychotherapy and outreach services, conducted intake evaluations, managed the center's social media accounts, consulted with university students and staff, and participated in interdisciplinary case conferences

- Clients included undergraduate and graduate students of diverse backgrounds
- Presenting concerns included depression, anxiety, trauma, suicidal ideation, academic concerns, and family and relationship issues

Bellarmine University Counseling Center (Louisville, KY) 8/2018-4/2019

Graduate Practicum Student

Site supervisor: Gary Petiprin, Ph.D.

University supervisors: Michael Whitten, Ph.D.; Lali McCubbin, Ph.D.

- University counseling center
- Provided individual psychotherapy and outreach services, conducted intake evaluations, and consulted with university staff
- Clients included undergraduate and graduate students of diverse backgrounds
- Presenting concerns included depression, anxiety, academic concerns, and family and relationship issues

Personal Counseling Service (Clarksville, IN) 8/2018-5/2019

Graduate Practicum Student

Site supervisor: Meg Hornsby, Psy.D.

University supervisors: Michael Whitten, Ph.D.; Lali McCubbin, Ph.D.

- Outpatient private practice
- Conducted psychological testing/assessment and evaluations of candidates for church positions (e.g., local pastors)
- Clients included children, adolescents, and adults of diverse backgrounds
- Typical assessment referral questions included diagnostic clarification and assessing for ADHD

Lexington VA Health Care System (Lexington, KY) 8/2017-7/2018

Graduate Practicum Student

Site supervisors: Mindy Craft, Psy.D.; Meg Hornsby, Psy.D.; Keli Blankenship, Psy.D.; Lynda Fereday, Ph.D.

University supervisors: Katy Hopkins, Ph.D.; Patrick Pössel, Dr. rer. Soc.

- Outpatient mental health clinic within Veterans Affairs Medical Center
- Provided individual and group psychotherapy, conducted psychological testing/assessment and intake evaluations, and participated in interdisciplinary case conferences
- Clients included military veterans and family members of veterans, ranging in age from mid-20's to mid-80's
- Presenting concerns included depression, anxiety, trauma, grief, personality disorders, and stress management

University of Louisville

Counseling Psychology Program (Louisville, KY)

8/2017-12/2017

Graduate Practicum Student

University supervisor: Amanda Mitchell, Ph.D.

- Provided supervision to master's-level students training in intelligence assessment

- Supervised students in use of *Wechsler Intelligence Scale for Children, Fifth Edition (WISC-V)* with volunteer clients through video review

Cardinal Success Program at Nia Center (Louisville, KY) 1/2017-11/2017

Graduate Practicum Student

Site supervisor: Eugene Foster, Ed.D.

University supervisors: Katy Hopkins, Ph.D.; Patrick Pössel, Dr. rer. Soc.; Lali McCubbin, Ph.D.

- Community-based training clinic
- Conducted psychological testing/assessment
- Clients were adult education students pursuing the G.E.D. who had histories of learning difficulties
- Referral questions were related to determining presence of learning disorder for academic accommodations

Cedar Lake Lodge (La Grange, KY) 5/2017-8/2017

Graduate Practicum Student

Site supervisor: Jeffrey Hicks, Ph.D.

University supervisor: Katy Hopkins, Ph.D.

- Residential facility for individuals with intellectual and developmental disabilities
- Conducted psychological testing and consulted with staff members to facilitate treatment
- Clients ranged in age from adolescents to elderly adults
- Referral questions were related to confirming intellectual or developmental disability diagnosis

Indiana University Southeast

Personal Counseling Services (New Albany, IN) 8/2016-5/2017

Graduate Practicum Student

Site supervisor: Michael Day, Psy.D.

University supervisor: Lali McCubbin, Ph.D.

- University counseling center
- Provided individual and couples psychotherapy and conducted psychological testing/assessment and intake evaluations
- Clients included traditional and nontraditional undergraduate students of diverse backgrounds
- Presenting concerns included depression, anxiety, academic concerns, and family and relationship issues

University of Kentucky HealthCare Trauma Services (Lexington, KY) 1/2013-4/2013

Graduate Practicum Student

Site supervisors: David C. Maynard, Ph.D. (licensed professional counselor); Jason Joy, M.S. (licensed marriage and family therapist)

University supervisor: Rory Remer, Ph.D., licensed psychologist

- Level 1 trauma center (medical hospital)

- Conducted brief substance abuse interventions primarily utilizing motivational interviewing, referred clients to substance abuse treatment programs, and consulted with hospital staff to facilitate treatment
- Clients predominately lower SES, with many from Appalachian region of eastern Kentucky

James W. Stuckert Career Center,

University of Kentucky (Lexington, KY)

5/2012-8/2012

Graduate Practicum Student

Site supervisor: Lenroy Jones, M.A. (career services professional)

University supervisor: Jeff Reese, Ph.D.

- University career services center
- Provided individual career consultations, performed outreach, and conducted program evaluation including running focus groups and administering surveys
- Clients included traditional and nontraditional undergraduate students and graduate students of diverse backgrounds

CLINICAL WORK EXPERIENCE

Associates in Counseling and Psychotherapy (New Albany, IN)

5/2019-7/2020

Therapist and Assessment Clinician

- Outpatient private practice
- Provided individual psychotherapy and conducted psychological testing/assessment
- Practiced teletherapy beginning in March 2020 in response to the COVID-19 pandemic
- Clients included adults and adolescents who were predominately lower SES (nearly all clients were on Medicaid or Medicare) and from diverse backgrounds
- Typical presenting concerns included depression, anxiety, substance abuse, relationship issues, conduct problems, trauma, grief, and stress management
- Assessment referrals included requests to determine safety concerns for clients on probation, evaluations for pain management clinic clients seeking surgery to implant a pain management device, and testing evaluations for clients with Child Protective Services cases

Our Lady of Peace (Louisville, KY)

10/2014-1/2016

Assessment Clinician

- Private psychiatric hospital
- Conducted level-of-care needs assessments with clients to provide referrals for mental health and substance abuse treatment, and completed prior authorizations with client's insurance providers
- Clients included adults, adolescents, and children presenting at the hospital's admissions department or one of its partner hospitals
- Presenting concerns included suicidality, psychosis, opioid detox, alcohol detox, and aggressive behavior

Extra Special Parents (Madison, IN) 3/2014-10/2014

Substance Abuse Therapist

- Private home-based service provider
- Provided individual and family substance abuse therapy and case management for clients with Indiana Department of Child Services cases; coordinated treatment with Department of Child Services family case managers; collected urine drug screens; participated in interdisciplinary team meetings; provided witness testimony on behalf of clients in family court
- Clients included adults of predominately lower SES with histories of substance abuse disorders (primarily opioid or methamphetamine abuse)

Center for Behavioral Health (Louisville, KY) 8/2013-3/2014

Substance Abuse Counselor

- Private outpatient methadone clinic
- Provided individual and group substance abuse therapy, conducted intake evaluations, and engaged in case management for clients on opioid maintenance therapy
- Clients included adults of diverse backgrounds

RESEARCH EXPERIENCE

Implicit theories, religious commitment, and forgiveness among Muslims who experienced an identity-based offense (University of Louisville)

- Dissertation, proposed 6/2019
- Chair: Mark M. Leach, Ph.D.
- Primary analysis of research design uses multiple regression to examine proposed relationship in which implicit theories act as a moderator between religious commitment and forgiveness

University of Louisville Department of Counseling and Human Development (Louisville, KY) 8/2017-7/2018

Graduate Research Assistant

Supervisors: Susan Longerbeam, Ph.D.; Ahmad Washington, Ph.D.

- Assisted faculty in the College Student Personnel and Counselor Education and Supervision programs
- Conducted literature searches, created annotated bibliographies, and transcribed interviews for qualitative research

Project RAP (Reaching Academic Potential; Supervisor: Kate Snyder, Ph.D.) 5/2016

Volunteer Research Assistant

- Assisted in data collection for federally funded project aimed at increasing educators' ability to identify academically high-potential students from under-represented backgrounds

- Assessed children in Jefferson County Public Schools (Kentucky) using the *Naglieri Non-Verbal Ability Test* and the *Measures of Academic Progress for Primary Grades*

University of Kentucky Telehealth Counseling Research Team,
Counseling Psychology Program (Supervisor: Jeff Reese, Ph.D.) 2013
Research Team Member

- Conducted experiments and assisted in data collection on study on empathic accuracy and therapeutic alliance in multiple telepsychology formats

University of Kentucky Proposal Development Office 8/2011-5/2013

Graduate Research Assistant

- Assisted researchers with preparing grant proposals, finding funding opportunities, and seeking project collaborators
- Disseminated funding opportunities to researchers, designed informational materials, and helped conduct workshops on funding and grant proposals

University of Louisville Infant Cognition Lab, Department of Psychological
and Brain Sciences (Supervisor: Cara H. Cashon, Ph.D.) 2010

Volunteer Research Assistant

- Conducted experiments on face processing and motor development in infants
- Performed outreach duties and assisted in data and lab management

REFEREED PUBLICATIONS

Choi, N., Leach, S. M., **Hart**, J. M., & Woo, H. (2019). Further validation of the Brief Resilience Scale from a Korean college sample. *Journal of Asia Pacific Counseling*, 9(2), 39-56.

RESEARCH PRESENTATIONS

Hart, J. M., & Leach, M. M. (2018, March). *An analysis of standards of confidentiality among national psychological ethics codes*. Spring Research Conference, Louisville, KY.

Choi, N., Leach, S. M., **Hart**, J. M., & Woo, H. (2017, April). *Validation of the Brief Resilience Scale from a Korean college sample*. American Educational Research Association Annual Conference, San Antonio, TX.

Hart, J. M., & Leach, M. M. (2017, April). *Religious commitment and humility in Muslims' forgiveness of microaggressions*. Great Lakes Regional Counseling Psychology Conference, Muncie, IN.

Maynard, D. C., & **Hart**, J. M. (2014, November). *Competencies in supervision*. Kentucky Counseling Association Annual Conference, Louisville, KY.

Newsome, B. D., Simpson, N. B., Mecham, M. M., Vasilj, I., Lengerich, A. J., **Hart**, J. M., & Reese, R. J. (2013, August). *Evaluating empathic accuracy and the therapeutic alliance in different telepsychology formats*. American Psychological Association Annual Convention, Honolulu, HI.

NON-REFEREED PUBLICATIONS

Hart, J. M. (2018, September). *Making three years of learning stick or: How I learned to stop worrying and prepare for my comprehensive exam*. Guest blog post for *The Learning Scientists*. <http://www.learningscientists.org/blog/2018/9/25-1>

TEACHING EXPERIENCE

University of Louisville, College of Education (Louisville, KY) 8/2015-7/2017

Instructor

- Instructor of record for undergraduate course EDTP 107: Human Development & Learning
- Taught eight sections of the course across four semesters, with class sizes ranging from 13-25 students
- Course was required for students in the teacher preparation program
- Developed and managed course content, learning activities, assignments, and exams
- Course content included theories of learning and motivation and areas of human development, with focus on the application of these concepts within a classroom
- Course included observation component in which students were tasked with observing Jefferson County Public Schools classrooms and reflecting on application of class content in classrooms

Benedictine University, Department of Communication Arts (Lisle, IL) 2008

Guest Lecturer

- Provided lecture and facilitated discussion related to newspaper design for COM 208: Layout and Design for Publication (instructor of record: Benjamin Eveloff, M.S.)
 - Lecture drew upon my experience in prior career as a newspaper copy editor
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OUTREACH PRESENTATIONS

Hart, J. M., & Williams, R. (2020, November). *Mindfulness: An introduction*. Presentation to freshman students in a first-year seminar program course taught by Christy Rossi, Ph.D., at the University of Denver, Denver, CO.

- Hart, J. M. (2020, October). *Resilience during COVID-19*. Workshop on resilience for faculty and staff of the Ricks Center for Gifted Children at the University of Denver, Denver, CO.
- Morrison, W., & Hart, J. M. (2020, September). *Campus Connect suicide prevention training*. Program on recognizing warning signs of someone contemplating suicide and how to respond, provided to resident advisers at the University of Denver, Denver, CO.
- Hart, J. M. (2019, May). *University of Louisville Counseling Center infomercial*. Presentation to undergraduate student orientation staff at the University of Louisville, Louisville, KY.
- Hart, J. M. (2019, March). *Coping with stress and anxiety*. Workshop for undergraduate students at the University of Louisville's School of Music, Louisville, KY.
- Hart, J. M. (2019, February). *Listening & referral skills*. Workshop for Bellarmine University Student Success Center student staff members, Louisville, KY.
- Hart, J. M. (2019, February). *Stress management: Finding balance*. Workshop for fellows of the Louisville Youth Voices Against Violence program within the University of Louisville's Youth Violence Prevention Research Center, Louisville, KY.
- Hart, J. M. (2018, December). *When going home is hard*. Workshop for undergraduate students at the University of Louisville, Louisville, KY.
- Hart, J. M. (2018, November). *When going home is hard*. Workshop for undergraduate students at the University of Louisville, Louisville, KY.
- Hart, J. M. (2018, November). *Stress management: Finding balance*. Workshop for post-bac, pre-med students at the University of Louisville, Louisville, KY.
- Hart, J. M. (2018, November). *Mental health: What can I do to help a friend?* Presentation to sorority members at the University of Louisville, Louisville, KY.
- Hart, J. M. (2018, September). *Stress management: Finding balance*. Workshop for graduate students at the University of Louisville, Louisville, KY.
- Hart, J. M. (2018, September). *University of Louisville Counseling Center infomercial*. Presentation to undergraduate students at the University of Louisville, Louisville, KY.
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SERVICE

- Kentucky Psychological Association Communications Committee 2017-2020
Student Representative
- Participated in quarterly committee meetings
 - Assisted in committee tasks, including maintenance of the Kentucky Psychological Association website
- Kentucky Psychological Association Annual Convention (Louisville, KY) 11/2019
Volunteer
- Assisted in day-of operations of conference, including assisting with presentations and providing information to and directing conference attendees
- Great Lakes Regional Counseling Psychology Conference, University of Louisville Steering Committee 2017-2019
Co-Chair
- Participated in the planning and development of the 2019 conference held by the University of Louisville's Counseling Psychology program
 - Reviewed applications for research presentations
 - Assisted in day-of operations of conference
- American Psychological Association of Graduate Students Advocacy Coordinating Team (ACT) 2016-2017
University of Louisville Campus Representative
- Disseminated advocacy announcements to students in the University of Louisville's Counseling Psychology program
 - Provided monthly reports to team leader on local advocacy efforts and issues of concern
- We Are Here UofL 10/2016
- Volunteer for campaign against sexual violence
 - Distributed information and answered questions at outreach event on University of Louisville's campus
- University of Louisville Graduate Student Council 2015-2016
ECPY Representative
- Represented students from academic programs within ECPY department at Graduate Student Council meetings
 - Voted on resolutions to be passed onto the Student Government Association
 - Disseminated information from Graduate Student Council to ECPY students
- The University of Chicago Urban Education Institute – 6to16 2009
Mentor
- Worked with Chicago Public Schools student in program aimed at promoting higher education
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AFFILIATIONS & PROFESSIONAL ORGANIZATIONS

<u>American Arab, Middle Eastern, and North African Psychological Association</u> (AMENA-PSY) <i>Member</i>	2020-present
<u>American Psychological Association</u> <i>Member</i>	2016-present
<u>Kentucky Psychological Association</u> <i>Member</i>	2017-2020

SELECTED TRAININGS & PROFESSIONAL DEVELOPMENT

Colorado Psychological Association Ethics Workshop	11/1/2020
▪ Workshop presented by CPA ethics board members with focus on ethical issues around telepsychology and providing services during the COVID-19 pandemic	
Telepsychology Best Practices 101	4-5/2020
▪ Webinar presented by the American Psychological Association providing an overview of best practices when delivering telepsychology services	
UofL Depression Center Twelfth Annual Conference	11/2018
▪ Conference on treating mood and personality disorders, with a focus on developments in biological psychiatry and psychotherapy	
CPTWeb, an online training course for Cognitive Processing Therapy	11/2017
▪ Presented by the National Crime Victims Research & Treatment Center at the Medical University of South Carolina	
Graduate Teaching Assistant Academy	8/2015-12/2015
▪ Monthly workshop series on teaching skills and philosophy presented by the University of Louisville's School of Interdisciplinary and Graduate Studies	
Teaching Toolbox	8/2015
▪ Teacher development workshop presented by the University of Louisville's School of Interdisciplinary and Graduate Studies	
Take TIME for Kids!: A Trauma Informed Care Training	6/2014
▪ Presented by Children's Bureau, Inc.	
Intervention: More Than a Television Show	4/2014
▪ Substance abuse workshop presented by Indiana University Counseling and Counselor Education program	

- Trauma-Focused Cognitive-Behavioral Therapy, an online training course 3/2014
- Presented by the National Crime Victims Research & Treatment Center at the Medical University of South Carolina
- Workshop on counseling clients who have experienced same-sex intimate partner violence 10/2011
- Presented by Carrie Brown, M.S., Ed.S., University of Kentucky
- Ally development diversity training workshop 8/2011
- Presented by University of Kentucky Counseling Psychology program
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EDUCATIONAL HONORS & ACTIVITIES

- College Media Advisers Scholarship 2005
- Competitive stipend received for being selected as an intern with the Student Press Law Center, an organization that advocates student First Amendment rights
- Friends Remember Brett Allen Fuller Scholarship 2005
- Annual competitive award received for leadership of Illinois State University's student newspaper, *The Daily Vidette*
- Illinois College Press Association Award for Excellence 2005
- Third Place – Feature Page Design, Dailies category (*The Daily Vidette*)
- Society of Professional Journalists (Illinois State University) 2004-2005
Chapter President
- National Society of Collegiate Scholars 2003-2005
Member
- Golden Key International Honour Society 2003-2005
Member
- The Daily Vidette* (Illinois State University) 2003-2005
Assignment Editor, Features Editor, Columnist, Reporter
- Scuola Lorenzo de' Medici (Florence, Italy) 2003
- Studied Italian language and culture during semester abroad