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AN EXAMINATION OF FORGIVENESS ATTITUDES, ASSERTIVENESS AND SELF- ESTEEM IN RELATIONSHIPS BETWEEN FORGIVENESS, RELATIONAL ABUSE, AND WELL-BEING.

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AN EXAMINATION OF FORGIVENESS ATTITUDES, ASSERTIVENESS AND
SELF-ESTEEM IN RELATIONSHIPS BETWEEN FORGIVENESS, RELATIONAL
ABUSE, AND WELL-BEING.

by

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ABSTRACT

This study examined attitudes towards forgiveness, assertiveness, and self-esteem as moderators between the tendency to forgive and life satisfaction, physical health, and relational abuse. One hundred and seventy two women recruited online completed measures that assessed self-ratings of the above variables. The tendency to forgive was positively associated with life satisfaction although not associated with physical health or relational abuse. Conversely attitudes towards forgiveness were positively associated with physical health, although not associated with life satisfaction or physical abuse. Assertiveness was positively associated with life satisfaction, although not associated with physical health or relational abuse. Self-esteem was positively associated with life satisfaction and physical health and negatively associated with relational abuse. Interaction analyses indicated that attitudes towards forgiveness moderated the relationship between tendency to forgive and life satisfaction. Specifically, the tendency to forgive was positively associated with life satisfaction only among those with low forgiveness attitudes. Assertiveness and self-esteem failed to moderate relationships between the tendency to forgive and any of the dependent variables: life satisfaction, physical health, and relational abuse. Results suggest that the tendency to forgive may be particularly beneficial for those with low forgiveness attitudes, although the present study is the first to obtain such findings. Implications for counselors and suggestions for future research are discussed.

DEDICATION

This dissertation is dedicated to the memory of my father, Randy Whittington, who was taken from us much too early at the age of 52. Although he was somewhat quiet, much like myself, my dad taught me many things. Primarily, he did so through his actions, rather than words. As a child I watched my dad work tirelessly to provide for his family, yet I never heard him complain about his early mornings or late nights. As a young man I watched him bravely battle cancer, enduring intense pain, seemingly endless treatments and an increasingly dismal prognosis. All the while, he never stopped fighting and never became angry. He had many reasons to be angry and justifiable cause to hold grudges, but he chose not to. In his life and in his death he was a gentle and forgiving man. Dad, I will never stop missing you and I will continue to try to be as forgiving of others as you were. Every great moment in my life is accompanied by a bit of sadness that I cannot share it with you. You probably did not know it, but you taught me that in life we can choose to hold on to anger for the wrongs we experience or we can forgive, let go, and embrace the positive. Thank you for that. Cancer may have won the battle, but you won the war.

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I would also like to thank my lovely wife for enduring this project with me. I hope the completion leaves us more time to work on our ten year plan. I cannot wait to see what the future has in store for us. I am incredibly grateful to the rest of my family for the support throughout the years. In particular, I am deeply indebted to my wonderful mother. I would not have made it here without your encouragement.

I also would not have made it here without the support of my classmates, in particular Dave Hart and Angie Schubert. I honestly was not sure if any of us would finish and it is only appropriate that we do it together. I have accomplished many wonderful things during my time at UMSL, but none greater than the friendships with the both of you.

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CHAPTER I

INTRODUCTION

Writers of various backgrounds have long extolled the virtues of forgiveness. Many are familiar with poet Alexander Pope's (1709) famous line "To err is human, to forgive divine" (para. 32). Similarly, Mahatma Gandhi, the Hindu leader widely known for his advocacy of non-violent civil disobedience stated, "The weak can never forgive. Forgiveness is the attribute of the strong" (Gandhi, 1980, p. 166). A portion from the oft-quoted Lord's Prayer, in which Jesus Christ instructs his disciples how to pray states, "Forgive us our debts, as we have also forgiven our debtors" (Matthew 6:12 New International Version). Likewise, almost all organized religions advocate the practice of forgiveness (Thoresen, Luskin, & Harris, 2008).

Beyond religion and philosophy, forgiveness has gained attention in the social sciences. For example, recent psychological theorists have conceptualized forgiveness among a classification of human strengths and virtues (Peterson & Seligman, 2004). As the preceding quotes illustrate, forgiveness has long been considered an act of good will by a variety of writers. Up until recently, however, there was little research that examined the act of forgiveness.

The psychological investigation of forgiveness has experienced substantial growth over the last two decades. Worthington and Scherer (2004) reported that by 2004 there were over 200 empirical studies of forgiveness, compared to 58 studies of forgiveness reported in 1997 (McCullough et al., 1998). Scherer, Cook, and Worthington's (2005) bibliography of forgiveness publications contains over 700 references, although many are

not empirical studies. A title search of “forgiveness” in ERIC and PsychINFO databases in February of 2014 produced 1,403 results, 874 of those classified as empirical studies.

The vast expansion of forgiveness research in the past 20 years has bolstered the social scientific understanding of the process of forgiveness. Much of this research has investigated associations between forgiveness and well-being, and produced a plethora of research that demonstrates positive associations between the two (see Toussaint & Webb, 2005). McNulty & Fincham (2012) have argued, however, that not enough emphasis has been placed on what specific factors might have negative implications for well-being. The following chapter will outline the present study, which seeks to fill a current gap in the literature by examining personality characteristics that may unfavorably interact with forgiveness and well-being.

Key Concepts

A number of key concepts or variables are mentioned throughout this project.

These study variables are defined below:

“Forgiveness” – In the present study, the term forgiveness, unless otherwise noted, will be used in reference to one’s disposition to grant forgiveness to others for perceived transgressions. It does not reference any single act of forgiveness. Rather, it is conceptualized as a personality trait, a pattern of forgiving other people.

“Forgiveness Attitudes” – This refers to one’s attitudes towards forgiveness. Higher values of forgiveness as an act of virtue is synonymous with higher forgiveness attitudes.

“Self-Esteem” – Self-esteem refers to one’s global feelings of self-worth. The conceptualization will be based primarily on Rosenberg’s (1965) conceptualization, which places value on one’s positive image of themselves.

“Assertiveness” – One’s willingness to express his or her self and act upon inclinations.

“Subjective Well-Being” – Subjective well-being refers to people’s cognitive judgment of their own well-being. The present study will focus exclusively on self-ratings of global life satisfaction, which is a general measure of quality of life, based on each participants standards and self-reports (Diener, Emmons, Larsen, & Griffin).

“Physical Health” – Physical health is defined in the present study as one’s general report of positive medical health and lack of symptoms of illness.

“Relational Abuse” – The amount of physical abuse present in a current relationship. Relational abuse will only be collected by participants who report a committed relationship or partnership, a minimum of one month in length. The present study will focus exclusively on physical abuse and not other types of abuse, such as emotional or sexual.

Background

The social sciences, and mental health practitioners, in particular, have historically viewed religious practice within a negative light (Myers, 2000). Freud (1927), for example, suggested that “religion is comparable to a childhood neurosis” (p. 57). Psychoanalytic theory, moreover, viewed religion as a belief for the weak-minded (Hood et al., 1996). Similarly, Ellis (1980) equated religious belief to irrational thinking, as he stated that the less religious persons were “the more emotionally healthy they tend

to be” (p. 637). Within this frame of reference, the social sciences have historically dedicated less resources on the investigation of processes, such as forgiveness, that are conceptualized as a component of religion or spirituality (Myers, 2000).

As the increase of research on forgiveness illustrates, the tide has shifted, and mental health professionals commonly acknowledge that religion is not only a worthy topic of inquiry, but one of the most common predictors of well-being (Myers, 2000). Much of the credit for this shift in attitude and inquiry has been associated with the emergence of the discipline of positive psychology. A landmark article, published in *American Psychologist* (Seligman & Csikszentmihalyi, 2000b) outlined the tenets of this new discipline and called for research that examines characteristics of optimal functioning, one of which was forgiveness. Within this theoretical perspective, the focus of research and practice is on nurturing strengths and expanding what is good about humanity, rather than mental health professional’s historical focus on ameliorating sickness. As research has demonstrated strong associations between religion and happiness (see Myers, 2000), increased focus has been placed on the role forgiveness plays on physical health, subjective well-being, personality, and relationships.

Although many in the social sciences have lauded the positive psychology movement, the specialty has not been void of criticism. McNulty and Fincham (2012) are especially critical of the movement and argue that no beliefs or practices can be labeled inherently positive or negative. In regards to forgiveness, they point to research that demonstrates associations between reported levels of forgiveness and potential relational abuse (Gordon, Burton, & Porter, 2004; Katz, Street, & Arias, 1997). Although McNulty and Fincham (2012) also highlighted research that showed a variety of positive

associations between forgiveness and well-being, their review of the literature illustrated the complicated nature of forgiveness. Forgiveness may be a process associated with a variety of indices of well-being, but the question remains: does that does render it an unalloyed good? The present study seeks to answer the call to look beyond positive associations, on average, between forgiveness and well-being and illuminate situational or individual characteristics, such as those present in an abusive relationship, in which forgiveness may not lead to positive outcomes.

Statement of Problem

Although the concept of forgiveness is a common notion, the social scientific literature has offered a variety of definitions of forgiveness. In their review of conceptualizations of forgiveness, Worthington and Scherer (2004) noted that, although researchers vary on details of how they define forgiveness, most agree that the act of forgiveness is a complex process that involves a variety of cognitive, emotional, and behavioral components. Worthington and Scherer further argued that, although researchers differ on how they define various components of forgiveness, most agree what forgiveness is *not*, in that it does *not* equate to forgetting or condoning transgressions or reconciling with transgressors. Rather, the act of forgiveness generally involves some level of reduction in negative thoughts, feelings, and/or behaviors associated with a transgression and the transgressor.

One of the most common distinctions observed in the literature is the distinction between state and trait forgiveness (Toussaint & Friedman, 2008), which distinguishes between forgiveness of a specific transgression (state) versus one's tendency or disposition to forgive (trait). This is an important distinction as the examination of trait

forgiveness goes beyond a single act of forgiveness and is conceptualized as a characteristic of one's personality. This distinction is particularly important in the present study, as participants' tendency to forgive will be the major focus of inquiry. As discussed by Berry et al. (2001), the majority of initial research on forgiveness examined specific acts of forgiveness and lacked appropriate attention to dispositional forgiveness. Consequently, they called for more attention to dispositional forgiveness in future research.

The expansion of recent research on forgiveness demonstrates that forgiveness is not just a virtue extolled by religious texts or the positive psychology movement, but rather a practice associated with a plethora of psychological and physical benefits (Worthington, 2008). As researchers have given more attention to the psychology of religion, research has sought to illuminate many of the psychological processes of religious practice and the psychological effects of said processes. Within this field of study, forgiveness has emerged as an important topic worthy of psychological investigation.

Forgiveness and Well-Being

Much of the initial forgiveness research following the initiation of the positive psychology movement examined relationships between forgiveness and a variety of physical health indicators. In a landmark study, Witlivliet et al. (2001) found higher stress reactions during imagined states of unforgiveness as well as higher levels of blood pressure. Subsequent studies found that individuals with lower reported levels of forgiveness displayed higher blood pressure when asked to recall instances of betrayal (Lawler 2003; Lawler-Row et al., 2008). Similarly, Hannon et al. (2012) reported that

granting forgiveness was associated with lower blood pressure for both victims and perpetrators.

A national survey by Toussaint (2004) found positive associations between self-forgiveness and self-reported physical health in young and middle age participants, as well as positive associations between a tendency to forgive others and health in older adults. A similar survey (Lawler et al., 2005) found associations between both state and trait forgiveness and a variety of self reported health measures including symptoms of illness, amount of prescriptions, sleep quality, fatigue, and somatic complaints. Participants with higher levels of reported forgiveness also displayed quicker cardiovascular recovery following a transgression in a laboratory setting (Whited, Wheat, & Larkin, 2010).

Research has also shown positive associations between forgiveness and variety of mental health indicators. A national survey (Toussaint et al., 2001) indicated that self and other forgiveness was positively associated with life satisfaction and negatively associated with psychological distress. A similar study of older adults (Krause & Ellison, 2003) found forgiveness of others positively associated with life satisfaction and negatively associated with depressive affect, somatic complaints, and death anxiety. A study of twins (Kendler et al., 2003) found forgiveness to be associated with lower nicotine dependence, drug use, and dependence. Studies with college students found forgiveness positively associated with global mental health (Berry & Worthington, 2001) and negatively associated with depression (Brown, 2003; Maltby, Macaskill, & Day, 2001) and anxiety (Subkoviak et al., 1995).

Although the aforementioned research outlines a host of benefits associated with forgiveness, McNulty and Fincham (2012) pointed out that, despite these findings, there is a body of research that demonstrates forgiveness, in certain situations, is also associated with negative outcomes. For example, Katz, Street, and Arias (1997) found that women, on average, reported low intentions to forgive hypothetical partner violence or to maintain violent relationships; however, women who reported higher levels of internal attribution (i.e., abuse was the victim's fault) were also more willing to forgive their partners and maintain the hypothetical relationship. Mediation analysis indicated that willingness to forgive fully mediated the relationship between attributions and intentions to exit an abusive relationship. Results suggest that forgiveness plays a key role in women's willingness to stay in a hypothetically abusive relationship.

In a more recent study, Gordon, Burton, and Porter (2004) examined forgiveness and willingness to return to abusive partners in a sample of women in domestic violence shelters. Results indicated that women who reported higher levels of forgiveness of their partners also reported more willingness to return to them. Similar to Katz et al. (1997), forgiveness mediated positive associations between self-attributions and willingness to return to relationships. Gordon et al. (2004) argued that findings demonstrated that, although attributions of violence influence decisions to stay in abusive relationships, willingness to forgive appears to influence attributions and be the primary determinant of continuation of abusive relationships. Forgiveness also predicted willingness to return to abusive partners more than previously established risk-factors such as investment in the relationships, lack of alternatives, and social pressure.

These studies demonstrate that forgiveness may indicate a willingness to return to or stay with an abusive partner, offer some initial evidence that forgiveness, in certain contexts, may be associated with relational abuse. Other studies have provided additional support for this possibility. For example, McNulty (2010) found that lower levels of forgiveness actually predicted a decrease in verbal and physical aggression in the first five years of marriage. Similarly, McNulty (2008) found that, among married couples with high levels of problematic behavior, forgiveness predicted lower marital satisfaction over time.

These studies indicate potential negative effects of forgiveness in the context of relationships and abuse. Research has also indicated some possible negative in other contexts. For example, Wohl and Thompson (2011) found self-forgiveness predicted less willingness to quit smoking and Squires et al., (2012) found the self-forgiveness predicted less willingness to change behavior among problem gamblers. Brown (2003) found a negative interaction between forgiveness, forgiveness attitudes, and depression. High forgiveness attitudes in the presence of low actual levels of forgiveness was predictive of higher levels of depression.

Based on these findings, McNulty and Fincham (2012) argued researchers “need to move beyond examining the main effects of traits and processes that may promote well-being on average to study the factors that determine, when, for whom, and to what extent those factors are associated with well-being” (p. 106). In other words, what is good, on average, is not necessarily good for a particular person, in a particular situation. For example, most would agree exercise is a “positive” behavior in general, but not all forms of exercise are beneficial for all people.

Likewise, mental health professionals need to refine their understanding of when certain processes, such as forgiveness, might have negative implications for clients. The positive psychology movement has served as a catalyst for research that examines forgiveness and well-being; however, the act of labeling a variable as “positive” likely injects a certain amount of unscientific bias into the research. From such perspective, McNulty and Fincham (2012) called for an end of labeling certain variables, including forgiveness, as “positive” and urged for more research that examines the possible negative interactions with well-being.

Purpose of the Study

The present study seeks to fill several important gaps in the current literature examining the relationship between forgiveness and well-being. First, further research is needed to examine what contextual or individual variables might have negative implications for forgiveness. Although McNulty and Fincham (2012) pointed to research that indicates negative implications of forgiveness for women in abusive heterosexual relationships, there is little information or investigation of possible negatives of forgiveness outside of this context. One area in need of research is individual or personality characteristics that might have negative implications for forgiveness.

As most discussions of negative implications of forgiveness revolve around women in abusive relationships, a review of common personality characteristics of battered women may provide indication of variables that may help illuminate the forgiveness/well-being relationship. One of the most common identified characteristics of abused women identified in the psychological literature is low self-esteem (Lewis & Fremouw, 2001). Self-esteem correlated negatively with spousal abuse (Cascardi &

O'Leary, 1992) and contributed to the difficulty of leaving an abusive marriage (Aguilar & Nightingale, 1994). Aguilar and Nightingale also found that women who reported dating violence had significantly lower self-esteem than those who did not.

A similar variable with implications for the forgiveness-well-being relationship is assertiveness. Cascardi and O'Leary (1992) found that women in abusive relationships reported higher levels of psychological coercion from their partner, indicating that abused women are likely to have more difficulty standing up for themselves. Wilson (2005) argued that victims of abuse become passive over time and are less likely to assert themselves to their abuser. Although there is less empirical investigation of the relationship between assertiveness and abuse, from a practical standpoint, it appears that termination of an abusive relationship or standing up to an abusive partner would require a great deal of assertiveness (Wilson, 2005) and low levels of assertiveness appear consistent with willingness to stay in an abusive relationship or forgive abusive partners (Cascardi & O'Leary, 1992). The present study will seek to empirically clarify these relationships.

Although Katz et al. (1997) found that self-esteem did not predict if women were willing to forgive a hypothetically abusive partner, Neto and Mullet (2004) found a negative association between self-esteem and forgivingness among women, but not among men. The literature does appear to clearly indicate that abused women demonstrate, on average, lower self-esteem. The relationship, however, between self-esteem, forgiveness, and abuse is unclear. Similarly, there is a dearth of information examining the role of assertiveness in the relationship between forgiveness and relational

abuse. The present study seeks to examine if self-esteem and assertiveness serve as moderators between forgiveness and relational abuse.

Similarly, examination of common personality characteristics of abused women may serve as potential moderating variables between forgiveness and well-being in general, beyond relational abuse. As research has demonstrated that victims of physical abuse have higher levels of anxiety and depression (Aguilar & Nightengale, 1994; Cascardi & O'Leary, 1992; Magdol, et al., 1997), as well as general psychological distress (Coffey et al., 1996), further investigation is needed to examine if self-esteem and assertiveness possibly moderate the relationship between forgiveness and well-being. In other words, is it particularly harmful to display high levels of forgiveness in combination with low levels of assertiveness and self-esteem?

The present study seeks to examine any possible differences in these relationships between men and women. The majority of psychological research that examines relational abuse looks at personality characteristics or effects of female victims of abuse. In their review of the literature, Lewis and Fremouw (2001) reported, however, that previous research suggested relationship violence was similar across genders (White & Koss, 1991) and that women initiated relationship violence more than men (Foshee, 1996; Magdol et al., 1997). They do provide several caveats to these findings, as they argue that men are more likely to underreport their own levels of aggression and point out that violence initiated by men typically results in more harm to the victim (Arias & Johnson, 1989). Nonetheless, the present study will seek to clarify gender differences in relationships between forgiveness, well-being, and relational abuse.

Finally, the present study seeks to replicate Brown's (2003) findings of interactions between forgiveness and forgiveness attitudes on well-being. Instead of depression as a dependent variable, the present study will test to see if high forgiveness attitudes and low levels of actual forgiveness predict lower subjective well-being and physical health.

Research Questions and Statement of the Hypotheses

Based on the outlined research, the following hypotheses have been generated:

Hypothesis 1 – Self-esteem, assertiveness, and forgiveness attitudes will moderate relationships between tendency to forgiveness and life satisfaction among females in committed relationships.

Hypothesis 1a – Low levels of self-esteem will weaken the positive association between forgiveness and life satisfaction and high levels of self-esteem will strengthen the positive association between forgiveness and life satisfaction.

Hypothesis 1b – Low levels of assertiveness will weaken the association between forgiveness and life satisfaction and high levels of assertiveness will have no effect on association between forgiveness and life satisfaction.

Hypothesis 1c – Low forgiveness attitudes will weaken the positive association between forgiveness and life satisfaction and high levels of forgiveness attitudes will have no effect on positive relationship between forgiveness and life satisfaction.

Hypothesis 2 – Self-esteem, assertiveness, and forgiveness attitudes will moderate relationships between tendency to forgiveness and physical health among females in committed relationships.

Hypothesis 1a – Low levels of self-esteem will weaken the positive association between forgiveness and physical health and high levels of self-esteem will strengthen the positive association between forgiveness and physical health.

Hypothesis 1b – Low levels of assertiveness will weaken the positive association between forgiveness and physical health and high levels of assertiveness will have no effect on association between forgiveness and life satisfaction.

Hypothesis 1c – Low forgiveness attitudes will weaken the positive association between forgiveness and physical health and high levels of forgiveness attitudes will have no effect on positive relationship between forgiveness and life satisfaction.

Hypothesis 3 – Self-esteem and assertiveness will moderate the relationship between tendency to forgive and relational abuse among participants in committed relationships.

Hypothesis 3a – At low levels of assertiveness, tendency to forgive will be positively associated with physical abuse where at high levels of assertiveness there will be no association between tendency to forgive and physical abuse.

Hypothesis 3b – At low levels of self-esteem, tendency to forgive will be positively associated with physical abuse whereas at high levels of self-esteem there will be no association between tendency to forgive and physical abuse.

Implications

The present study provides a large step forward in the literature by examining the moderating role of two personality characteristics - self-esteem and assertiveness - on the relationships between forgiveness, relational abuse, and well-being. Previous research has disproportionately focused on pathways between forgiveness and well-being, without

proper consideration for moderating variables or possible exceptions to this relationship. There is a growing body of literature suggesting that forgiveness might have harmful consequences in the case of an abusive relationship (McNulty & Fincham, 2012). Based on this literature, the present study will indicate if there is a possible negative interaction with forgiveness and well-being, based on levels of self-esteem and assertiveness. In other words, are there negative consequences for individuals who are both forgiving and have low self-esteem and those who are forgiving and have low assertiveness?

Although answers to these questions will increase the theoretical understanding of the relationship between forgiveness and well-being, they may also provide valuable information to clinicians. With the increase in research on forgiveness, there has also been a subsequent increase in forgiveness as a counseling intervention (American Psychological Association, 2006). This makes it particularly important for counselors to understand when forgiveness might have negative implications for clients. If, as hypothesized, self-esteem and assertiveness interact unfavorably with forgiveness, counselors should be wary of promoting forgiveness in clients without ensuring self-esteem and assertiveness are well-developed.

Delimitations

Although the present study will address important holes in the current literature on the relationship between forgiveness, self-esteem, assertiveness, relational abuse and well-being, it is not without its limitations. First, it must be noted that the design used here is correlational and cross-sectional. Although the possibility exists to potentially discover new relationships between the aforementioned variables, the study is not designed to provide definitive causal inferences.

Additionally, it should be noted that there is not uniform consensus on how variables of religion and forgiveness are defined in the professional literature. In regards to forgiveness, scholars vary in how they define the construct (Wohl, DeShea, & Wahkinney, 2008) and therefore the present study is limited to the chosen measure of forgiveness. Since the present study is focusing on dispositional or trait forgiveness, results will be more applicable to one's tendency to forgive than it will to specific instances of forgiveness.

Summary

Although there is a plethora of information regarding the relationship between forgiveness and well-being, researchers have not devoted ample attention to contextual situations or individual characteristics in which forgiveness might have negative implications for well-being. The present study will add to the current literature by examining how assertiveness and well-being interact with relationships between forgiveness, well-being, and relational abuse.

CHAPTER 2

REVIEW OF THE LITERATURE

The psychological investigation of forgiveness has seen a vast expansion in the amount of work produced since the turn of the century. A title search of “forgiveness” in ERIC and PsychINFO databases before the year 2000 produces 217 results, whereas the same search in February 2014 time yielded 1,403 titles. It is clear that the social sciences have taken a keen interest in the concept of forgiveness, as evidenced by the plethora of research generated in a 14 year span. As McCullough et al. (2009) pointed out, at the turn of the century, “...researchers could easily keep abreast of all the major theoretical and empirical developments on forgiveness. That era is over” (p. 439).

The plethora of research now published on forgiveness provides researchers with a greater understanding of what forgiveness is, how it works, and the benefits it provides. The sheer amount of publications over a relatively short period of time also makes it difficult, however, to traverse the content and make general conclusions about a complicated process. After a brief historical and theoretical review, the present literature review will review the pertinent literature related to definitions of forgiveness, associations between forgiveness and physical health, subjective well-being, mental health, personality, and relationships. Finally, a review of research that discusses possible negative outcomes related to forgiveness will be provided.

Theoretical Background

As mentioned previously, the social sciences have historically viewed religious practice within a negative light (Myers, 2000). Despite research and positive conjecture by earlier prominent psychologists William James and G. S. Hall (Myers, 2000), the

psychology of religion was largely neglected in the post World War II era. As pointed out by Seligman and Csikszentmihalyi (2000b), research and practice in post World War II counseling focused largely on treating symptoms of trauma in wounded veterans and set the stage for a field that almost exclusively sought to treat mental illness. In the last 20 years psychological research on religion has re-emerged.

The establishment of positive psychology (Seligman & Csikszentmihalyi, 2000b) deserves much of the credit for expansion of research on religion and related processes, including forgiveness. This zeitgeist has produced a plethora of research that seeks to illuminate what is good about humanity, what factors are predictive of well-being, and what interventions can build positive character and prevent mental illness. There is a whole new body of literature, in addition to an array of clinical interventions that counselors can turn to in their practice (Seligman, Steen, Park, & Peterson, 2005). As many have called for a divorce from strict adherence to the medical, disease-based model of mental health practice (Wampold, 2001; Yalom, 2002), positive psychology has contributed methods that answer such calls. From this platform, forgiveness has emerged as a process that is highly predictive of well-being and deserving of increased research.

Definitions of Forgiveness

Before a review of the psychological characteristics of forgiveness is undertaken, a discussion of how researchers define forgiveness must take place. Definitions of forgiveness are complex and multi-faceted. Although a few common themes emerge in the literature, there are nuances in how researchers define forgiveness. Furthermore, studies of forgiveness focus on various aspects or elements of forgiveness, such as

forgiveness of self vs. others, or emotional vs. behavioral forgiveness. The following review outlines the most relevant and current perspectives on forgiveness in the psychological literature.

Much of the early writing on forgiveness attended to the most appropriate means to define the construct, with many disagreements between scholars (Worthington, et al. 2007). For example, Enright and Fitzgibbons (2000) argued that forgiveness does not equate to pardoning an act or condoning it. Likewise, they disagreed with scholars (Hargrave, 1994; Lauritzen, 1987) who argued that forgiveness is synonymous with reconciliation or that one must exact some amount of revenge or punishment, colloquially referred to as “balancing the scales”, before forgiveness can be complete (Flanigan, 1992). Enright and Fitzgibbons (2000) also argued that forgiveness must be a moral act that contains compassion and empathy above a simple reduction in resentment towards an offender, as argued by McGary (1989). Enright and Fitzgibbons (2000) provided an example of a person who reduces hostile feelings towards an offender by murdering them. They argue that this cannot equate with forgiveness, as the reduction in hostility came as a result from vengeance rather than a moral act of benevolence, as they conceptualize forgiveness.

Earlier arguments also discussed the worthiness of forgiveness. Some argued that forgiveness indicated a lack of self-respect on the victim’s part (Haber, 1991) or that forgiveness should be withheld until the perpetrator has earned it (Vachss, 1994). More recently, Murphy (2005) made a similar argument that “hasty” forgiveness undermines self-respect and puts the victim in danger of being harmed again. He further argued that simple acts of resentment, such as no longer inviting a colleague out to lunch,

demonstrate self-respect and provide closure by no longer exposing the victim to transgressions. Enright's (1996) position refuted claims of self-respect and requisite earned forgiveness, as he pointed out that requiring perpetrators to earn forgiveness or maintaining resentment out of supposed self-respect yokes the victim to the offense and the offender. Choosing to forgive, rather, grants the power to the victim to be released from negativity associated with an offense. From these discussions, most theorists have argued that forgiveness does not equate with reconciliation or condoning negative acts (Worthington, 2005b), as Murphy's (2005) conceptualization seems to do. Forgiveness is more commonly viewed as a process that releases the victim from the negative associations with an offense. People can choose to remove themselves from harmful or unpleasant situations and can maintain that offenses were unjust while still forgiving the act and letting go of feelings of resentment and anger.

One of the most prominent definitions of forgiveness is that developed by The Foundation for Inner Peace (1975), Jampolsky (1999), and Friedman (2000) who defined forgiveness as a shift in seven components: (1) perception and vision, (2) belief and attitudes, (3) affect, (4) self-empowerment and responsibility, (5) choice, decision, and intention, (6) from duality consciousness to oneness consciousness, and (7) recognition of the core qualities of the person. From this perspective, Toussaint and Friedman (2009) claimed:

forgiveness occurs when a person lets go of emotionally backed judgments, grievances, attack thoughts and beliefs towards themselves and others so that they can perceive the goodness, worth, magnificence, innocence, love, and peace in both themselves and another person simultaneously (p. 636).

Another commonly cited conceptualization of forgiveness comes from Enright and the Human Development Study Group (1991), where forgiveness forms a triad, which entails a process of forgiving others, receiving forgiveness from others, and self-forgiveness. Enright (1996) posits that a complete experience of forgiveness occurs when there is synchrony across the three forgiveness pathways and that asynchrony can inhibit the completion of the forgiveness process. As he stated, “Synchrony across the three pathways seems to foster a more complete, deeper, and smoother transition to forgiveness in clients” (p. 122). Enright (1996) discussed the triad within the context of counseling and the process of helping clients work through the forgiveness triad and argued that doing so leads to moral strengths and made clients less susceptible to anxiety, depression, and hopelessness.

Knutson, Enright, and Garbers (2008) provided evidence of the developmental path of Enright’s (1991, 2001) model of forgiveness by comparing client orderings of the 21 steps of forgiveness to the order of the theoretical model. Eighty-two Midwestern participants (60 female, 22 male) who reported forgiveness of a serious transgression ordered the 21 theoretical steps presented in random order via an online survey. The average of each participant’s Spearman rank order correlation coefficients ($r_s = .55, p < .05$) indicated significant similarity with the theoretical model, with a shared variance of 36%.

McCullough et al. (1998) defined forgiveness within a two-part motivational system in which victims of transgressions (1) seek to avoid personal and psychological contact with perpetrators and (2) are motivated to exact revenge on their perpetrators. Therefore, forgiveness is defined as “the reduction in avoidance motivation and revenge

motivation following an interpersonal offense” (p. 1587). This definition is discussed, however, within the boundaries of a close relationship or partnership and within the context of a specific act or event. Although they discussed a variety of cognitive, offense-related, relational, and personality-related variables that are associated with forgiving, they posit that empathy is the primary underlying variable involved in the process of forgiving a partner for an offense. Furthermore, they argued that forgiveness helps restore cooperation within relationships and increases relationship-constructive motivations.

In their review of the definitions of forgiveness, Toussaint and Friedman (2008) distinguished what might be dubbed as state vs. trait distinctions. Several authors have examined forgiveness as a disposition (Berry et al. 2005; Brown, 2003; Thompson et al. 2005), which would fall under a trait model of forgiveness, whereas others have targeted the forgiveness of specific acts or transgressions (McCullough et al., 1998). Similarly, Berry et al. (2001) pointed out that the majority of research up until that point examined forgiveness as a state variable rather than from a trait-like conceptualization. They called for increased attention of one’s disposition to forgive, which they dubbed *forgivingness* and defined as “a tendency to forgive transgressions that is stable over time and across situations” (p. 1278).

Toussaint and Webb (2005) also referred to the distinction between state and trait forgiveness. They defined trait forgiveness as “a *tendency* to offer, feel, or seek changes from negative to positive cognitions, behaviors, and affect pertaining to offenders that include oneself, others, and God” (p. 350). Likewise, they defined state forgiveness as “a *process* of offering, feeling, or seeking a change from negative to positive cognitions,

behavior, and affect pertaining to *specific* offenses that are perceived to be perpetrated by oneself, others or God” (p. 350). They also described forgiveness within a variety of contexts and targets and pointed to research that investigates forgiveness in respect to one’s self, others, God, families, or entire cultures and societies. They agreed with Enright and the Human Development Study Group (1991) who referred to forgiveness as a complex construct with affective, behavioral, and cognitive components. Toussaint and Webb (2005) concluded with a formal definition and define forgiveness as “an internal process undertaken by the victim, which does not require retribution, restitution, reconciliation, or a return to vulnerability by the victim, yet reserves the right to retain accountability from the offender” (p. 350).

In their discussion of the variety of definitions of forgiveness in the psychological literature, Worthington and Scherer (2004) pointed out that most researchers agree that forgiveness is a complex process that involves a variety of cognitive, affective, behavioral, motivational, decisional, and interpersonal aspects. There is, however, no clear consensus among scholars of the importance of the various components of forgiveness. Worthington (2003) proposed a two-factor model of forgiveness that consists of decisional and emotional forgiveness. Decisional forgiveness revolves around the intention to behave toward a transgressor, as one would have without or before the transgression. Emotional forgiveness revolves around perceived differences between how things are and how they should be and a replacement of negative emotions with positive emotions (Worthington, 2005a). The act of emotional forgiveness involves letting go of emotional anger, negative cognitions, depressive ruminations, and the like. In Worthington’s (2003) conception, individuals can exhibit decisional forgiveness

without necessarily experiencing emotional forgiveness, although decisional forgiveness may lead to emotional forgiveness.

Worthington and his colleagues (Worthington & Scherer, 2004; Worthington & Wade, 1999; Worthington, Berry, & Parrott, 2001) also discussed the related concept of unforgiveness, which they defined as “a complex combination of delayed negative emotions toward a person who has transgressed personal boundaries” (Worthington & Scherer, 2004, p. 386). Feelings of unforgiveness typically develop over time and are conceptualized to arise primarily from rumination, in which victims’ brood over transgression thereby increasing negative associations with the event and/or transgressor.

Toussaint and Friedman’s (2008) definition of forgiveness is similar to those described by Worthington and colleagues with the primary focus on the role of emotions. They defined forgiveness as “the extent to which negative emotions such as anger, fear, hurt, and bitterness can be replaced with more positive emotions such as peace, love, and joy” (p. 636). They expanded upon this definition noting that forgiveness can be focused on one’s self or others, in both acts of decisional or emotional forgiveness.

A review of the research on forgiveness highlights a myriad of definitions. In the conclusion of the comprehensive *Handbook of Forgiveness*, Worthington (2005b) argued that despite numerous references there is much disagreement on the definition of forgiveness, there is a “near consensus” (p. 557) on what forgiveness is among scholars. In particular, Worthington argued that virtually all scholars agree on what forgiveness is *not*. Most scholars agree that forgiveness does not equate to reconciliation with perpetrators or grant excusal, exoneration, justification, or acceptance of transgressions.

Furthermore, Worthington (2005b) concluded that there is less disagreement among researchers on what forgiveness is, but rather that forgiveness is a multi-dimensional and complex construct that cannot be defined simply. As the preceding review indicates, although discussions of forgiveness revolve around similar themes, they do so in a variety of manners and contexts. Forgiveness can be for one's self or for others. It can occur in romantic relationships, families, friendships, and communities. It involves emotions, behaviors, and thoughts. It can be a personality disposition or be granted for a single event. It can occur quickly or over time. At the root of it all, forgiveness typically is conceptualized as a reduction in negative associations with a transgression. Analysis of relationships of forgiveness with personality and well-being typically conceptualize forgiveness as a positive process that reduces negativity associated with a transgression.

Forgiveness and Physical Health

An increasing amount of research has devoted attention to the relationship between forgiveness and physical health. Earlier researchers relied on a theoretical or indirect link of forgiveness and health. Many scholars argued that documented associations between forgiveness and constructs such as hostility (Miller et al., 1996) or anger (Witliviet, Ludwig, & Vander Laan, 2001) indicated that forgiveness *should* have a beneficial effect on physical health. Until the early 2000s there was, however, scant literature directly examining this relationship (Lawler et al., 2005). Recent research, however, has produced several studies that have examined relationships between forgiveness and various measures of physical health, such as blood pressure, heart rate, arousal, and self-reports of physical health.

Forgiveness and Physiological Response

In a seminal study of the physiology of forgiveness, Witvliet, Ludwig, and Vander Laan (2001) examined a variety of measures of arousal during imagined states of forgiveness and unforgiveness. Participants ($N = 71$; 36 male, 35 female) recruited in introductory psychology courses were instructed to recall a recent personal offence and then imagine states of both forgiveness and unforgiveness. During periods where they were instructed to imagine unforgiveness, participants displayed higher levels of eye muscle tension $F(1, 70) = 34.94, p < .001$, skin conductance $F(1, 70) = 14.58, p < .01$, heart rate $F(1, 68) = 34.94, p < .001$, and mean arterial pressure $F(1, 68) = 8.98, p < .01$ than during imagined states of forgiveness. Although the study only examined short-term physiological effects of forgiveness, results do suggest that individuals display higher levels physiological arousal or stress responses during imagined states of unforgiveness. These findings paved the way for additional research to examine forgiveness' effect on physiological indices of arousal and well-being.

In a similar design, researchers asked college students recruited from introductory psychology courses ($N = 108$; 64 females, 44 males) to recall instances of betrayal (Lawler et al., 2003). Lower levels of self-reported state forgiveness was associated with higher levels of diastolic blood pressure ($r = -.39, p = .002$), systolic blood pressure ($r = -.39, p = .002$), mean arterial pressure ($r = -.37, p = .004$) and rate-pressure product ($r = -.48, p = .0001$); however, no statistically significant associations were found between trait-forgiveness and forehead tension ($r = -.23, p > .05$) or skin conductance responses ($r = .23, p > .05$). Similarly, lower levels of self-reported trait forgiveness were statistically significantly associated with diastolic blood pressure ($r = -.45, p = .0001$), systolic blood

pressure ($r = -.31, p = .02$), and mean arterial pressure ($r = -.42, p = .001$) but not with heart rate ($r = -.03, p > .05$), rate pressure product ($r = -.13, p > .05$), forehead tension ($r = -.18, p > .05$), and skin conductance responses ($r = .21, p > .05$).

In a follow-up study, (Lawler-Row, Karremans, Scott, Edlis-Matityahou, & Edwards, 2008) introductory psychology students ($N = 114$; 63 female, 51 male) were asked about a particular time that they were angered or offended by their parents. After an interview about the reported situation, participants complete measures of state and trait forgiveness, as well as reports of negative physical symptoms, daily medications, and number of weekly drinks. Participants' systolic blood pressure, heart rate, and rate pressure product (a measure of cardiovascular risk calculated by heart rate X systolic blood pressure) were also monitored. State forgiveness predicted lower levels of reported physical symptoms ($r = -.26, p < .01$) while trait forgiveness predicted lower levels of daily medications ($r = -.35, p < .01$) and weekly alcoholic drinks ($r = -.34, p < .01$). Similarly, self-reported trait forgiveness was associated with lower levels of systolic blood pressure ($r = -.37, p < .0001$), heart rate ($r = -.26, p < .01$), and rate pressure product ($r = -.41, p < .0001$), whereas self-reported state forgiveness was associated with lower levels of heart rate ($r = -.32, p < .01$) and rate pressure product ($r = -.26, p < .01$).

In addition, Lawler-Row et al. (2008) sought to illuminate the role anger plays in the forgiveness-health relationship. The authors found that acting out on anger was negatively associated with both state ($r = -.40, p < .0001$) and trait forgiveness ($r = -.50, p < .0001$) and that acting out on anger was also strongly related to blood pressure ($r = .33, p < .001$), heart rate ($r = .28, p < .01$), and rate pressure product ($r = .40, p < .0001$) as was state forgiveness. Partial correlation analyses that removed the effects of acting out

on anger, however, still revealed statistically significant correlations between trait forgiveness and blood pressure ($r = -.30, p < .05$) and state forgiveness and heart rate ($r = -.21, p < .05$). This led the authors to conclude that forgiveness' contribution to physical health goes beyond that of anger reduction.

Whited, Wheat, and Larkin (2010), expanded the research on forgiveness and physiological response by examining the role of forgiveness and apology on cardiovascular recovery for participants in a lab setting. Participants ($N = 79$; 50 female, 29 male) recruited from undergraduate psychology courses were instructed to complete a serial subtraction task. An examiner followed a script and made negative comments about the participants' effort and abilities. After these comments, participants were randomly selected to receive an apology or to complete session without an apology. This methodology differs from the majority of research in that it examines the act of forgiveness as it occurs immediately following a transgression rather than having participants recall a prior one; however, it is limited due to the contrived nature of the transgression in a laboratory setting.

Nonetheless, the study produced several interesting findings. Consistent with results of previous similar studies (Lawler et al., 2003; Witlivliet et al., 2001) individuals with higher levels of self-reported forgiveness experienced more rapid diastolic blood pressure ($F(1, 70) = 4.88, p = .03$), and mean arterial blood pressure ($F(1, 70) = 3.96, p = .05$), recovery following a transgression. Researchers found, however, the effect of an apology on blood pressure recovery depended on sex. Women experienced more rapid blood pressure recovery when offered an apology, whereas men experienced the opposite; diastolic blood pressure ($F(1, 70) = 9.56, p < .01$) and mean arterial blood

pressure ($F(1, 70) = 9.63, p < .01$). Therefore, future research on forgiveness, in particular the role of apology, needs to further examine sex differences.

A more recent study (Hannon, Finkel, Kumashiro, & Rusbult, 2012) confirmed findings of both Witvliet et al. (2001) and Lawler et al. (2003, 2008) with married couples. Sixty-eight married couples, recruited through university and community billboards, were asked to identify a recent partner transgression and discuss these while being videotaped. Partners then watched the videotapes of these discussions independently and rated the degree to which the victim granted forgiveness and the degree to which the perpetrator made amends. Although perpetrator amends had no relation to either systolic ($\beta = .20, p > .05$) or diastolic ($\beta = .02, p > .05$) blood pressure, forgiveness granted by the victim was associated with lower blood pressure for both victims (systolic, $\beta = -.34, p < .01$; diastolic, $\beta = -.39, p < .01$) and perpetrators (systolic, $\beta = -.20, p < .05$; diastolic, $\beta = -.27, p < .01$). This research makes an interesting leap in the literature demonstrating that forgiveness not only has a positive physiological effect for those who grant, but also for those that receive. Furthermore, it also supports the predominant belief in the literature that perpetrator reconciliation is not an essential component of forgiveness (Worthington, 2005b), as it had no relationship with blood pressure levels for perpetrators or victims of marital transgressions.

The preceding studies provide evidence that forgiveness is consistently associated with more favorable levels of physiological arousal and stress, such as blood pressure, muscle tension, heart rate, and skin conductance in laboratory settings. This research, however, focuses largely on specific and immediate physiological responses and does not examine more comprehensive or long-term measures of physical health. The following

section focuses on research that examines relationships and a variety of self-reported measures of physical health.

Forgiveness and Self-Reported Physical Health

Additional research has further examined the relationship between forgiveness and self-reported physical health. In a national telephone survey of 1,423 respondents (gender was not identified in the study), Toussaint et al. (2001) found associations between self-forgiveness and self-rated health in young (ages 18-44, $n = 737$; $r = .19$, $p < .001$) and middle age (ages 45-64, $n = 410$; $r = .13$, $p < .01$) participants and associations between tendencies to forgive others in late adulthood (ages 65 and older, $n = 276$; $r = .24$, $p < .05$). Findings of the study are consistent with the position of Worthington et al. (2007) that it takes years for the effects of trait-forgiveness to have a discernible effect on one's body and thus may explain why associations were not found until later adulthood.

Lawler et al. (2005) examined associations between both state and trait forgiveness and a variety of health measures in a sample of 81 community adults (62 female, 19 male). Both state and trait forgiveness were associated with lower reports of negative physical symptoms (state, $r = -.48$, $p < .0001$; trait, $r = -.33$, $p < .01$), number of prescription medications taken (state, $r = -.52$, $p < .0001$; trait, $r = -.45$, $p < .0001$), fatigue (state, $r = -.40$, $p < .0001$; trait, $r = -.29$, $p < .01$), and somatic complaints (state, $r = -.47$, $p < .0001$; trait, $r = -.30$, $p < .01$), as well as higher self-reports of sleep quality (state, $r = .44$, $p < .0001$; trait, $r = .44$, $p < .0001$). Further analyses in the Lawler et al. study tested spirituality, social skills, negative affect, and stress as mediators of forgiveness and physical health. All four of the variables either partially or fully

mediated the associations, and negative affect was the strongest mediating variable for both state and trait forgiveness and physical health.

Stoia-Caraballo (2008) looked more closely at the forgiveness-sleep quality relationship in participants recruited from a midwestern Catholic university ($N = 277$; 153 female, 124 male). Structural equation modeling indicated that negative affect ($r = -.23, p < .05$) and anger rumination ($r = -.44, p < .001$) mediate the relationship between state forgiveness and sleep quality ($r = .75, p < .001$; sleep measures were coded so that higher scores reflected lower sleep quality), providing insight into how an indirect relationship between forgiveness and sleep quality works.

Green, Decourville, and Sadava (2012) used a similar methodology ($N = 623$; 469 female, 153 male, 1 unidentified) of Canadian undergraduate students to examine mediators and found significant associations between dispositional forgiveness and self-reported physical health ($r = .17, p < .05$). Structural equation modeling was employed and found that negative affect ($r = -.47, p < .05$) was the strongest mediator of the forgiveness-health relationship, followed by self-reported stress ($r = -.17, p < .05$) and positive affect ($r = .25, p < .05$).

Wilson, Milosevic, Michelle, Kenneth, and Hibbard (2008) examined associations between dispositional self and other-forgiveness and self-reported physical health in a sample of 266 undergraduate students (81% female, 19% male) recruited at a university in southern Ontario. Zero-order correlations indicated statistically significant associations between reported physical health and both self ($r = .31, p < .01$) and other-forgiveness ($r = .20, p < .01$). A multiple regression model was then constructed to examine the unique effects of the two different types of forgiveness on physical health.

Self-forgiveness was a statistically significant predictor of physical health ($\beta = .27, p < .001$) and accounted for 9.4% of the variance in physical health, whereas other-forgiveness was not a significant predictor of physical health ($\beta = .10, p = .096$) and accounted for only 3.9% of the variance. Thus, in this sample, self-forgiveness demonstrated an independent and stronger effect on physical health than other-forgiveness.

The importance of literature demonstrating links between forgiveness and physical health was further illustrated in Toussaint, Owen, and Cheadle's (2012) longitudinal study. A national probability sample of 1,500 participants (ages 66 and older; 885 female, 615 male) found that conditional forgiveness of others was associated with higher risk of mortality ($B = .346, p < .01$) at three-year follow-up. Mediation analyses indicated that physical health was the key mediator between forgiveness and mortality (Sobel = 2.935, $p < .01$). Although the design was insufficient to infer causality, it does suggest that physical health is a strong mediator of the forgiveness-mortality relationship. The authors argued that, although their research provides initial evidence confirming the effect unforgiveness has on physiological variables, more work was needed to confirm if unforgiveness leads to negative physiological effects and thereby reduce longevity.

A sample of 288 (141 female, 147 male) HIV positive adults recruited through an HIV clinic in the southern United States (Martin, Vosvick, & Riggs, 2012) found that forgiveness of self was associated with lower levels of self-reported HIV symptoms ($r = -.26, p < .05$) and pain ($r = .26, p < .05$) and higher overall physical functioning ($r = .15, p < .05$). Further analyses found an interaction effect between, forgiveness of self,

attachment style and perceptions of health ($\beta = .12, p < .05$). For low attachment anxiety or more positive internal views of the self, forgiveness did not differentiate perceptions of health, whereas for high attachment anxiety, forgiveness of self was associated with higher perceptions of health. This suggests that self-forgiveness may play a prominent role for HIV+ adults with high attachment anxiety. A statistically significant interaction was also found between forgiveness of others, attachment styles, and pain ($\beta = .12, p < .05$). For those who reported higher attachment anxiety, higher forgiveness of others was associated with lower levels of pain, whereas with reported lower attachment anxiety, forgiveness of others showed no relationship with pain, suggesting forgiveness of others is only associated with lower pain in those who display more attachment anxiety. Overall, the study suggests that forgiveness has more positive associations with health in HIV+ adults with higher attachment anxiety, yet not in those with low attachment anxiety.

The preceding research provides evidence from a variety of samples that forgiveness is predictive of a variety of self-reports of physical health, including general reported health, negative health symptoms, somatic complaints, prescription medications, and sleep quality. A longitudinal study demonstrated associations between forgiveness and mortality. In all, the research provides a plethora of evidence that various types of forgiveness are associated with short-term measures of physiological arousal or stress, self-reports of physical health, and longevity.

Forgiveness and Well-Being

Building on the previously reviewed research outlining the associations between forgiveness and physiological indicators of stress, discussion of forgiveness and mental

health or subjective well-being often occur within a stress-coping model. Worthington and Scherer (2004) hypothesized that forgiveness can be employed as a coping strategy to reduce stress and thereby improve health and well-being. Within this model, unforgiveness is conceptualized as a negative pattern of responses that increases stress and therefore negatively affects both mental and physical health. Specifically, Worthington et al. (2001) outline both direct and indirect effects through which forgiveness is conceptualized to affect mental health. In this model, the physiological effects of forgiveness reviewed above are hypothesized to have direct effects on mental health and well-being. Other factors, including social support, interpersonal functioning, health behaviors, personal control, anger, and rumination are hypothesized to have indirect effects, meaning that forgiveness may help one develop meaningful relationships protecting against symptoms of depression, as one example. Much of the literature has examined relationships between forgiveness and various indices of well-being, proposed as indirect effects in the Worthington et al. model. The following review will outline research that has examined relationships between forgiveness, subjective well-being, and mental health.

Forgiveness and Subjective Well-Being

Toussaint et al. (2001) examined associations between forgiveness, age, and subjective well-being in a national probability sample of 1,423 adults (gender not reported). Participants were divided into three age categories, young adults (ages 18-44, $n = 709$), middle-aged adults (ages 45-64, $n = 377$), and older adults (ages 65 and older, $n = 242$; 95 unidentified). Results indicate negative associations between both self forgiveness (young adults, $B = -.17, p < .001$; middle-aged adults, $B = -.17, p < .001$;

older adults, $B = -.18, p < .001$), other forgiveness (young adults, $B = -.24, p < .001$; middle-aged adults, $B = -.48, p < .001$; older adults, $B = -.37, p < .001$), and psychological distress for all age groups. Age differences were found on life satisfaction as self-forgiveness was only associated with life satisfaction for younger adults ($B = .11, p < .001$) whereas other forgiveness was associated with life satisfaction only for middle-aged ($B = .24, p < .001$) and older adults ($B = .27, p < .001$). Although self and other forgiveness do appear to be strongly associated with favorable mental health outcomes, it does appear that effects of other forgiveness are more pronounced as individuals' age.

In a similar study of approximately 1,316 older adults (gender not reported) recruited through the Medicare Beneficiary Eligibility List, Krause and Ellison (2003) found forgiveness of others to be positively associated with life satisfaction ($\beta = .22, p < .001$) and negatively associated with depressive affect ($\beta = -.18, p < .001$), somatic complaints ($\beta = -.18, p < .001$), and death anxiety ($\beta = -.19, p < .001$). The study also examined the role of requiring acts of contrition to earn forgiveness played on well-being. Results indicated that self-reports of belief in contrition to earn forgiveness was negatively associated with life satisfaction ($\beta = -.16, p < .001$) and positively associated with depressive affect ($\beta = .13, p < .001$), somatic complaints ($\beta = .07, p < .01$), and death anxiety ($\beta = .28, p < .001$). Thus, it appears that forgiveness has a more pronounced effect on well-being when offered unconditionally, compared to when acts of contrition are required (as perceived by the offended) to earn forgiveness.

Sastre et al. (2003) examined the relationship between forgivingness and life satisfaction in a sample of 1002 participants recruited in France and Portugal. French participants ($n = 892$; female = 469, male = 341) were recruited by graduate students on

city sidewalks where participants were simply asked to participate in the study. Portuguese participants were recruited from university classes. The sample was divided into four age groups: ages 17-22 (adolescent; $N = 213$), ages 23 – 25 (young adults; $N = 197$), ages 36 – 45 (adults; $N = 189$) and ages 46 – 65 (middle aged; $N = 211$). Overall, results showed minimal associations between dispositional forgiveness and life satisfaction. In the French sample, there was a statistically significant association between overall forgiveness and life satisfaction ($r = .08, p < .05$); however, results were significant only for men ($r = .14, p < .05$) and not women ($r = .04, p > .05$). Among the different ages, the adult group of the French sample obtained the strongest association found in the study ($r = .24, p < .05$). There were no statistically significant associations found in the Portuguese sample between overall forgiveness and life satisfaction. One explanation the authors offered for the lack of findings between forgiveness and life satisfaction is that life satisfaction is a self-referential trait, and offers little about how individuals relate with others.

Macaskill (2012) examined relationships between dispositional self and other-forgiveness, trait anger, well-being, and life satisfaction among two different samples university students in the United Kingdom (study 1: $n = 297$, 152 female, 143 male; study 2: $n = 233$, 150 female, 83 male). A path model was created in which anger flowed through self- and other-forgiveness to the dependent variables global mental health and life satisfaction. Anger was a significant predictor of both self- ($r = .19, p < .001$) and other-forgiveness ($r = .36, p < .001$) with higher levels on forgiveness measures reflecting more unforgiveness. Although lower levels of self-forgiveness was found to predict poorer mental health ($r = .35, p < .001$) and life satisfaction ($r = .30, p < .001$), other-

forgiveness was not a statistically significant predictor of either measure. Study 2 sought to replicate findings of study 1 with a different sample, and added in variables of shame, guilt, and anxiety. Similar to results of study 1, higher levels of self-unforgiveness and anger were associated with poorer global mental health (self-unforgiveness: $\beta = .34, p < .001$; anger $\beta = .13, p < .05$) and life satisfaction (self-unforgiveness: $\beta = .32, p < .001$; anger $\beta = .25, p < .001$). Neither study confirmed causal models in which self-forgiveness served as an indirect path between anger and mental health or life satisfaction. In study 2, higher levels of anxiety were associated with more self- ($\beta = .63, p < .001$) and other-unforgiveness ($\beta = .26, p < .001$). Whereas shame predicted only self-unforgiveness ($\beta = .38, p < .001$), guilt demonstrated a negative correlation with other-unforgiveness ($\beta = -.22, p < .001$), indicating that those who display higher levels of guilt are more likely to forgive others.

Maltby, Day, and Barber (2005) examined the relationship between forgiveness and happiness using a two-factor eudaimonic/hedonic conceptualization of happiness. Eudaimonic happiness is a long-term measure of happiness where one develops greater engagement and meaning in life, whereas hedonic happiness reflects a rather short-term measure of pleasure attainment. The study employed the Enright Forgiveness Inventory (Subkoviak et al., 1995), which assesses six dimensions of state forgiveness, both positive and negative thinking, feeling, and behaving with a sample of 244 college students (128 female, 116 male) from the United Kingdom. The authors found lower levels of negative forgiveness thoughts was associated with lower levels of short-term or hedonic happiness ($\beta = .51, p < .01$) whereas positive forgiveness feelings ($\beta = .17, p < .05$) and positive forgiveness behaviors ($\beta = .25, p < .05$) predicted long-term or

eudaimonic happiness. The authors conclude that evidence suggests that avoiding negative thinking about transgression plays a primary in preventing reduction in happiness in the moment. Conversely, they argue that in the long-term, it is behavior and feelings towards transgressors that is most essential in preventing the ill-effects of unforgiveness on happiness.

Breen, Kashdan, Lenser, and Fincham (2010) examined the roles of forgiveness and gratitude on several measures of well-being in a sample of 140 (113 female, 27 male) undergraduate psychology students recruited at a major university in the United States. Bivariate correlations indicated that forgiveness was associated with lower levels of depression ($r = -.53, p < .01$), anger ($r = -.61, p < .01$), loneliness ($r = -.51, p < .01$), personal distress ($r = -.45, p < .01$), and higher levels of acceptance ($r = .57, p < .01$), self-compassion ($r = .68, p < .01$), and well-being ($r = .40, p < .01$). Similarly, gratitude was associated with lower levels of depression ($r = -.34, p < .01$), anger ($r = -.29, p < .01$), loneliness ($r = -.28, p < .01$), and higher levels of acceptance ($r = .38, p < .01$), self-compassion ($r = .35, p < .01$), empathy ($r = .24, p < .01$) and well-being ($r = .32, p < .01$). Partial correlation analyses were conducted between forgiveness and the preceding outcome variables while removing the variance contributed by gratitude and all associations remained statistically significant. When partial correlation analyses were conducted between gratitude and outcome variables while controlling for forgiveness, associations between anger and loneliness were, however, no longer statistically significant ($p > .05$). Associations with depression ($r = -.21, p < .05$), acceptance ($r = .25, p < .01$), self-compassion ($r = .17, p < .05$), empathy ($r = .22, p < .05$), and well-being ($r = .20, p < .05$) were still statistically significant but coefficients were reduced. Results

suggest that, while forgiveness and gratitude are inter-related and both demonstrate favorable outcomes with well-being, forgiveness demonstrates stronger independent effects on well-being than gratitude.

Sandage and Jankowski (2010) examined the role differentiation of self (DoS) plays in the relationship between forgiveness and well-being. Conceptualized primarily by Murray Bowen (Kerr & Bowen, 1988), the construct is described by intrapersonal dimensions (regulation of emotional reactivity), interpersonal dimensions (ability to maintain a unique sense of self while still relating positively with others), and has positively predicted a variety of well-being measures (Sandage & Jankowski, 2010). The authors found DoS to mediate relationships between tendency to forgive and spiritual instability, mental health symptoms, and positive affect. They posit that this evidence suggests one of the key components of the relationship between forgiveness and well-being is the ability to regulate one's emotions and relate with others in more prosocial ways.

In a sample of 115 students recruited through undergraduate psychology courses, (91 female, 24 male) Bono, McCullough, and Root (2008) examined if differences in well-being occurred during times when individuals reported higher forgiveness than typical. Participant's levels of forgiveness and well-being being was assessed five different times over a 10 – week period. The authors noted that this was the first study to examine intra-individual differences in forgiveness and well-being. Forgiveness was assessed using the Transgression-Related Interpersonal Motivations (TRIM) Inventory, which assesses three dimensions of forgiveness: avoidance (motivation to avoid contact with transgressor), revenge (motivation to seek revenge against the transgressor), and

benevolence (conciliatory motivations towards the transgressor). Higher than typical avoidance motivation was associated with lower well-being, $t(df = 112) = -2.48$, $P = .015$, effect size $r = -.23$, whereas higher than typical benevolence towards transgressors was associated with higher well-being, $t(df = 112) = 2.92$, $P = .005$, effect size $r = .26$. Although there were no significant associations between within-persons revenge motivation and well-being $t(df = 112) = -1.15$, $P = .25$, effect size $r = -.11$, a significant interaction was found with apology/amends $t(df = 112) = -2.22$, $P = .03$, effect size $r = -.20$, meaning that a negative association between revenge motivation and well-being increased as perception of apology from the transgressor increased.

Bono, McCullough, and Root (2008) also found that higher within-person feelings of closeness towards the transgressor was associated with well-being, $t(df = 112) = 2.09$, $P = .04$, effect size $r = .19$, and this relationship was moderated by apologies by the transgressor, $t(df = 112) = 2.27$, $P = .04$, effect size $r = .21$. Therefore, when individuals felt more closeness to transgressors than typical, they reported greater well-being. In addition, greater perception of apology on the part of the transgressor increased this effect on well-being.

McCullough, Bono, and Root (2007) investigated whether within-person increases in rumination regarding a transgression were associated with within-person reductions in forgiveness in three separate studies. The first study utilized a sample of 89 (69 female, 20 male) undergraduate students recruited in introductory psychology courses who reported a transgression within the last week. Participants completed surveys at five different points throughout the semester roughly two weeks apart from each other. Results indicated that, when participants were more ruminative than typical for

themselves, they displayed lower levels of forgiveness, as assessed by increased motivations for revenge $t(df = 85) = 3.98, p < .01$, effect size $r = .39$ and avoidance $t(df = 85) = 2.78, p < .01, r = .29$. Mediation analyses indicated that anger mediates associations between both avoidance (Sobel's $t = 5.22, p < .001$) and revenge (Sobel's $t = 4.06, p < .001$).

The second study utilized a sample of 115 undergraduate psychology students (91 female, 24 male). Participants were assessed approximately two weeks apart as in the first study, but on the same day and time each assessment. Questionnaires were also completed in a lab instead of the classroom, as in study 1. Results were consistent with the first study, as high levels of within-person rumination were associated with revenge, $t(df = 115) = 5.44, p < .01$, effect size $r = .46$, and avoidance, $t(df = 115) = 2.84, p < .01$, effect size $r = .26$, and anger mediated these associations (avoidance, Sobel's $t = 5.41, p < .001$; revenge, Sobel's $t = 3.93, p < .001$).

In the third study, 163 students (112 female, 51 male) recruited through undergraduate psychology courses were instructed to complete questionnaires each day for 21 consecutive days. The goal of this study was to assess if increased rumination on one day would predict avoidance and revenge motivations on the subsequent day. Similar to results of studies one and two, analyses indicated that, on any given day, higher levels of rumination were associated with higher levels of avoidance and revenge motivation $t(160) = 2.31, p < .05$, effect size $r = .18$, on the following day, with these associations mediated by anger (avoidance, Sobel's $t = 3.99, p < .001$; revenge, Sobel's $t = 3.89, p < .001$). Although the correlational design of these studies limits causal

inference, results do suggest that higher levels of rumination have a relationship with lower levels of forgiveness by increasing motivation for revenge and avoidance.

Toussaint and Friedman (2009) examined the mediating roles of affect and belief between forgiveness, gratitude, and well-being on a sample of 72 (37 female, 35 male) outpatient counseling clients in the eastern United States. All measurements of forgiveness and gratitude were predictive of happiness (self-forgiveness: $r = .44, p < .001$; other-forgiveness: $r = .32, p < .01$; situational forgiveness: $r = .52, p < .01$; gratitude: $r = .51, p < .001$) and life satisfaction (self-forgiveness: $r = .57, p < .001$; other-forgiveness: $r = .33, p < .01$; situational forgiveness: $r = .38, p < .01$; gratitude: $r = .64, p < .001$). Furthermore, positive affect and beliefs mediated all of the above associations, suggesting that documented relationships between both forgiveness and gratitude, and well-being are channeled by more positive affect and belief of one's self. The authors' noted that associations between forgiveness and well-being were of higher magnitude than much of the previous research (Maltby et al., 2005; Sastre et al., 2003) although associations between gratitude and well-being were consistent with previous research. As Toussaint and Friedman discussed, previous research examining the forgiveness/well-being relationship show somewhat inconsistent results. The point out that their study is unique, in that it uses a sample of counseling clients, rather than a college student or general population sample, leading the authors to hypothesize that forgiveness may be more important for those in counseling, as they are more likely to be struggling with important relationship issues. Furthermore, many studies do not consider the multi-dimensional nature of forgiveness, with a bias towards situational forgiveness of others.

Nonetheless, the authors argue that results suggest both forgiveness and gratitude are salient topics for counseling clients.

Moorhead, Gill, Minton, and Myers (2012) examined the role of forgiveness and forgiveness-related motivations on wellness of 115 (99 female, 16 male) counselors in training recruited through five counselor education programs in the United States.

Instant-specific revenge motivation was negatively correlated with total wellness ($r = -.35, p < .01$). This relationship remained significant when partial correlations were used to control for 5-factor personality variables (openness, conscientiousness, extraversion, agreeableness, neuroticism; $r = -.36, p < .01$).

Rijavec and Mijocevic (2010) examined gender effects on the relationships between revenge and avoidance motivations and well-being in a sample of 600 (300 female, 300 male) university students in Croatia. Results indicated that men reported higher levels of revenge motivation, $F(1, 597) = 6.31, p < .05$, than women, although there were no statistically significant gender differences for avoidance motivation, $F(1, 597) = .12, p > .05$. For males, both revenge ($B = .13, p < .05$) and avoidance ($B = .15, p < .05$) motivations were predictive of depression, whereas only revenge ($B = .20, p < .05$) motivation was predictive of depression for women. The authors posit that these observed differences may be the result of women being more prone to avoidance style of coping than men (see Day & Livingstone, 2003; Matud, 2004). Therefore, men may see avoidance as a less socially acceptable coping method, lending to symptoms of depression. Since both motivations are considered indicative of lower levels of revenge, the authors posit that results provide further evidence that forgiveness is inversely associated with depression.

In a sample of 139 participants (80 female, 59 male) recruited from Chinese community samples, Tse and Yip (2009) examined the relationship between dispositional forgiveness, interpersonal adjustment and psychological well-being. Interpersonal adjustment was assessed using scales that assess reported levels of friend support and satisfaction with leisure activities. Psychological well-being was assessed by measuring optimism, depression, perceived self-efficacy, and positive affect. Pearson correlations indicated that forgiveness was associated with friend support ($r = .23, p < .01$), leisure ($r = .26, p < .01$), positive affect ($r = .17, p < .05$) and depression ($r = -.22, p < .05$). A structural equation model demonstrated a statistically significant fit when interpersonal adjustment was tested as an indirect path between forgiveness and psychological well-being ($df = 13, \chi^2 = 18.86, p = .13, GFI = .96, CFI = .97, \text{and RMSEA} = .057$). The model confirmed proposals by Lawler-Row and Piferi (2006) that a tendency to forgive others predicts interpersonal adjustment in terms of friendships and leisure activities, which in turn predicts higher well-being.

The preceding review outlines several studies that demonstrated positive associations between forgiveness and various measures of subjective well-being, which was commonly measured by assessing levels of life satisfaction or related variables such as positive affect and happiness. One theme that emerged in the review is that forgiveness of self is more consistently associated with well-being in younger adults (Macaskill, 2012) whereas forgiveness of others is more consistently associated with well-being in older adults (Krause & Ellison, 2003; Toussaint et al., 2001). Toussaint and Friedman's (2009) study of outpatient counseling clients, however, found both self and other forgiveness associated with happiness and life satisfaction. It is possible, as

hypothesized by Toussaint et al., (2001) that the effects of forgiveness of others become more pronounced as people age. This hypothesis, however, at this point, requires more evidence of support.

Forgiveness and Mental Health

The section above reviews research that has examined associations between various measures of forgiveness and subjective well-being. There is also a great deal of research that has examined forgiveness and different aspects of mental health. The following section will outline research that has examined relationships between forgiveness and symptoms of depression and anxiety, suicide, and substance abuse.

Depression and Anxiety.

Kendler et al. (2003) examined 2,621 pairs of twins from the Virginia Twin Registry and found forgiveness of others negatively associated with nicotine dependence, as well as drug use and dependence. Lower levels of vengefulness (defined as unvengefulness) were associated with lower levels of major depression (Odds Ratio = .86, $p < .001$), generalized anxiety (Odds Ratio = .83, $p < .001$), phobia (Odds Ratio = .90, $p < .05$), and bulimia nervosa (Odds Ratio = .53, $p < .01$).

Brown (2003) examined relationships between attitudes towards forgiveness, dispositional forgiveness, vengeance, and depression in a sample of 70 (32 female, 37 male, 1 unspecified) midwestern undergraduate students. Multiple regression analyses found that among these variables, dispositional forgiveness was the only one that was a statistically significant predictor of depression ($\beta = -.41$, $p < .01$). A statistically significant interaction, however, was found between attitudes towards forgiveness, dispositional forgiveness, and depression ($\beta = -.23$, $p < .05$). Simple slopes tests, which

measure interactions effects, revealed that at low levels of dispositional forgiveness, high levels of attitudes towards forgiveness was positively associated with depression ($\beta = .41$, $p < .05$). Therefore, individuals who had positive attitudes or valued the act of forgiveness, yet did not display this behavior, were more likely to be depressed. A statistically significant interaction was also found between dispositional forgiveness, vengeance, and depression ($\beta = .23$, $p < .05$). Simple slopes tests revealed that at low levels of dispositional forgiveness, low levels of vengeance predicted higher levels of depression ($\beta = -.40$, $p < .05$). Thus, individuals who displayed a tendency not to forgive and not to retaliate against offenders were more depressed than those who had a low tendency to forgive and did retaliate. Results demonstrate that unforgiveness is not necessarily synonymous with vengefulness. Brown postulates that individuals who are unforgiving and yet do not retaliate may feel powerless to do so or they may feel they deserved the wrongs done to them.

Subkoviak et al. (1995) analyzed relationships between forgiveness, anxiety, and depression in a sample of 394 (204 female, 190 males) participants recruited in the Midwest. Half of the participants were college students and the other half were their same-gender parents. Among college students, forgiveness was associated with lower state anxiety for those reporting any degree of interpersonal hurt ($r = -.30$, $p < .05$) and those reporting deep interpersonal hurt ($r = -.44$, $p < .05$). Similarly, among the adult sample, forgiveness was associated with lower state anxiety for those who reported any degree of interpersonal hurt ($r = -.43$, $p < .05$) and those who reported deep interpersonal hurt ($r = -.49$, $p < .05$). Although no associations were found in the overall sample between forgiveness and depression, there was a statistically significant association with

depression among adult participants who reported a great deal of hurt from a family member ($N = 34$, $r = -.32$, $p < .01$). As one of the earlier studies of the forgiveness—well-being relationship, results suggested that lower levels of forgiveness can have unfavorable associations with mental health indices, particularly anxiety. The authors, however, argued that results suggest the effects of forgiveness on well-being need to take into account developmental concerns, as results suggest forgiveness was a helpful coping mechanism for college students coping with hurt from romantic relationships and adults coping with hurt from familial relationships.

Toussaint et al. (2008b) used a random selection procedure to gather a nationally representative sample of 1,423 participants (709 female, 563 male; 151 unidentified) to examine the role of hopelessness in the relationship between forgiveness and depression. Bivariate correlations indicated that forgiveness of self was negatively correlated with both hopelessness ($r = -.472$, $p < .0001$) and depression ($r = -.255$, $p < .0001$). Likewise, forgiveness of others was negatively correlated with both hopelessness ($r = -.472$, $p < .0001$) and depression ($r = -.278$, $p < .0001$). Seeking forgiveness, however, was positively correlated with depression ($r = .065$, $p < .05$) though not hopelessness ($r = -.006$, $p > .05$) Partially standardized logistic regression models confirmed predictions that hopelessness served as indirect path between both forgiveness of self ($B = -.086$, $Z = 2.957$, $p < .01$) and others ($B = -.06$, $Z = 2.663$, $p < .01$) and depression. The results indicate that forgiveness of self and others has a direct protective effect against depression and that hopelessness is a key variable in this relationship.

Toussaint, Marschall, and Williams (2012) examined the role of forgiveness as a mediator between religion/spirituality and depression in the sample used in the two

preceding studies. A random phone dialing procedure was used to recruit 1,423 participants at the onset of the study and 1,055 participants were re-interviewed six months later. Odds ratios (OR) indicated that the most statistically significant predictor of a depression diagnosis at the second assessment was a depression diagnosis at the first assessment ($B = 2.52$, $OR = 12.46$, $p < .001$). Although religion/spirituality was not a significant predictor of depression during the second assessment ($B = -.01$, $OR = .99$, $p > .05$), both forgiveness of oneself ($B = -.32$, $OR = .72$, $p < .01$) and forgiveness of others ($B = -.39$, $OR = .68$, $p < .05$) were negatively associated with a depression diagnosis at the second assessment, thus serving as protective factors against depression. A path model was then constructed to examine the indirect effects of religion/spirituality through forgiveness of others and oneself on a depression diagnosis at the second assessment, while depression during the first assessment and all demographic variables were controlled. Religion/spirituality indirectly predicted depression, with forgiveness of others mediating this relationship ($B = .03$, $Z = -1.98$, $p < .05$); however, religion/spirituality was not a significant predictor of depression when forgiveness of self was the mediator ($B = .02$, $Z = -1.63$, $p = .10$). Therefore, forgiveness of others may play a more protective role against depression for more religious or spiritual individuals.

Burnette et al. (2009) examined the role of rumination, empathy, and forgiveness on depression through the theoretical framework of attachment theory (Bowlby, 1982), which posits that individuals seek proximity to attachment figures, particularly as a response to stress. Burnette et al. (2009) examined anxious (strategies used) and avoidant (affective processes) attachment styles. Structural equation modeling was used with a sample of 221 undergraduate students (141 female, 80 male) and indicated that

associations between high attachment anxiety and lower levels of forgiveness ($r = -.19, p < .05$) are mediated by high levels of rumination, whereas associations between avoidant attachment styles and forgiveness ($r = -.25, p < .05$) was mediated by lower levels of empathy. Therefore, the authors postulate that those high in attachment anxiety have difficulty forgiving others because they ruminate about transgressions, whereas those high in attachment avoidance have difficulty forgiving because they lack empathy for offenders.

Burnette et al. (2009) also found that the relationship between anxious attachment style and depression ($r = .52, p < .05$) was partially mediated by low forgivingness and relationships between avoidant attachment style and depression was fully mediated by low forgivingness ($r = .25, p < .05$). Therefore, a lack of positive social relationships and interpersonal strategies to maintain relationships, including forgiveness and empathy, have a negative effect on mood.

These studies provided additional evidence for positive relationships between forgiveness and mental health, as forgiveness was consistently associated with more favorable mental health outcomes. Both self and other forgiveness was consistently associated with lower levels of depression (Brown, 2003; Kendler et al., 2003; Maltby, Macaskill, & Day, 2001; Toussaint et al., 2008b). One study of college students found that only forgiveness of self, and not forgiveness of others, was associated with more favorable general mental health symptoms. Therefore, national probability samples consistently showed that both self and other forgiveness was associated with better mental health; however, one study with a predominantly young adult, college student sample found only self-forgiveness predictive of more favorable mental health.

Gender differences in depression and anxiety.

The preceding studies examined associations between forgiveness and mental health, primarily focusing on symptoms of depression and anxiety among samples. Several studies have examined similar relationships, while focusing on gender differences in these relationships. For example, Maltby, Macaskill, and Day (2001) examined relationships between self and other forgiveness, personality, and general health, in a sample of 324 (224 female, 100 male) undergraduate students. Correlation analyses, ran separately by gender, found that failure to forgive self predicted neuroticism (men: $r = .53, p < .001$; women: $r = .41, p < .001$) anxiety (men: $r = .22, p < .05$; women: $r = .22, p < .01$) and depression (men: $r = .32, p < .01$; women: $r = .27, p < .001$) for both men and women. Similarly, failure to forgive others was associated with higher depression scores for both men and women (men: $r = .37, p < .01$; women: $r = .23, p < .01$). Among men, failure to forgive others was negatively associated with extraversion ($r = -.25, p < .05$) where among women failure to forgive others was associated with social dysfunction ($r = .28, p < .001$) and psychoticism ($r = .17, p < .05$). The authors argued that results provide further evidence that low levels of self-forgiveness has a negative intra-individual effect whereas low forgiveness of others negatively affects social relationships. Therefore, although both were negatively associated with depression, the mechanisms through which the effect occurs operate differently.

Toussaint et al. (2008) examined gender differences in associations between various types of forgiveness and presence of a major depressive episode. A random selection procedure was used to gather a nationally representative sample of 1,423

participants (709 female, 563 male, 151 unidentified) who completed questionnaires over the phone on an initial interview and at a 6-month follow-up. Women demonstrated significantly higher levels of forgiveness of others (Cohen's $d = .26, p < .001$), forgiveness by God (Cohen's $d = .20, p < .001$), and seeking forgiveness (Cohen's $d = .54, p < .001$) than men. No significant gender differences were found in self-forgiveness (Cohen's $d = .07, p > .05$). Associations between forgiveness and depression were then conducted separately for women and men using Odds ratios (OR). For women, forgiveness of self (OR = .34, $p < .001$), forgiveness of others (OR = .45, $p < .001$), and forgiveness by God (OR = .603, $p < .05$) were all associated with lower risk of a depression diagnosis, whereas seeking forgiveness (OR = 1.71, $p < .05$) was associated with a higher risk of depression. For men, only self-forgiveness was associated with depression (OR = .15, $p < .001$), as it lowered the likelihood of a diagnosis. A statistically significant gender by forgiveness of others interaction was found ($p < .05$) as higher levels of forgiveness of others reduced the likelihood of depression for women but not for men.

Results provided confirmation of previous research indicating that women display higher levels of forgiveness than men (Freese, 2004; Miller & Hoffman, 1995; Miller & Stark, 2002; Miller et al. 2008). Results suggest that forgiveness of self serves as a substantial buffer against depression, for both men and women; however, forgiveness of others and by God also plays a protective role in women. The authors argued interpersonal styles of women likely explain these differences. Similarly, they posit that observed negative associations between seeking forgiveness and depression in women may be explained by a more keen awareness of hurt caused to others or that seeking

others forgiveness may be related to an un-tested moderating variable such as neuroticism or self-esteem that is negatively correlated with depression. From this point of view, it may be possible that higher levels of seeking others forgiveness is a corollary of low self-esteem, and women with these characteristics seek forgiveness when it is not warranted. This possibility is similar to the hypotheses of the present study, that women who have a high tendency to forgive and low self-esteem may be more likely to expose themselves to physical abuse and have lower well-being.

Rijavec et al. (2010) analyzed the effects of revenge and avoidance motivation on depression and happiness in a sample of 600 college students recruited at the University of Zagreb in Croatia. In the overall sample, revenge motivation predicted higher levels of depression ($r = .20, p < .001$) and lower levels of happiness ($r = -.11, p < .001$), whereas avoidance motivation predicted higher levels of depression ($r = .20, p < .001$) only. Gender analyses indicated that males reported higher levels of revenge motivation, $F(1, 597) = 6.31, p < .05$. Revenge motivation predicted lower happiness ($r = -.05, p < .05$), higher depression ($r = .22, p < .001$), and avoidance motivation predicted higher levels of depression for males whereas only revenge motivation predicted higher levels of depression for females ($r = .21, p < .001$). Similarly, hierarchical regression models, while controlling for age, found that both revenge ($B = .13, p < .05$) and avoidance motivation ($B = .15, p < .05$) significantly predicted depression for males, whereas only revenge motivation predicted depression for females ($B = .20, p < .05$).

Ysseldyk, Matheson, and Anisman (2008) examined the role of appraisal-coping process in the relationship between forgiveness and depressive symptoms. Coping was assessed using Folkman and Lazarus' (1980) model that consists of two types of coping:

emotion-focused and problem-focused. Problem-focused coping entails the use of cognitive or behavioral strategies to deal with stressors whereas emotion-focused coping involves engaging emotion through rumination, expression or seeking support (Engagement), and avoiding emotion through disengagement or denial of a stressful event (Avoidant). The first set of analyses (Ysseldyk, Matheson, & Anisman, 2008) examined women's willingness to grant forgiveness for psychological or physical abuse in an ongoing romantic relationship amongst a sample of 95 female college students. As hypothesized by the authors, women who reported greater willingness to forgive their partners also reported lower levels of depression ($r = -.43, p < .001$). Avoidant emotion-focused coping (Sobel's $z = -2.02, p < .05$) partially mediated the forgiveness-depression relationship; however, the main effect was still statistically significant, indicating forgiveness affects depression independently of avoidant emotion-focused coping. Contrary to the authors' hypotheses, there was no interaction found between forgiveness, level of abuse, and depression ($R^2_{cha} = 0.006, F < 1$), as forgiveness was associated with depression, regardless of levels of abuse reported by women.

The second set of analyses (Ysseldyk, Matheson, & Anisman, 2008) examined the role of the appraisal-coping process between forgiveness and depression with a non-abusive transgression. Gender differences were also examined in the second study and a sample of 99 undergraduate students (64 female, 35 male). As in the first study, forgiveness predicted lower depressive symptoms ($\beta = -.32, p < .001$), with no statistically significant differences observed between genders. As expected, those who remained in relationships reported more willingness to forgive than for those who

reported terminating the relationships, $F(3, 92) = 4.69, p < .01$; however, there was no difference found in levels of depression among the groups.

Miller, Worthington, and McDaniel's (2008) meta-analysis examined gender differences of forgiveness in 53 studies. A total of 70 different analyses (some articles contained multiple studies) with 15,731 participants produced a standardized mean difference (Cohen's d) of .281 with a 95% confidence interval of .206 to .356. Thus, there does appear to be a small to moderate, yet statistically significant, difference between levels of forgiveness between males and females.

Research on gender differences of forgiveness indicated that, on average, women display higher levels of forgiveness than men. When this research examines effects on depression, however, there are little differences. In other words, forgiveness is generally associated with better depression outcomes in both men and women (Ysseldyk, Matheson, & Anisman, 2008). There are some differences in how these associations are observed. For example, Toussaint et al.'s (2008) showed that, while forgiveness of self was predictive of lower depression for both males and females, forgiveness of others and receiving God's forgiveness was also predictive of lower depression in women. Rijavec et al. (2010) found that both revenge and avoidance motivation was predictive of lower depression in men, whereas only lower revenge motivations predicted lower depression for women. Therefore, forgiveness appears to be equally protective against depression for men and women, with noted differences in different types of forgiveness.

Forgiveness and suicide.

In addition to a host of studies that have examined the relationship between forgiveness and a variety of well-being or mental health measures, several studies have

examined the relationship between forgiveness and suicidal behaviors. Hirsch, Webb, and Jeglic (2011) examined the role of forgiveness on depression and suicidal behavior. In a sample of 158 undergraduate students (123 female, 35 males) identified as at least mildly depressed as evidenced by a Beck Depression Inventory-II (Beck, Steer, & Brown, 1996) score of 13 or higher, self-forgiveness was associated with symptoms of depression ($r = -.36, p < .01$) and suicidal behavior ($r = -.26, p < .05$). Forgiveness of others was associated with suicidal behavior ($r = -.26, p < .05$) but not with depression ($r = -.05, p > .05$). Mediation analyses indicated that depression mediated the relationship between self-forgiveness and suicidal behavior ($r = -.21, p < .05$), indicating an indirect relationship between self-forgiveness and suicidal behavior. In other words, self-forgiveness leads to lower levels of depression and subsequently lower levels of suicidal behavior. The opposite was found for forgiveness of others, as there was no statistically significant relationship between forgiveness of others and depression and thus a direct relationship was found between forgiveness of others and suicidal behavior, exclusive of the effects of depressive symptoms. Based on this finding, the authors propose that forgiveness likely reduces symptoms of depression, thereby decreasing the likelihood of exhibiting suicidal behaviors. Although this model was supported by the data, the cross-sectional design precludes determination of causality.

In a related study (Hirsch, Webb, & Jeglic, 2012) of 372 college students (260 female, 112 male) forgiveness was examined as a possible moderator of anger and suicidal behavior. Forgiveness of self was associated with lower levels of depression ($r = -.30, p < .001$), inward anger ($r = -.19, p < .001$), and suicidal behavior ($r = -.27, p < .001$). Similarly, forgiveness of others was associated with lower levels of depression (r

= $-.11, p < .05$), inward anger ($r = -.28, p < .001$), and suicidal behavior ($r = -.15, p < .001$). Moderation analyses used independent models that tested inward-anger and outward anger separately. Forgiveness of self moderated the relationship between inward anger expression and suicidal behavior ($t = -2.08, p < .05$) as the association between internalizing anger and suicidal behavior was reduced as forgiveness of self increased. Thus, it appears that forgiveness of self serves as a buffer between internalizing anger and suicidal behaviors as those that are low in self-forgiveness show a stronger association between inward-anger and suicidal behavior. Forgiveness of self also moderated the relationship between outwardly expressed anger and suicidal behavior ($t = 2.12, p < .05$) as those with lower levels of self-forgiveness displayed more suicidal behaviors with lower levels of outward directed anger. This indicates that outwardly expressed anger may be beneficial for those with lower self-forgiveness, a somewhat unexpected finding. Hirsch et al. posit that, since low levels of self-forgiveness is associated with depression, outward expression of anger may facilitate behavioral activation and thus more positive affect. Outwardly expressed anger may also minimize feelings of self-punishment, and the negative associations experienced in those with inwardly expressed anger.

Sansone, Kelly, and Forbis (2013) also examined the relationship between forgiveness and history of suicide attempt in primary-care medical patients. The relationship between forgiveness and history of suicide was examined with 304 (225 female, 79 male) recruited through primary care clinics in the Midwestern United States, with 19.1% of participants reporting a previous suicide attempt. Spearman's Rho analyses indicated a negative correlation between overall forgiveness and past suicide

attempt ($r = -.30, p < .05$). In particular, items that assessed forgiveness of self, “I find it hard to forgive myself for some of the things I have done” ($r = -.23, p < .05$); “I often feel like I have failed to live the right kind of life” ($r = -.24, p < .05$), forgiveness by others, “I believe that when people say they forgive me for something I did, they really mean it” ($r = .20, p < .05$), “I feel that no matter what I do now, I will never make up for mistakes I have made in the past” ($r = -.22, p < .05$)] and one item that assessed forgiveness of others, “I have grudges which I have held onto for months or years” ($r = -.21, p < .05$)] were associated with a history of suicide attempt. These studies indicate that forgiveness of both self and others not only have favorable associations with depression, but also with suicidal thoughts and history of previous suicide attempts.

Forgiveness and substance abuse.

In addition to mental health symptoms of depression, anxiety, and suicide, several studies have examined associations between forgiveness and substance abuse. For example, Webb, Robinson, Brower, and Zucker (2006) examined the role of self-forgiveness, other forgiveness, and forgiveness from God with 157 (53 female, 104 male) adults with substance abuse disorders entering treatment in Midwestern United States. Participants were assessed at the onset of treatment and at 6-month follow-up. At baseline assessments, self- ($B = -4.02, p < .01$), and other-forgiveness ($B = -4.19, p < .01$) predicted lower alcohol related problems, whereas forgiveness by God was not statistically significant. Follow-up analyses found no statistically significant relationships between any types of forgiveness and alcohol-related problems. The study did find that levels of self-forgiveness were lower than other-forgiveness and forgiveness by God. As such, they hypothesized that, although self-forgiveness might be the most

difficult type of forgiveness to attain, results suggest it may be the most important type of forgiveness in relation to alcohol-related problems.

Webb and Brewer (2010) examined associations between forgiveness and college student drinking in a sample of 721 students (516 female; 198 male) from two different colleges in eastern Tennessee and rural southern Appalachia. Students' levels of reported drinking were used to create dichotomous groups of those at-risk for a substance abuse disorder and those not at-risk. T-tests indicated that the at-risk group reported statistically significantly lower levels of self-forgiveness ($P = .018$, $d = .24$), other-forgiveness ($P = .002$, $d = .31$), and feeling forgiven by God ($P = .002$, $d = .33$). Multiple regression analyses indicated that only feeling forgiven by God ($B = -2.354$, $p < .01$) was the only type of forgiveness predictive of total alcohol-related symptoms; however, self-forgiveness was predictive of higher risk for relapse ($B = -.996$, $p < .001$). As a result, the authors argued that forgiveness by God acts as a buffer against risk of alcohol-related symptoms and that self-forgiveness plays an important role in recovery due by lowering risk for relapse.

Webb and Brewer (2010) used the same sample of participants from the preceding study to examine relationships between forgiveness, health, and problematic drinking. A sub-sample of 126 participants categorized as likely harmful or problematic drinkers were used to examine relationships between forgiveness and health outcomes. In multivariate analyses, self-forgiveness predicted more favorable levels of mental health symptoms ($B = 1.546$, $p < .001$), somatic complaints ($B = -5.250$, $p < .01$), healthy behaviors ($B = 7.328$, $p < .05$), social support ($B = 6.373$, $p < .001$), and personal problems ($B = -6.831$, $p < .05$). Forgiveness of others was not related to any of the above

outcome variables and feeling forgiven by God was predictive of more favorable levels of social support ($B = 3.117, p < .05$) and personal problems ($B = -10.984, p < .001$).

Webb, Robinson, and Brower (2011) tested mental health and social support as mediators of the relationship between forgiveness and alcohol-related outcomes. A voluntary sample of 149 (50 female, 99 male) participants in outpatient alcohol treatment was used at the onset of treatment and 118 (40 female, 78 male) completed questionnaires at 6-month follow-up. At baseline, forgiveness of self ($p < .01$) and others ($p < .05$) both had a direct effect on alcohol problems; however, relationships were no longer statistically significant when adding psychiatric distress to the multiple regression model. Therefore, psychiatric distress was found to fully mediate the relationship between both forgiveness of self and others. Social support was not found to be a significant mediator. At 6-month follow-up, the only statistically significant finding was a similar indirect relationship between forgiveness of self and alcohol problems ($p < .05$), with psychiatric distress mediating this relationship. Longitudinal analyses were also conducted to compare baseline reports of forgiveness and follow-up levels of problematic drinking. In these analyses, forgiveness of others was found to indirectly predict alcohol problems, via psychiatric distress ($B = .18, p < .0001$). Therefore, forgiveness of self and others, through the pathway of lower psychiatric distress, both demonstrated salutary relationships with problematic drinking.

Webb, Hill, and Brewer (2012) examined two dimensions of social support - constructive social support and social undermining - as mediators of the relationship between forgiveness and alcohol-related problems. A sample of 126 (76 female, 50 male) college students in eastern Tennessee identified as likely hazardous drinkers was

used. Multivariate analyses found an indirect relationship between self-forgiveness and alcohol-related problems ($B = -2.77, p < .001$), with social undermining fully mediating this relationship, as self-forgiveness and alcohol-related problems were no longer associated once social undermining was added to the equation ($B = .08, p > .05$). Feeling forgiven by God was associated with alcohol-related problems ($B = -2.12, p < .05$). Although still statistically significant, the association was reduced once social undermining was added to the equation ($B = -2.09, p < .05$) suggesting partial mediation. The study indicated that lower levels of perceived social undermining by others plays a key role relationships between self-forgiveness, feeling forgiven by God, and overall alcohol-related problems.

The preceding studies provided substantial evidence that forgiveness is consistently associated with more favorable levels of problematic substance abuse. In particular, self-forgiveness appears to be most commonly associated with more favorable symptoms of substance abuse.

In general, a review of research that examined associations between forgiveness and well-being indicates strong associations between a variety of types of forgiveness and measures of well-being. Self and other forgiveness is consistently associated with high levels of subjective well-being, lower depression and anxiety, lower levels of suicidal symptoms, and lower levels of problematic substance use. The following section will review research that has examined associations between forgiveness and positive relationship characteristics.

Forgiveness and Relationships

Worthington and Scherer (2004) have proposed that the beneficial effects of forgiveness noted in research may be due to more enhanced relational skills. Although they noted, at that time, there was little research directly examining this hypothesis, they outline several skills that are likely more developed in forgiving individuals including greater emotional coping skills, reduced likelihood of committing offensive behaviors, higher capacity to commit to relationships, and more willingness to sacrifice in relationships. Similarly, Fincham (2000) conceptualized forgiveness as a means of allowing individuals in close personal relationships to effectively deal with the natural offenses experienced in interpersonal relationships. The following section will outline the research that examines the role forgiveness plays in relationships, and in-turn, well-being.

One of the predominant lines of research examining forgiveness and relational well-being examines associations between forgiveness and variables of healthy relationships, namely relationship commitment and satisfaction. For example, Berry and Worthington (2001) found low levels of trait anger ($r = -.32, p < .05$) and high levels of dispositional forgiveness ($r = .37, p < .05$) predicted higher relationship quality among a sample of 39 (20 female, 19 male) undergraduate college students. Participants were asked to imagine typical interactions with their partners, those who reported unhappy relationships experienced higher cortisol arousal during this imagery ($F(1, 34) = 9.96, p < .01, \eta^2 = .23$). Dispositional forgiveness was statistically significantly associated with lower cortisol reactivity ($r = -.34, p < .05$) during the imagery task and positively associated with general self-report measures of physical ($r = .21, p < .05$) and mental

health ($r = .52, p < .001$). The authors theorized that high dispositional forgiveness and low trait anger affects stress response primarily through an effect on relationship quality. From a clinical perspective, the authors posited that results suggested counselors should monitor clients' proneness to anger and unforgiveness, as untreated, high levels of these variables may negatively affect relationship quality, and in turn mental and physical well-being.

Allemand et al. (2007) examined the role of trait forgiveness and relationship satisfaction on episodic forgiveness in a sample of 180 participants (129 female, 51 male) recruited both in classes and in the surrounding community at the University of Zurich. A significant interaction was found ($F(7, 151) = 26.23, p < .001, R^2 = .55$) where at higher levels of relationship satisfaction, trait forgiveness predicted higher episodic forgiveness ($\beta = .36, p < .05$). In other words, those who reported high levels of relationship satisfaction and trait forgiveness demonstrated higher levels of episodic forgiveness than those who reported low relationship satisfaction and low trait forgiveness. Those who reported low levels of relationship satisfaction, however, demonstrated negative associations between trait forgiveness and episodic forgiveness ($\beta = -.33, p < .05$). Therefore, those who reported unsatisfactory relationships and high trait forgiveness displayed a tendency to be report less episodic forgiveness than those who reported unsatisfactory relationships and low trait forgiveness, an unexpected finding. The authors hypothesized that this finding may suggest those who find themselves unable to forgive a partner for a specific offense, even they they are typically forgiving, may signal that there is a problem in the relationship, hence lower relationship satisfaction.

Cardi, Milich, Harris, and Kearns (2006) examined the moderating role of self-esteem on women's reactions to instructions to forgive an offender. Seventy-nine women with a history of victimization were recruited at a university in the southeastern United States. Participants were randomly assigned to three groups, one that instructed participants to forgive their offenders, one that instructed them to let go of negative emotions associated with the offense, and a control group where participants were taken through a relaxation exercise. Analysis of variance indicated that those assigned to the forgiveness group displayed significantly higher levels of negative affect than the other two groups ($F(2, 75) = 10.36, p < .001$). Interaction analyses were conducted to determine if self-esteem moderate levels of positive and negative affect across the three experimental groups. For women who reported low levels of self-esteem, there was no difference between the three treatment groups on positive affect; however, for women who reported high self-esteem, the letting go intervention produced significantly higher positive affect than the other interventions ($F(2, 72) = 5.97, p < .01$).

Further analyses indicated no differences in negative affect in the three treatment groups amongst women with low self-esteem; however, in women with high self-esteem, the control (relaxation) group produced lower levels of negative affect than both the forgiveness and letting go interventions ($F(2, 72) = 3.52, p < .05$). Therefore, women high in self-esteem tended to respond more favorably to instructions to let go of negative emotions, rather than a more specific instruction to simply forgive their offender. The authors posit that a lack of observed difference between interventions for women low in self-esteem may indicate feelings of powerlessness, and a tendency to respond poorly to

all interventions. It may also indicate that women low in self-esteem lack the personal resources necessary to undertake the act of forgiveness.

McNulty (2008) examined the role of forgiveness in relationship satisfaction over a two-year span with a group of 72 recently married couples. Couples were initially sent a questionnaire packet that assessed forgiveness, negative interactions, problem severity, and relationship satisfaction, to complete independently and were then brought in to a laboratory where 10 minute discussions, designed to assess the level of negative verbal behavior, were videotaped. Couples then completed follow-up questionnaire packets at 6-month intervals. Cross-sectional analyses found that self-reported forgiveness was associated with more happiness in marriage ($r = .29, p < .05$). Hierarchical linear modeling found no effects of within-subject changes of forgiveness on relationship satisfaction ($t = 1.5, p > .05$) or changes in severity of marital problems ($t = .6, p > .05$), leading the authors to conclude that forgiveness has no effect on marital development. Interaction analyses were then conducted to examine the moderating role of negative interactions on forgiveness and changes in severity of relationship problems and relationship satisfaction. Negative interactions for relationship satisfaction were found between husbands' forgiveness levels of wives and observations of wives' negative behaviors ($t = -1.98, p < .05$) and between wives' reports of forgiveness and reports of husbands' negative behaviors ($t = -3.26, p < .05$).

Similarly, for changes in problem severity, positive interactions were found for husbands' forgiveness levels and both observations of wives' negative behavior ($t = 2.50, p < .05$) and reports of wives' negative behavior ($t = 2.41, p < .05$). Consistent with author's predictions, forgiveness appeared to have a beneficial effect over time for

couples with low levels of negative behavior, whereas forgiveness had a negative effect over time for couples with high levels of negative behavior. McNulty argued that findings suggested clinicians should be wary of universal promotion of forgiveness interventions in couples, particular those in high-conflict relationships.

Braithwaite, Selby, and Fincham (2011) proposed a mediation model of forgiveness and relationship satisfaction where increased relational effort and decreased negative conflict mediates this relationship. Two different studies were conducted. In the first study, 523 participants (84% female, 26% male) who identified as in a committed opposite sex relationship were recruited from an introductory course on families across the lifespan. Initial analyses found a direct effect of forgiveness on relationship satisfaction ($\beta = .17, p < .01$); however, when the full model was constructed, with relational effort and negative conflict serving as mediators, this relationship was no longer statistically significant ($\beta = .00$). Forgiveness was found to predict relationship effort ($\beta = .49, p < .01$), which in turn predicted relationship satisfaction ($\beta = .17, p < .01$). Similarly, forgiveness predicted lower amounts of negative conflict tactics ($\beta = -.18, p < .01$), which in turn predicted higher relationship satisfaction ($\beta = -.46, p < .01$), providing support for both of the hypotheses that relationship effort and negative conflict would mediate the forgiveness/relationship satisfaction relationship.

In a second study, Braithwaite, Selby, and Fincham (2011) sought to extend findings of their first study by examining the relationships between forgiveness, relationship effort, negative conflict, and relationship satisfaction longitudinally, while also controlling for amount of relationship commitment. Four hundred forty six participants (81% female, 19% male) recruited from undergraduate courses (no

participants from the first study were allowed to participate) completed surveys at baseline and then at a two-month follow-up. Relationship commitment was found to predict relationship satisfaction ($\beta = .13, p < .01$), but not effort or negative tactics. Similar to study 1, forgiveness at baseline predicted follow-up effort ($\beta = .24, p < .01$) and negative conflict tactics ($\beta = -.15, P = .02$). Both relationship effort ($\beta = .24, p < .01$) and negative conflict tactics ($\beta = -.15, p = .02$) predicted relationship satisfaction. When mediator variables were controlled, there was actually a negative relationship between forgiveness and relationship satisfaction ($\beta = -.14, p < .01$). Results suggested that relationship effort and negative conflict tactics mediate the relationship between forgiveness and relationship satisfaction longitudinally, while controlling for relationship commitment and baseline relationship satisfaction. The authors hypothesized that the negative finding in study 2 for forgiveness and relationship satisfaction may provide support for negative effects of forgiveness on relationship satisfaction, as previous research (McNulty, 2008) found that forgiveness is only beneficial in couples who do not display high levels of negative communication. In other words, when the effects of effort and negative conflict are removed from the equation, forgiveness in relationships could promote an absence of consequences for wrongdoing and thus have a negative effect on a relationship over time.

Fincham, Beach, and Davila (2004) conducted two different studies to investigate if forgiveness is associated with better conflict resolution in married opposite sex couples. In study 1, 52 British couples, all in their third year of marriage, were recruited through community advertisements and completed questionnaires on forgiveness (via a two-factor model that consists of benevolence and retaliation), relationship satisfaction

and conflict resolution. Multivariate analyses found that husbands' self-reported levels of retaliation predicted wives' self-reported ineffective conflict resolution ($\beta = .31, p < .05$) while controlling for the relationship satisfaction of both partners. The benevolence dimension of forgiveness, however, was not a significant predictor. On the other hand, wives' self-reported levels of benevolence negatively predicted husbands' self-reports of conflict resolution ($\beta = -.35, p < .05$), whereas wives' self-reported levels of retaliation was not a significant predictor. The authors noted that two limitations of the study were that all couples had been married for three years and that there were varying degrees of time since couples reported transgressions. Therefore, a second study was undertaken.

In this second study, Fincham, Beach, and Davila (2004) recruited 96 opposite sex couples recruited through community advertisements from the greater Buffalo, New York area to participate in an ongoing study of family relationships. Participants completed questionnaires that assessed conflict resolution and relationship satisfaction, as in Study 1, but forgiveness was assessed via a three-dimensional model that consisted of retaliation, avoidance, and benevolence. Multivariate analyses revealed husbands' self-reported avoidance was the only forgiveness dimension to predict wives' self-reports of ineffective conflict resolution ($\beta = .27, p < .05$) whereas wives' self-reported benevolence was the only forgiveness dimension that predicted husbands' self-reported ineffective conflict resolution ($\beta = -.30, p < .01$). Therefore, results of both studies suggested that lower levels of benevolence among wives were consistently associated with difficulty resolving conflicts, whereas higher levels of the negative aspects of forgiveness, avoidance and retaliation, were consistently associated with difficulty in conflict resolution for husbands. The authors argued that this likely does not

reflect a gender difference in reactions to forgiveness, but rather reflects basic gender differences in response to relational conflict, as previous research has demonstrated that women are less likely to avoid conflict and more likely to engage conflict in discussion (Heavy, Layne, & Christensen, 1993).

Fincham, Beach, and Davila (2007) examined the role of forgiveness on later conflict resolution in a longitudinal study of married couples. Eighty-six opposite sex couples recruited through community advertisements completed measures of marital quality, ineffective arguing, and forgiveness at baseline and twelve month follow-up. Forgiveness was assessed in a bi-dimensional format, consisting of benevolence (positive forgiveness) and unforgiveness (negative forgiveness). Multiple regression analyses found that wives self-reported levels of benevolence was the only statistically significant predictor of husbands' self-reported levels of ineffective conflict resolution ($\beta = -.23, p < .05$). For husbands, the only significant predictor of follow-up ineffective conflict resolution was baseline levels of ineffective conflict resolution (regression coefficients not reported). Although the study indicated a strong longitudinal association between benevolence and ineffective conflict resolution among wives, the authors noted that the design of the study limited a directional hypothesis. It could be that unresolved conflict lowers the amount of benevolence wives grant husbands or vice-versa. Nonetheless, the authors argued that the study provided additional evidence that forgiveness interventions for couples may be worthwhile interventions, deserving of further study.

Paleari, Regalia, and Fincham (2011) examined effects of inequity in forgiveness between partners on relational and personal well-being. A sample of 129 opposite sex couples married couples living in Northern Italy completed questionnaires at baseline and

six months later. Results indicated that husbands' reports of levels of forgiveness given wives' levels of forgiveness received were significantly correlated ($r = .56, p < .001$), as was the opposite ($r = .45, p < .001$). Longitudinal analyses showed that, after controlling for Time 1 levels of forgiveness granted, forgiveness received, and well-being, inequity in forgiveness predicted decreased well-being among wives ($b = -.52, p < .001$) but not among husbands ($b = -.08, n.s.$). Interestingly, analyses that compared differences between being over benefited vs. under benefited found no statistically significant differences among wives ($b = .10, n.s.$) indicating that lower well-being occurred among wives, regardless if they received larger amounts of forgiveness than husbands or less amounts of forgiveness.

Pelucchi, Paleari, Regalia, and Fincham (2013) examined the role of perpetrator self-forgiveness (the degree to which the person who committed the offense forgives him/herself) was related to both own and partner relationship satisfaction. A sample of 168 married or cohabiting opposite sex couples from Northern Italy completed questionnaires that assessed transgression responsibility, transgression severity, transgression guilt, relationship satisfaction, and self-forgiveness. Only those who reported moderate responsibility were analyzed, resulting in a final sample of 150 couples. The Actor-Partner Interdependence Model (Kenny, 1996) was used to analyze data. This approach assesses interdependence between partners by simultaneously estimating the effects a respondent's levels of one variable have on his or her own outcome score and on the partner's outcome score. Analyses indicated no empirical distinction among partners for Forgiveness of Self, ($P = .267$), or Unforgiveness of Self ($P = .567$). In regards for forgiveness of self, identical significant actor effects (.15) were

found for both men and women, indicating the more benevolent the offender was to him or herself, the more satisfied he or she was with the relationship. Likewise, offender's unforgiveness of self significantly predicted his or her relationship satisfaction (-.25) as well as partner's relationship satisfaction (-.14), indicating that negative feelings by the offender negatively affected his/her relationship satisfaction, as well as relationship satisfaction as reported by the partner. The authors speculate that unforgiveness affects both perpetrator and victim relationship satisfaction, as it is likely unsatisfying to live with a partner with a proclivity towards negative thoughts and feelings.

Forgiveness and Personality

Research examining forgiveness and personality is largely focused on the relationship within the context of the Big Five theory of personality (Costa & McRae, 1992). The Big Five has been developed through factor analysis of numerous independent measures of personality and the five factors have consistently emerged as the broad, underlying dimensions of personality. Big Five factors consist of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.

Berry et al. (2001) examined relationships of Big Five personality traits and related characteristics to dispositional forgiveness. Three different college student samples ($n = 61, 80, 232$, respectively) in the Western United States found consistent correlations between agreeableness (Pearson r Coefficients ranged from .25 to .33) neuroticism (Pearson r Coefficients ranged from -.27 to -.32) and anger (Pearson r Coefficients ranged from -.38 to -.43) with forgiveness. The authors posited that findings are consistent with conceptualizations of dispositional forgiveness as a personality trait facilitated by prosocial feelings.

Brose, Rye, Lutz-Zois, and Ross (2005) examined relationships between dispositional and situational forgiveness and the Big Five model of personality. Two-hundred seventy five participants (70.9% female, 19.1% male) were recruited from introductory psychology classes at a Midwestern Catholic university in the United States. Situational forgiveness was assessed via a two-factor model that consisted of absence of negative feelings and presence of positive feelings. Five-factor personality was assessed using the NEO Personality Inventory – Revised (NEO-PI-R; Costa & McCrae, 1992), which assesses the Big Five factors plus five additional dimensions within each factor. Consistent with the authors' hypotheses, neuroticism was negatively correlated with all forgiveness variables including, absence of negative feelings ($r = -.52, p < .001$), presence of positive feelings ($r = -.24, p < .001$), and dispositional forgiveness ($r = -.42, p < .001$). Agreeableness was positively correlated with all forgiveness variables including, absence of negative feelings ($r = .33, p < .001$), presence of positive feelings ($r = .28, p < .001$), and dispositional forgiveness ($r = .40, p < .001$)]. There were no statistically significant correlations for conscientiousness and openness, and extraversion was only correlated with presence of positive feelings ($r = .20, p < .001$).

Analysis of sub-factors indicates that warmth ($r = .22, p < .001$) and positive emotions ($r = .21, p < .001$) were the only sub-factors of extraversion associated with presence of positive feelings, whereas gregariousness, assertiveness, activity, and excitement-seeking all failed to reach statistical significance. Furthermore, warmth was also associated with dispositional forgiveness ($r = .24, p < .001$) and positive emotions were associated with both absence of negative feelings ($r = .28, p < .001$) and dispositional forgiveness ($r = .27, p < .001$). Although extraversion, as a main factor,

was only associated with positive feelings, the sub-factors warmth and positive emotions were more consistently associated with all forgiveness variables in the study.

Walker and Gorsuch (2002) further examined relationships between forgiveness and the Big Five by examining several types of dispositional forgiveness (forgiveness of others, receiving other's forgiveness, forgiveness of self, and receiving god's forgiveness) and not only the Big Five, but 16 underlying factors (neuroticism: emotional stability, anxiety, emotionality, distrust; agreeableness: warmth, sensitivity; extraversion: friendliness, reserve, gregariousness, assertiveness, introversion; conscientiousness: dutifulness, orderliness; openness to experience: intellect, imagination, complexity) of the Big Five, based on Cattell's conceptualization (Cattell, Saunders, & Stice, 1949). Correlations with the overall Big Five factors and the 16 specific dimensions of the Big Five were reported. The study included 180 University students (137 female, 43 male) from both religious and non-religious Universities in the Southern California region.

Results indicated that neuroticism negatively predicted Forgiveness of others ($r = -.27, p < .01$) and receiving God's forgiveness ($r = -.31, p < .01$). More specifically, anxiety, ($r = -.17, p < .05$) emotionality ($r = -.34, p < .05$) and distrust ($r = -.21, p < .05$) predicted forgiveness of others. Assertiveness was also found to be positively correlated with forgiveness of self ($r = .23, p < .01$), but not with any other type of forgiveness.

The study failed to confirm hypotheses that agreeableness would predict high levels of forgiveness of others, as agreeableness was only associated with receiving others Forgiveness ($r = .21, p < .05$) and receiving forgiveness from God ($r = .28, p < .01$). Similarly, both warmth and sensitivity, the two components of agreeableness were

associated with receiving others forgiveness ($r = .19, p < .05$; $r = .17, p < .05$) and receiving God's forgiveness ($r = .31, p < .01$; $r = .16, p < .05$), respectively.

Extraversion was not associated with any type of forgiveness; however, introversion was positively associated with forgiveness of others ($r = .16, p < .05$) and both friendliness ($r = .20, p < .01$) and assertiveness ($r = .23, p < .01$) were positively associated with forgiveness of self. Negative associations were found between reserve and receiving others forgiveness ($r = -.22, p < .01$) and receiving God's forgiveness ($r = .18, p < .05$).

Conscientiousness had no associations with any type of forgiveness and only one sub-factor, dutifulness, was associated with receiving God's forgiveness ($r = .24, p < .01$). Similarly, openness to experience had no associations to any type of forgiveness, although imagination was negatively correlated with forgiveness of others ($r = -.18, p < .01$) and intellect was positively associated with forgiveness of self ($r = .22, p < .01$).

Overall, the study by Walker and Gorsuch (2002) indicated that higher levels of the Big Five trait of neuroticism are commonly associated with lower levels of all types of forgiveness, except for receiving others forgiveness. Higher levels of agreeableness were associated with receiving forgiveness but not with granting forgiveness. The other three Big Five factors had no overall associations with any type of forgiveness.

Brown and Phillips (2005) examined agreeableness and neuroticism as predictors of two different dispositional measures of forgiveness and attitudes towards forgiveness. Agreeableness was associated with both measures of dispositional forgiveness ($r = .38$ & $.25, p < .01$) and attitudes towards forgiveness ($r = .27, p < .01$). Neuroticism was also

associated with both measures of dispositional forgiveness ($r = -.50$ & $-.19$, $p < .001$) but was not significantly associated with attitudes towards forgiveness ($r = -.12$, n. s.).

Tabak and McCullough (2011) further examined the role of agreeableness and likelihood to forgive in a longitudinal study. In an undergraduate female sample ($n = 39$), the study found victims were more likely to forgive perpetrators whom they perceived to have higher levels of agreeableness ($\beta = -.16$, $p < .05$). This was also associated with lower levels of physiological stress response, as measured by plasma cortisol responses ($\beta = -.60$, $p < .05$). The authors posit that their findings are consistent with research that demonstrates victims are more likely to forgive perpetrators whom they perceive as safe and valuable (McCullough et al, 2010), characteristics that are consistent with Big Five descriptions of agreeableness.

Chiaramello, Sastre, and Mullet (2008) examined a three-factor structure of seeking forgiveness, conceptualized as inability to seek forgiveness, sensitivity to circumstances, and unconditional seeking of forgiveness, with the Big Five area of personality. An adult sample of 317 participants from the Toulouse region of France completed questionnaires. Inability to seek forgiveness was negatively associated with openness ($r = -.23$, $p < .001$) and agreeableness ($r = -.23$, $p < .001$) and unconditional seeking of forgiveness was associated with openness ($r = .28$, $p < .001$). Sensitivity to circumstances obtained no significant associations with any Big Five dimensions. The study also examined temporal orientation and guilt related to the dimensions of forgiveness. Past orientation was associated with inability to seek forgiveness ($r = .17$, $p < .01$) while a future orientation was associated with unconditional seeking of forgiveness ($r = .15$, $p < .01$). On guilt measurements, general guilt was not associated with any

forgiveness dimension, although self-punishment was associated with inability to seek forgiveness ($r = .17, p < .01$). Therefore, people who display tendencies of openness and agreeableness and are future orientated are more likely to seek forgiveness whereas those who tend to be self-punishing and past oriented are less likely to do so.

Maltby et al. (2008) examined what factors of the Big Five personality theory predicted forgiveness 30 months after a transgression. First year undergraduate students from two British campuses who had experienced a transgression in the past month were recruited to participate in the study. Only those who rated the self-reported transgression as “very serious” or “extremely serious” were invited to participate in the study. Upon enrollment in the study, participants completed measurements of personality and forgiveness, which was measured via revenge and avoidance motivation. Eight hundred seventy nine participants initially completed questionnaires and 438 respondents participated in the second phase of data collection 30 months later. Hierarchical multiple regression was employed with Time 2 avoidance/revenge motivations regressed on Time 1 avoidance/revenge motivations in the first step, yielding a statistically significant result ($B = .11, p < .001$). Personality variables were added in the second step with only neuroticism reaching statistical significance ($B = .09, p < .01$). The sub-components of neuroticism (anxiety, angry hostility, depression, self-consciousness, impulsiveness, vulnerability) were then put in to the regression equation, to determine what components caused a change in avoidance/revenge motivations. In this analysis, only angry hostility reached statistical significance ($B = .09, p < .01$). Results suggest that neuroticism, in particular an individual’s readiness to experience anger, is a statistically significant predictor of avoidance/revenge motivations two and a half years following a

transgression. The authors do point out that the effect of personality and neuroticism is rather small; nonetheless, it adds an important element of understanding to the personality-forgiveness literature by demonstrating the effect of neuroticism following a transgression over time.

Wang (2008) examined relationships between trait and state forgiveness and Big Five personality traits among a sample of 155 (112 female, 43 male) Taiwanese college students. Bivariate correlations indicated that agreeableness was correlated with state forgiveness ($r = .27, p < .01$) and trait forgiveness ($r = < .01$). Likewise, neuroticism was also associated with state forgiveness ($r = -.36, p < .001$) and trait forgiveness ($r = -.26, p < .01$). Results suggest those who are more agreeable and emotionally stable have a greater tendency to forgive, consistent with most research. The authors did note surprise, however, as other research in more collectivist cultures (Watkins & Regmi, 2004) did not find significance between forgiveness and personality.

Koutsos, Wertheim, and Kornblum (2008) examined relationships between Big Five traits of neuroticism and agreeableness, spirituality, contextual factors and forgiveness. A sample of 128 (78 female, 50 male) participants recruited through social networks in Australia and New Zealand was used. A multiple regression equation indicated that agreeableness ($\beta = .42, p < .001$), neuroticism ($\beta = -.19, p < .05$), and spirituality ($\beta = .22, p < .01$), all contributed significantly to variance in one's tendency to forgive, $F(3, 124) = 22.47, R^2 = .35, p < .001$. Further analyses were also conducted to determine if one's disposition to forgive was simply a sub-component of agreeableness or the combined personality variables, in terms of effects on revenge and avoidance motivation. Agreeableness, neuroticism, and spirituality were entered in the first step of

a hierarchical regression equation, and accounted for 5.7% and 7.4% of the variance in avoidance and revenge motivations, respectively. When dispositional forgiveness was added to the equation, it accounted for an additional 12.0% and 18.0% of the variance in avoidance and revenge, respectively, indicating that it is a separate construct from personality variables. Analysis of contextual factors indicated that the value the offended party places on the relationship with the offender had the largest effect on avoidance ($\beta = -.33, p < .01$) and revenge ($\beta = -.46, p < .001$) motivations.

The preceding review of personal characteristics and forgiveness indicates a few consistent trends in the literature. Big Five traits of agreeableness and neuroticism are consistently associated with forgiveness. Those high in agreeableness tend to be more forgiving whereas those high in neuroticism tend to be less forgiving.

In regards to specific sub-factors, warmth and sensitivity (sub-factors of agreeableness) predicted higher levels of forgiveness, whereas readiness to experience anger (a sub-factor of neuroticism) has predicted lower levels of forgiveness. Thus, those who display more warmth and sensitivity to others would be more willing to forgive, whereas those who are prone to anger are less willing to forgive. Findings are also consistent with studies that have demonstrated anger as a key component of the forgiveness/well-being relationship (Hirsch, Webb, & Jeglic, 2012; McCullough, Bono, & Root, 2008).

One study in the preceding review examined assertiveness (Walker & Gorsuch, 2002) one of the moderating variables in the present study. As outlined, assertiveness was associated with higher forgiveness of self, suggesting that some level of assertiveness may be required to grant forgiveness to one's self. Although this is a singular finding,

based on an observational design, it may indicate that assertiveness plays a role in relationships between forgiveness and relational abuse and well-being. It stands to reason that, if assertiveness is related to forgiveness of one's self, it may also be involved in willingness to remain in an abuse relationship and may also be related to well-being. The present study seeks to clarify these relationships empirically.

Negative Implications of Forgiveness

Although this literature review has highlighted an astounding amount of research that demonstrates positive relationships between forgiveness and a variety of indices of well-being, this relationship is not without exception or limitation. In their critique of the discipline of positive psychology, McNulty and Fincham (2012) argued that examinations of forgiveness need to become more contextual and consider situations and dispositions in which forgiveness might be negative. Their article highlighted several forgiveness studies that demonstrated negative implications for relationships and well-being. Moreover, they called for researchers to take a more comprehensive view of the process of forgiveness. As outlined in this review, forgiveness, on average, has many positive benefits for many people; however, clinicians and researchers are mistaken if they view forgiveness as an unalloyed good. The following section will highlight research that demonstrates negative associations or implications of forgiveness and sets the stage for the current investigation of possible moderators of the forgiveness well-being relationship.

In their seminal research study, Katz, Street, and Arias (1997) examined the role of two types of self-appraisals - self-esteem and self-attributions - in willingness to forgive hypothetical dating violence. One-hundred forty-five undergraduate women from

a large university in the southeastern United States who reported a current relationship with a minimum length of one month participated in the study. Regression analyses indicated that history of dating violence was not predictive of intentions to exit a violent relationship ($\beta = -.02, p > .05$). When self-esteem and self-attributions were added to the relationship only self-attributions predicted intentions to exit a violent relationship ($\beta = .35, p < .001$). Similarly, when a regression analysis was conducted with intentions to forgive dating violence on self-esteem and self-attributions, only self-attributions was statistically significant ($\beta = .37, p < .001$). In other words, when women blame themselves for dating violence, they are more likely to report willingness to forgive perpetrators and lower likelihood of exiting the relationship. The study then examined if forgiveness mediates the relationship between self-appraisals and intention to exit the relationship. When forgiveness was added to the previously statistically significant regression equation between self-attribution and intentions to exit a violent relationship, the relationship was reduced to non-significance, indicating full mediation. Thus, forgiveness was judged to play a key role in women's willingness to stay in an abusive relationship. In particular, women who blame themselves for dating violence are more likely to forgive their partners and thus more likely to remain in abusive relationships.

Although the Katz et al. (1997) study provided important implications for the role of forgiveness and abuse, one notable weakness is that it was hypothetical in nature, as it only asked women to speculate how they would react in abusive situations. A more recent study (Gordon, Burton, & Porter, 2004) examined the role of forgiveness and willingness to return to perpetrators among a sample of women in domestic violence shelters. One hundred twenty-one women, residing in nine domestic violence shelters in

eastern Tennessee participated in the study. Levels of forgiveness were positively associated with women's report of intent to return to their abusive partners ($r = .46, p < .01$). Regression models were then created to examine the role constraints (costs of leaving the relationship), severity of violence, and malicious attributions (towards the abusive partner) play in willingness to return to the relationship. In this model, constraints ($\beta = .25, p < .01$) and malicious attributions ($\beta = -.29, p < .01$) were predictive of intention to return while severity of violence was not ($\beta = -.13, p > .05$). When forgiveness was added to the regression equation, it was associated with intent to return ($\beta = .32, p < .01$) and the significance of constraints ($\beta = .19, p < .05$) and malicious attributions ($\beta = -.17, p < .10$) were both reduced. Furthermore, Sobel's test ($p < .05$) indicated a significant reduction in malicious attributions, indicating forgiveness fully mediated its relationship with intentions to return. Therefore, the study provided important confirmation of Katz et al. (1997) study, indicating that forgiveness may contribute to willingness to tolerate or return to an abusive partner, with a clinical sample of domestic abuse victims. The study provides important evidence that forgiveness can have negative implications, particularly for abused women, and indicated further research was needed to explore the role of forgiveness in battered women specifically, and for relational abuse, more broadly.

Along these lines, several recent studies have examined possible negative implications of forgiveness in heterosexual relationships. McNulty (2008) examined the role of forgiveness, negative behavior and marital satisfaction over a two year span with a sample of 72 newly married couples from north-central Ohio. Cross-sectional associations indicated that both husbands ($r = .39, p < .05$) and wives ($r = .29, p < .05$)

obtained positive correlations between forgiveness and marital satisfaction at the initiation of the study. Couples were then asked to complete survey materials again at 6-month intervals over a two-year period. Hierarchical linear modeling was used to examine within-subject changes in marital satisfaction, problem severity, and marital forgiveness. Main effect analyses of forgiveness found no significant effects on marital satisfaction or problem severity; however, interaction analyses demonstrated that for both husbands ($t = -1.98, p < .05$) and wives ($t = -3.25, p < .05$), problem severity moderated the relationship between forgiveness and marital satisfaction. Therefore, among couples who reported higher levels of problem behavior, higher levels of forgiveness was associated with lower levels of marital satisfaction, whereas for couples who reported lower levels of problem behavior, forgiveness was positively associated with marital satisfaction.

In a separate study, McNulty (2011) used the same participants from the previous study to examine relationships between partners' tendency to express forgiveness and psychological and physical aggression. Cross-sectional correlations found tendency to express forgiveness was associated with marital satisfaction for both wives ($r = .26, p < .05$) and husbands ($r = .25, p < .05$). Longitudinal analyses, however, found a significant interaction between forgiveness and both psychological ($t = -2.36, p < .05$) and physical aggression ($t = -2.12, p < .05$). In other words, over the first four years of marriage, spouses with lower levels of forgiveness experienced a decline in psychological and physical aggression, whereas those high in forgiveness experience either stable levels or increases in verbal and physical aggression. Although forgiveness may typically be

associated with health and well-being, it is clear that this is not the case within the context of an abusive or potentially abusive relationship.

Another similar study (McNulty, 2010) utilized a sample of 135 newlywed, heterosexual couples to complete daily questionnaires for a seven day period. Both partners were asked if their spouse had engaged in a negative behavior that day, if so, if they forgave the behavior and to what degree they disliked the behavior. Regression analyses found that forgiving a partner's negative behavior on one day increased the likelihood of negative behavior occurring on the following day ($B = .64, p < .05$). Odds ratios ($OR = 1.89$) indicated that spouses were almost two times as likely to report negative behaviors on days after they had forgiven negative behaviors than on days they had not.

The aforementioned studies illustrate that, although there is a large body of research demonstrating positive effects of forgiveness, negative findings are not without exception. Although further research is needed, it is clear that forgiveness potentially has negative consequences for women in abusive relationships and for marriages with high levels of conflictual behavior. In their review of these studies, McNulty and Fincham (2012) called for additional research to examine not only relational factors, but individual or personality characteristics that might interact unfavorably with forgiveness. Several studies have been conducted that explore such possibilities.

For example, Wohl and Thompson (2011) examined the role of self-forgiveness on exposure to chronic unhealthy behaviors (e.g., smoking cigarettes). A sample of 181 smokers (63 male, 118 female) recruited from a Canadian university found that self-forgiveness predicted willingness to quit smoking ($\chi^2(6, 179) = 50.44, p < .001$).

Willingness to quit smoking was assessed via Prochaska and DiClemente's (1994) transtheoretical stages of change model where the contemplation stage indicates a greater willingness to change than the pre-contemplation stage. Odds ratios indicated that higher levels of self-forgiveness increased odds of being in the pre-contemplation rather than contemplation stage almost threefold ($OR = 2.71$).

Another similar study (Squires, Sztainert, Gillen, Caouette, & Wohl, 2012) examined possible negative implications of self-forgiveness among gamblers. One hundred ten participants (33 female, 75 male, 2 unidentified) were recruited from introductory psychology classes at large Canadian university. Data were collected over a period of five years, as only participants who reported at least one symptom of pathological gambling and reported gambling was in need of corrective action were selected. Consistent with hypotheses, results indicated that problem gamblers were more likely to report readiness to change their gambling behavior ($F(1, 108) = 10.18, P = .002$), than at-risk gamblers and problem gamblers were less forgiving of themselves than at-risk gamblers ($F(1, 108) = 9.44, P = .003$). Mediation analyses indicated that self-forgiveness partially mediated the relationship between gambling behavior and willingness to change, as the significance between these variables was reduced (from $\beta = .28, p < .01$ to $\beta = .19, p < .05$) when self-forgiveness was added to the equation. Thus, self-forgiveness appears to play a key role in one's willingness to refrain from problematic gambling behavior, as those that displayed less self-forgiveness were more willing to change. The authors speculated that self-forgiveness may serve as a buffer to negative emotional consequences of gambling and prevent problem gamblers from making changes that typically result with negative affective experiences. Furthermore,

results of the study, in conjunction with results of Wohl and Thompson's (2011) investigation of self-forgiveness and smoking does suggest that self-forgiveness can have a deleterious effect on chronic unhealthy or pathological behavior by buffering the negative effects of behaviors and increasing individuals' willingness to continue negative behavior.

Research has also indicated that forgiveness can predict higher levels of depression, depending on the context. As previously discussed, Brown's (2003) study found that attitudes toward forgiveness moderated the relationship between dispositional forgiveness and depression, where those who value forgiveness but report low levels are more likely to be depressed ($\beta = .41, p < .05$), whereas dispositional forgiveness had no effect on depression for those who did not value forgiveness. Thus, one's value of forgiveness appears to play a large role on how it affects his or her levels of depression. The present study will seek to expand upon this finding by testing if this interaction is found with subjective well-being and physical health as dependent variables.

Another area of research that heeds McNulty and Fincham's (2012) call for more contextual examinations of forgiveness and well-being is possible personality variables that might moderate this relationship. The aforementioned research on victims of abuse provides a platform for this investigation, as a logical next step is to examine common personality characteristics of abused women. As the research has demonstrated, forgiveness appears to play a key role in battered women's willingness to return to abusive partners. Additional investigation of related personality characteristics may help illuminate the role of forgiveness and exposure to relational abuse. In other words, what other factors play a role in determining when forgiveness may predict relational abuse?

Self-esteem is one area of personality that may aid further understanding of said relationships. For example, a sample of 33 women in New York state seeking treatment for domestic abuse support (Cascardi & O'Leary, 1992) found that self-esteem was positively associated with victim reports of frequency of physical aggression ($r = -.59, p < .01$), severity of aggression ($r = -.59, p < .01$), and degree of injury ($r = -.49, p < .05$) as a result of abuse.

A similar study (Cascardi, O'Leary, Lawrence, & Schlee, 1995) compared three groups of women: abused women ($n = 49$), non-abused, maritally discordant ($n = 23$) and non-abused, maritally satisfied ($n = 25$) recruited from community samples. Analysis of variance indicated that abused women reported higher levels of psychological coercion by partners ($F(2,94) = 12.28, p < .001$, Tukey HSD $< .05$) than the other two groups. Likewise, there was a significant main effect of worry about upsetting one's spouse ($F(2,93) = 12.28, p < .001$), as abused women and discordant, non-abused women reported higher levels of concern than the community sample (Tukey's HSD $< .05$). Thus, partners who physically abuse women attempt to enforce psychological control on their partners and those in abusive and unhappy relationships report more fear of partners. Results of these studies do suggest that self-esteem is a key variable for abused women and coercion likely plays an important role in abusive relationships, as abusive men attempt to gain control of their partners. Similarly, abused women may lack assertiveness to stand up to their controlling and abusive partners. The present study will examine these relationships further, as low levels of assertiveness are likely harmful in the context of abusive relationships and there are no current studies that examine the

possible moderating role of assertiveness between forgiveness and both relational abuse and well-being.

Forgiveness research has examined Big Five personality variables related to low self-esteem and a lack of willingness to stand up for one's self, but not within a context of examining how they might be harmful. For example, three sub-scales of the Big Five dimension of extraversion (reserve, assertiveness, and introversion) may be related to a reluctance to stand up for one's self. Walker and Gorsuch (2002) found that reserve was negatively associated with both receiving others and God's forgiveness. Introversion was positively associated with forgiveness of others and assertiveness was positively associated with forgiveness of self. Although these are interesting findings, the authors do not explore the implications for well-being. In terms of how these findings might be related to relational abuse, lower levels of assertiveness may indicate a lack of self-forgiveness, which has been connected to lower well-being. This could possibly relate to low self-esteem, as well, one common characteristic of abused women. Although assertiveness was not associated with forgiveness in Walker and Gorusch's analysis, it is still possible that an interaction effect exists, where high levels of forgiveness with low levels of assertiveness have negative implications for relational abuse and well-being. The present study will seek to fill this gap in the literature by examining characteristics of individuals who display high levels of forgiveness and low levels of assertiveness.

As illustrated in this review, the case for examination of possible moderating role of self-esteem and assertiveness is made based upon findings of abused women, thus leaving room for examination of the role gender might play in such investigation. In other words, will gender play a role in possible relationships between forgiveness, self-

esteem, assertiveness, and relational abuse or well-being? A recent meta-analysis (Miller, Worthington, & McDaniel, 2008) examined gender differences in forgiveness across 70 different studies with a sample of 15,731 participants. A mean effect size of $d = .281$ indicated females were, on average, more forgiving than males by a bit over $\frac{1}{4}$ of a standard deviation. The authors consider effect sizes between .2 and .4 as demonstrating a small but moderate effect and suggest that variables such as agreeableness, neuroticism, or vengefulness may play a moderating role in this finding.

Therefore, it does appear that women, on average, are more likely to be forgiving than men, which leads to the question, how does this affect relationships between forgiveness, relational abuse and well-being, the dependent variables in the present study? As previously discussed, Rijavec et al. (2010) found that forgiveness (measured in revenge and avoidance motivations) was not predictive of happiness for either men or women, but was predictive of depression, particularly for men, as only revenge motivations were predictive of more depression for women. Similarly, Maltby, Macaskill, and Day (2001) found forgiveness was negatively associated with neuroticism, depression, and anxiety for both women and men. Ysseldyk, Matheson, and Anisman, (2009) found that, although forgiveness predicted depression, there were no gender differences in this relationship.

Therefore, the current research does indicate that, although women are, on average, more forgiving than men, there generally are not differences in well-being based on gender. Based on these findings, the present study hypothesizes that no gender differences on measures of physical or subjective well-being will be obtained. The present study will, however, also consider effects of forgiveness, assertiveness, and self-

esteem on levels of relational abuse, and gender differences should be considered in this relationship as well.

Lewis and Fremouw (2001) reviewed the literature regarding differences in dating violence and pointed to studies that indicated similar levels of violence initiated by men and women. For example, White and Koss (1991) surveyed a nationally representative college student sample of 2,602 women and 2,105 men from 32 institutions in the United States and found no gender differences for reports of dating violence. Among males, 37% reported initiating violence and 39% reported receiving violence, whereas 35% of females reported initiating violence and 32% reported receiving violence.

Lewis and Fremouw's (2001) review also referenced studies that have indicated women actually initiate more violence than men. For example, Magdol et al. (1997) examined partner violence rates among a sample of 861 (425 female, 436 male) 21-year-old youth in New Zealand. Females reported significantly higher rates of perpetrated abuse ($\chi^2 = 20.36, p < .01$) with a perpetration rate of 35.8% compared to males reported rate of 21.8%. Similarly, Foshee (1996) examined perpetration rates of 1,405 (701 female, 704 male) adolescents in North Carolina. Although there were no differences reported in rates of dating violence victimization ($\chi^2 = 1.2, p = .27$) between males (39.4%) and females (36.5%), there were significant differences ($\chi^2 = 20.36, p < .01$) between lifetime initiation of violence between males (15.0%) and females (27.8%). Although Lewis and Fremouw (2001) argued that social desirability may result in minimized reports of inflicted abuse by males, the literature suggests that rates of physical violence is likely similar in occurrence. The present study will add to this literature by examining reports of relational abuse among men and women, although it

will only examine amounts of abuse received by participants. Nonetheless, based on these reports, the present study hypothesizes that there will be no reported gender differences in levels of relational abuse.

Summary

In this review of the literature, a brief history of the study of religion and well-being was provided, which sets the stage for the current theoretical state, in which the rise of positive psychology has opened the door to the psychology investigation of variables often associated with religion, such as forgiveness. As a result, researchers have paid increased attention to the role of forgiveness, and how it affects physical health, subjective well-being, mental health, and relationships, as well as associations with personality. Although definitions of forgiveness vary, they typically revolve around some type of reduction in negative associations with transgressions. In a review of forgiveness and well-being, forgiveness has been associated with a host of positive physical, emotional, and relational variables and is more commonly predictive of aspects of personality associated with well-being (i.e., positive associations with agreeableness and negative associations with neuroticism).

Contextual examinations of forgiveness, however, indicates that forgiveness is not an invariable predictor of well-being. In situations such as abusive relationships, high levels of forgiveness are not only unwarranted but can have negative implications for health and well-being. Additionally, in high conflict relationships, forgiveness may lead to escalation of conflicts and reduce relational health. In the following chapter, the methodology for further exploring negative implications of forgiveness will be described.

CHAPTER 3

METHODOLOGY

The primary purpose of the present study is to explore the possibility of psychological variables that might create an interaction effect between forgiveness and well-being. In other words, in what situations or what combination of variables might it be harmful to display high levels of forgiveness? Based on previous findings that high levels of forgiveness was associated with a likelihood of returning to an abusive relationship (Gordon, Burton, & Porter, 2004; Katz, Street, & Arias, 1997) the present study hypothesizes that related variables including self-esteem, and assertiveness will be associated with forgiveness, well-being, and relational abuse, irrespective of gender. The present study will also seek to provide confirmation of Brown's (2003) finding that attitudes towards forgiveness moderated relationships between forgiveness and depression and will test if this relationship exists with dependent variables of life satisfaction and physical health. The following chapter will outline the methodology used to explore these questions.

Procedure

All study questionnaires were entered into Qualtrics survey collection software provided by the University of Missouri – St. Louis. The website collects and stores all data and makes the data available for transfer to a spreadsheet upon completion of data collection. Recruitment messages were posted online to various websites, message boards, and online advertisements. Since the present study is interested in examining forgiveness and related variable among adults in committed relationships, only

participants who report a committed relationship, with a minimum length of one year, were asked to complete instruments beyond demographic questions.

Participants were offered the chance to sign up for one of five \$30 gift cards to Amazon.com as an incentive to participate in the present study. If participants chose to do this, they were redirected to a different data collection site so that personal information could not be connected to study response in any way. Five participants were randomly chosen and gift cards were mailed once all data analysis was completed.

In compliance with the National Research Act's (PL 93-38) requirements for human subjects research, a proposal of the present study was submitted to the University of St. Louis – Missouri's Institution Review Board and was approved. In addition, the primary researcher completed human subjects research training through the National Institutes of Health.

Materials

Participants were asked to complete eight different self-report instruments to assess dispositional forgiveness, attitudes towards forgiveness, assertiveness, self-esteem, relational abuse, life satisfaction, and physical health (See Appendices B-I). A demographics survey will also be administered to all participants. In total, the eight questionnaires consisted of 69 items.

Demographics

A demographics survey was administered to all participants to assess age, gender, race/ethnicity, sexual orientation, highest level of education, socioeconomic status, religious affiliation, and relationship status.

Forgiveness

Dispositional or trait forgiveness was assessed with the 4-item tendency to forgive scale (TTF; Brown, 2003). Preliminary analyses found internal consistency coefficients of .82 and test-retest reliability of .71 over an 8-week period (Brown, 2003). A follow-up study found (Brown & Phillips, 2005) Cronbach's alpha internal consistency coefficients of .73. An internal consistency coefficient of .74 was obtained in the present sample. Construct validity was demonstrated by positive correlations with self-esteem and negative correlations with anger (Brown, 2003), as these findings are consistent with previous research (Freedman & Enright, 1996; Worthington, 2000). Scores of the TTF were also positively related to Berry et al.'s (2001) scenario-based measure of dispositional forgiveness (Brown, 2003). Responses are given on a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. Sample items included "I tend to get over it quickly when someone hurts my feelings" and "I have a tendency to harbor grudges."

Attitudes Towards Forgiveness

Attitudes towards forgiveness was assessed using the 6-item Attitudes Towards Forgiveness Scale (ATF; Brown, 2003). The inventory is designed to measure the extent to which people view forgiveness as a virtue, regardless of the levels of forgiveness they actually display in their lives. Adequate internal consistency was demonstrated with coefficients of .69 and initial validation of the ATF demonstrated construct validity as those who valued forgiveness but did not display forgiveness reported higher levels of depression (Brown, 2003). An internal consistency coefficient of .69 was also obtained in the present sample. Responses are given on a 7-point Likert-type scale ranging from

(1) strongly disagree to (7) strongly agree. Sample items included “I believe that forgiveness is a moral virtue” and “Forgiveness is a sign of weakness.”

Self-Esteem

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The scale was designed to assess global feelings of self-worth and is one of the most widely used self-esteem scales in social science research. Internal consistency coefficients have been reported from .84 to .95 (Sinclair et al., 2010) and was .89 in the present sample. Adequate construct validity has been displayed as the RSES has been negatively associated with depression, anxiety, and stress and positively associated with wellbeing (Sinclair et al.). Responses are given on a Likert-type scale ranging from 3 (Strong Disagree) to 0 (Strongly Agree). Sample questions included, “On the whole, I am satisfied with myself” and “At times, I think I am no good at all.”

Assertiveness

Assertiveness was assessed via the 10-item assertiveness sub-scale from Goldberg’s (1999) 165-item self-report scale that is part of the International Personality Item Pool. The items are based off of the Big Five model (Costa and McCrae, 1992), as well as Cattell’s 16PF (Cattell, 1946). Internal consistency coefficients have ranged from .73 to .86 (Goldberg, 1999) and was .82 in the present sample. Convergent validity was demonstrated by positive correlations between Goldberg’s scale and the 16PF Fifth Edition (Conn & Reike, 1994). The assertiveness sub-scale consists of Likert-type scale items with values ranging from 1 (very inaccurate) to 5 (very accurate). Sample items included, “Say what I think” and “Take control of things”.

Relational Abuse

Levels of reported physical abuse were assessed using a combined version of the Severity of Violence Against Women Scale (SVAWS; Marshall, 1992a) and the Severity of Violence Against Men Scale (Marshall, 1992b). Items that were gender specific were changed to include his/her so that they could be answered by male or female participants for either male or female partners. All other elements of the scales remained unchanged. The scale consists of 21 items and has demonstrated strong internal consistency, with Cronbach's Alpha coefficients ranging from .89 to .96 (Marshall, 1992a; Marshall, 1992b). Cronbach's Alpha coefficient in the present sample was .97. The scale has demonstrated appropriate construct validity and can be used to assess physical abuse towards women or men in relationships of 12 months or more (Thompson et al., 2006). Items are scored on a Likert-type scale ranging from 1 (never) to 4 (many times). Example questions included, "Pulled your hair" and "Punched you."

Subjective Well-Being

Subjective well-being was assessed using a measure of life satisfaction. Life satisfaction will be measured by the 5-item Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS has shown acceptable internal consistency as Pavot and Diener (1993) reported Cronbach's Alpha coefficients of .87 and two month test re-test reliabilities of .82. Cronbach's Alpha in the present sample was .91. Pavot and Deiner also outlined the evidence of construct validity of the SWLS as it has been negatively associated with depression, negative affect, anxiety and general psychological distress and positively associated with positive affect. Items are scored on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Example

questions included, “In most ways my life is close to ideal” and “The conditions of my life are excellent.”

Physical Health

Perceived physical health was assessed using the Medical Outcomes Study Short-Form (MOS SF-20; Stewart, Hays, & Ware, 1988). The MOS SF-20 is a 20-item self-report inventory designed to assess health in six specific areas: health-related physical functioning, role functioning, social functioning, mental health, pain, and subjective appraisal of health. Similar to procedures followed by Wilson et al. (2008), the present study will only use the 5-item subjective appraisal of health sub-scale, which is a general measure of self-reported physical health, to increase discriminant validity. Stewart et al. (1988), reported internal consistency coefficient of .87 on a sample of 9,729 participants and Wilson et al. (2008) reported internal consistency of .90 in a forgiveness study with 266 college students. Cronbach’s alpha in the present sample was .89. Construct validity was demonstrated as all sub-scales of the MOS SF-20 were correlated with each other (Stewart et al., 1988). In addition, a medical patient sample scored lower on the MOS SF-20 than a general population sample (Stewart et al.). Questions ask participants to rate health on Likert-type scales, such as “In general, would you say your health is” ranging from 1 (excellent) to 5 (poor), and “I am somewhat ill” ranging from 1 (definitely true) to 6 (Definitely false).

Description of Study Instruments

See Table 2 for a description of the instrument data. The mean TTF score was 14.74 (SD = 4.68) with a Cronbach’s alpha reliability estimate of .74. The mean ATF score was 30.50 (SD = 5.24), with a Cronbach’s alpha reliability estimate of .69. The

RSE had a mean score of 30.33 (SD = 5.53), with a Cronbach's alpha reliability estimate of .89. The mean IPIP-A score was 36.29 (SD = 6.39), with a Cronbach's alpha reliability estimate of .82. The SWLS had a mean score of 23.49 (SD = 7.11), and a Cronbach's alpha reliability estimate of .91. The mean SFHS-MOF score was 22.67 (SD = 6.02), with a Cronbach's alpha reliability estimate of .89. The SVAWM mean score was 22.65 (SD = 5.97), with a Cronbach's alpha reliability estimate of .97.

Description of Study Participants

A description of final analyzed data is presented in Table 1. It should be noted, that not all totals are of equal size due to unreported data by some participants. Similarly, data reported in percentages may not exactly equal 100% due to rounding. Review of the initial sample indicated that only 32 males completed questionnaires. As a result, the decision was made to analyze data exclusively using female participants and to omit proposed analyses to examine gender differences via three-way interactions, since the hypotheses of the present study were based largely on research that examined the role of forgiveness in abused women (Katz, 1997; Neto & Mullet, 2004) and the small sample of men prevented gender comparisons from being conducted with adequate statistical power.

The final sample included 173 female participants. The sample was predominantly Caucasian ($n = 141$, 82%) with low frequency of African-American ($n = 17$, 10%), Hispanic/Latina ($n = 5$, 3%), Multiple Races ($n = 5$, 3%), Asian-American ($n = 3$, 2%) and Native American ($n = 1$, <1%) participants. One participant did not report race/ethnicity (<1%). The sample was also highly educated as 64% of participants reported some type of college degree ($n = 115$). Of these participants, 55 (32%) reported

a bachelor's degree and 60 (35%) reported graduate degree. Fifty-eight participants (34%) reported high school or some college education.

In terms of sexual orientation, the sample was predominantly heterosexual ($n = 143$, 83%). Twenty-one participants (12%) identified as bisexual and seven participants identified as gay or lesbian (4%). One participant (<1%) identified as asexual and one participant (<1%) did not report sexual orientation. The sample was diverse in terms of religious orientation as the largest reported category was no religion ($n = 48$, 28%), followed by Protestant ($n = 33$), Other ($n = 29$), Catholic ($n = 19$), Atheist ($n = 15$), Agnostic ($n = 14$, 8%), Jewish, ($n = 4$, 2%), Buddhist ($n = 3$, 2%), Muslim ($n = <1$) and Hindu ($n = 1$, <1%). Participants reported a mean age of 36.36 ($SD = 12.0$), mean relationship length of 9.39 years ($SD = 8.55$) and mean household income of \$64,827.27 ($SD = 43,425.63$).

Statistical Analysis

Power estimations, based on Cohen's (1992) guidelines, were followed in order to obtain the [number](#) of participants required in the present study. For multiple regression designs, Cohen considers an effect size of .15 a medium effect, which is the desired amount of power in the present study. One independent variable (forgiveness) and four moderator variables (attitudes towards forgiveness, assertiveness, self-esteem, and gender) will be employed for a total of five predictor variables. Three different dependent variables (subjective well-being, physical health, and relational abuse) will be assessed. Using Cohen's guidelines for a study with five predictor variables and an alpha of .05, a minimum of 126 participants are needed for a medium effect size at a power level of .80.

Since the following hypotheses were tested using hierarchical multiple regression, the first component of statistical analysis was to check that data met the assumptions of regression, including linearity, homoscedasticity, and normality (Field, 2013). To assess covariates, ANOVAs were conducted to examine if the main variables in the study (forgiveness, forgiveness attitudes, self-esteem, assertiveness, abuse, life satisfaction, happiness, affect, and physical health) vary as a function categorical demographic variables, which included participants' education level and religious affiliation. There was not enough diversity on race/ethnicity or sexual orientation to make comparisons across groups. Pearson correlation coefficients were conducted between main study variables and continuous demographic variables (age, household income, relationship length) to assess as possible covariates. Hierarchical multiple regression was then used to test forgiveness attitudes, assertiveness, and self-esteem as moderators of relationships between the tendency to forgive and life satisfaction, physical health, and relational abuse. Complete description of study analyses is provided in the following chapter.

CHAPTER 4

RESULTS

This chapter presents data collected for the present study and is divided into the following sections: (a) study hypotheses (b) an overview of data analysis procedures (c) analyses used to investigate study hypotheses.

Study Hypotheses

The study hypotheses were modified after review of demographic data. As only 32 males completed study materials, this resulted in inadequate size to run gender comparisons. As a result, three-way interactions in all three hypotheses, which included gender as a second moderating variable, were eliminated from the analysis.

Furthermore, all analyses were conducted using only female participants, as the previously discussed research focuses primarily on forgiveness and relational abuse with women. Therefore, forgiveness attitudes, assertiveness, and self-esteem were each tested as moderators between forgiveness and life satisfaction, as well as physical health. Forgiveness attitudes were not assessed as a moderator between forgiveness and physical abuse. The study hypotheses were thus modified as follows:

Hypothesis 1 – Self-esteem, assertiveness, and forgiveness attitudes will moderate relationships between tendency to forgiveness and life satisfaction among females in committed relationships.

Hypothesis 1a – Low levels of self-esteem will weaken the positive association between forgiveness and life satisfaction and high levels of self-esteem will strengthen the positive association between forgiveness and life satisfaction.

Hypothesis 1b – Low levels of assertiveness will weaken the association between forgiveness and life satisfaction and high levels of assertiveness will have no effect on association between forgiveness and life satisfaction.

Hypothesis 1c – Low forgiveness attitudes will weaken the positive association between forgiveness and life satisfaction and high levels of forgiveness attitudes will have no effect on positive relationship between forgiveness and life satisfaction.

Hypothesis 2 – Self-esteem, assertiveness, and forgiveness attitudes will moderate relationships between tendency to forgiveness and physical health among females in committed relationships.

Hypothesis 2a – Low levels of self-esteem will weaken the positive association between forgiveness and physical health and high levels of self-esteem will strengthen the positive association between forgiveness and physical health.

Hypothesis 2b – Low levels of assertiveness will weaken the positive association between forgiveness and physical health and high levels of assertiveness will have no effect on association between forgiveness and physical health.

Hypothesis 2c – Low forgiveness attitudes will weaken the positive association between forgiveness and physical health and high levels of forgiveness attitudes will have no effect on positive relationship between forgiveness and physical health.

Hypothesis 3 – Self-esteem and assertiveness will moderate the relationship between tendency to forgive and relational abuse among participants in committed relationships.

Hypothesis 3a – At low levels of assertiveness, tendency to forgive will be positively associated with physical abuse where at high levels of assertiveness there will be no association between tendency to forgive and physical abuse.

Hypothesis 3b – At low levels of self-esteem, tendency to forgive will be positively associated with physical abuse whereas at high levels of self-esteem there will be no association between tendency to forgive and physical abuse.

Data Analysis Procedures

Data were collected via an online survey utilizing Qaultrics software. After data collection was completed, raw data were imported into Statistic Packages for the Social Sciences 21 (SPSS 21) for analysis. Items of the Tendency to Forgive (TFF) scale, Attitudes Towards Forgiveness (ATF) scale, Rosenberg Self-Esteem (RSE) scale, Assertiveness scale of the International Personality Item Pool (IPIP-A), and the Medical Outcomes Study Short Form (SFHS-MOF) that were phrased negatively were reverse coded and items of each scale were then summed to produce total scores for each scale in SPSS.

As previously discussed, it was determined that 126 participants were required to suffice minimum power requirements for regression analyses with the expectation of a moderate effect size, although 200 participants were targeted. Two hundred and forty eight participants originally completed study materials. Participants with more than 10% of missing data on the instruments that assessed the main variables were removed from analysis to produce a final data set of 208 participants. Missing data on main variable instruments were replaced by inserting the mean score of the remaining items for the particular scale. Mean substitutions were only made when 10% of item level data were

missing. Additionally, no participant for which mean substitutions were used had more than one missing datum point. Although this procedure for inserting missing data is not optimal, it is judged to be acceptable, considering a low number of missing data (18 mean substitutions were made in the data set) as Tabachnick and Fidell (2007) reported that in data sets with 5% or less missing data, almost all replacement procedures yield the same final result. Four additional values were initially judged as outliers and eliminated from analysis of the corresponding dependent variable. Values in excess of 3.29 standard scores, based on Tabachnick and Fidell's (2007) guidelines, were initially removed from analysis. Initially, three cases were removed from analyses for Hypothesis 3; however, due to issues with normality, additional outliers appeared on subsequent analyses and all data were re-entered. These issues will be described in more detail when assumptions of regression are reviewed.

Hierarchical multiple regression (HMR) was used to test all three of the study hypotheses. As described in the previous chapter, standardized predictor variables were entered in the first step of the regression equation followed by interaction terms. Simple slopes tests were conducted and plotted to determine the specific nature of interactions, for those that met statistical significance. To identify covariates and review bivariate associations, Pearson correlation analyses were conducted for all continuous variables before the main study hypotheses were tested using HMR.

Preliminary Analyses

Correlations were calculated for all continuous variables using Pearson correlation coefficients (See Table 3). Associations of demographic variables were reviewed first. Age was associated with income ($r(53) = .24, p = .01$), and length of

relationship ($r(155) = .70, p < .001$). Education level was associated with income ($r(61) = .25, p = .001$), and life satisfaction ($r(174) = .24, p < .001$). Income was associated with length of relationship ($r(54) = .15, p = .01$).

Associations between main study variables were then reviewed. Tendency to forgive was associated with forgiveness attitudes ($r(174) = .42, p < .001$), self-esteem ($r(174) = .29, p < .001$), and life satisfaction ($r(174) = .28, p < .001$). Forgiveness attitudes were associated with self-esteem ($r(174) = .21, p = .001$), life satisfaction ($r(174) = .26, p = .001$), and physical health ($r(1744) = .2, p < .001$). Self-esteem was associated with assertiveness ($r(174) = .37, p < .001$), life satisfaction ($r(174) = .48, p < .001$), physical health ($r(174) = .38, p < .001$), and relational abuse ($r(174) = -.23, p = .003$). Life satisfaction was associated with assertiveness ($r(174) = .18, p = .01$) and physical health ($r(174) = .36, p < .001$).

To identify possible covariates, Pearson correlation coefficients reported above were reviewed to examine if any continuous demographic variables (income, age, education level, and relationship length) were related to life satisfaction. Education level was the only covariate identified with life satisfaction and was thus added in the first step of the HMR equation. Religious orientation was also tested as a covariate and additional categorical demographic variables (gender, race, sexual orientation) were not tested as covariates, as group size was not adequate to make meaningful comparisons across groups. Life satisfaction was not found to vary as a function of religious orientation ($F(4, 168) = 1.63, p = .17$) and was not entered as a covariate.

To screen for multicollinearity among independent variables, Pearson correlations, coefficients of determination (r^2), as well as Tolerance and VIF statistics

were reviewed for all predictor variables. Pearson correlation coefficients were statistically significant between tendency to forgive and attitudes towards forgiveness ($r = .42, r^2 = .18$), tendency to forgive and self-esteem ($r = .29, r^2 = .08$), and attitudes towards forgiveness and self-esteem ($r = .21, r^2 = .04$). Tolerance values ranged from .71 to .99 and VIF values ranged from 1.0 to 1.42. All scores are within acceptable ranges (Tabachnick & Fidell, 2007) and indicate no concerns with multicollinearity.

Before HMR analyses were conducted, data were examined for assumptions of linearity, homoscedasticity, and normality. To examine linearity, scatter plots of standardized residuals and standardized predicted values were produced for predictor variables and each of the dependent variables. Visual inspection of these plots indicated no issues concerning linearity between independent variables and life satisfaction. Partial regression plots were also obtained for each predictor variable and indicated appropriate linearity for equations with life satisfaction and physical health as the dependent variable. Additionally, the scatterplots of standardized residuals and predicted values indicated residuals were fairly evenly spread over predicted values of life satisfaction and physical health, indicating appropriate homoscedasticity. To examine normality, a histogram of standardized residuals and Normal P-P plots were produced for life satisfaction. Results indicated a fairly normal distribution. Both Normal P-P and Normal Q-Q plots were within limits of normality and data were not judged to violate assumptions of regression for regression equations using life satisfaction and physical health as dependent variables (Field, 2013). One subject was judged as an outlier, as it exceeded 3.29 standard deviations (Tabachnick & Fidell, 2007) on Hypothesis 1 analyses, and was thus removed from the data set and not included in further analyses.

Severe violations of linearity, homoscedasticity, and normality were observed for relational abuse. This finding was not surprising, as questions ask about severe behaviors including punching, choking, throwing items, or using weapons. Analysis of histogram of residuals indicated a severe positive skew, as most participants reported minimal amounts of physical abuse. As a result both square root and log transformations were utilized. Analyses were again conducted and histograms indicated minimal improvement for each transformation. Regression plots indicated slight improvement with heteroscedasticity; however, this still remained an issue. Outliers beyond 3.29 standard deviations were initially eliminated, although removal did not improve normality or heteroscedasticity. Furthermore, each time outliers were removed additional outliers appeared in subsequent analyses. Therefore, all data were re-entered and left in original state for subsequent analyses. Since transformations did not improve normality or heteroscedasticity, analyses were conducted with the raw data, with noted limitations due to the positive skew of relational abuse data.

Main Analyses

Hypothesis 1

Three different hierarchical multiple regression (HMR) equations were conducted to test attitudes towards forgiveness, assertiveness, and self-esteem, as moderators between tendency to forgive and life satisfaction, while controlling for education level. In each HMR equation, education level was entered in the first step, predictor variables in the second, and interaction terms in the final step.

The first HMR equation tested attitudes towards forgiveness as a moderator of tendency to forgive and life satisfaction, while controlling for education level. In the first

step, education level was a statistically significant predictor of life satisfaction ($B = 2.28$, $t(170) = 3.61$, $p < .001$) and the overall model was significant ($F(1, 170) = 13.05$, $p < .001$) and accounted for 7% of total variance in life satisfaction. In the second step, tendency to forgive and attitudes towards forgiveness were added to the equation. The overall regression equation was statistically significant ($F(3, 168) = 11.48$) and accounted for 17 % of the total variance in life satisfaction. The addition of the predictor variables accounted for an additional 10% of variance (R^2 change = .10, F change (3, 168) = 10.01, $p < .001$). Education level remained a statistically significant predictor of life satisfaction ($B = 2.21$, $t(168) = 3.69$, $p < .001$) and both tendency to forgive ($B = .37$, $t(168) = 3.17$, $p = .002$) and forgiveness attitudes ($B = .21$, $t(168) = 2.04$, $p = .043$) were statistically significant predictors of life satisfaction. In the final step, the interaction term for tendency to forgive and forgiveness attitudes was added to the equation. The overall model was again statistically significant and accounted for 19% of total variance in life satisfaction (R^2 change = .04, F change (4, 167) = 8.2, $p = .005$). In this step, education level ($B = 2.22$, $t(167) = 3.77$, $p < .001$) and tendency to forgive ($B = .24$, $t(167) = 3.17$, $p = .002$) remained statistically significant predictors of life satisfaction, although forgiveness attitudes did not ($B = .10$, $t(167) = .865$, $p = .388$). The interaction term between tendency to forgive and forgiveness attitudes was statistically significant ($B = -.05$, $t(167) = -2.86$, $p = .005$), indicating that forgiveness attitudes moderated the relationships between tendency to forgive and life satisfaction.

Simple slopes tests were then conducted between tendency to forgive and life satisfaction separately at one standard deviation above and below the mean of forgiveness attitudes. Among those with high forgiveness attitudes, tendency to forgive was not a

statistically significant predictor of life satisfaction ($B = .09$, $t(168) = .61$, $p = .54$), although tendency to forgive was a statistically significant predictor of life satisfaction among those with low forgiveness attitudes ($B = .64$, $t(168) = 3.84$, $p < .001$). Results, therefore, indicate that forgiveness attitudes moderates the relationship between tendency to forgive and life satisfaction, although the nature of the interaction was contrary to hypotheses, as a positive association between the two occurred only among participants with low forgiveness attitudes.

A second HMR equation tested assertiveness as a moderator of tendency to forgive and life satisfaction, while controlling for education level. In the first step, education level was a statistically significant predictor of life satisfaction ($B = 2.36$, $t(169) = 3.74$, $p < .001$) and the overall model was significant ($F(1, 169) = 13.97$, $p < .001$) and accounted for 8% of total variance in life satisfaction. In the second step, tendency to forgive and assertiveness were added to the equation. The overall regression equation was statistically significant ($F(3, 167) = 12.61$, $p < .001$), and accounted for 19% of the total variance in life satisfaction. The addition of the predictor variables accounted for an additional 11% of variance (R^2 change = .11, F change (3, 167) = 11.09, $p < .001$). Education level remained a statistically significant predictor of life satisfaction ($B = 2.35$, $t(167) = 3.93$, $p < .001$) and both tendency to forgive ($B = .39$, $t(167) = 3.17$, $p < .001$), and assertiveness ($B = .21$, $t(167) = 2.73$, $p = .007$) were statistically significant predictors of life satisfaction. In the final step, the interaction term for tendency to forgive and assertiveness was added to the equation. The overall model was again statistically significant and accounted for 19% of total variance in life satisfaction (R^2 change = .01, F change (4, 166) = 2.01, $p = .16$), although the addition of the interaction

term did not result in a statistically significant increase variance explained. In the final step, education level ($B = 2.35$, $t(166) = 3.95$, $p < .001$), tendency to forgive ($B = .41$, $t(166) = 3.84$, $p < .001$), and assertiveness ($B = .19$, $t(166) = 2.5$, $p = .013$) remained statistically significant predictors of life satisfaction. The interaction term between tendency to forgive and forgiveness attitudes was not statistically significant ($B = -.02$, $t(166) = -1.42$, $p = .16$) indicating that assertiveness did not moderate the relationship between tendency to forgive and life satisfaction.

A third HMR equation was conducted to test self-esteem as a moderator of tendency to forgive and life satisfaction - the final analysis for Hypothesis 1. In the first step, education level was a statistically significant predictor of life satisfaction ($B = 2.16$, $t(169) = 3.43$, $p = .001$) and the overall model was significant ($F(1, 169) = 11.81$, $p = .001$) and accounted for seven percent of total variance in life satisfaction. In the second step, tendency to forgive and self-esteem were added to the equation. The overall regression equation was statistically significant ($F(3, 167) = 24.73$) and accounted for 30% of the total variance in life satisfaction. The addition of the predictor variables accounted for an additional 24% of variance (R^2 change = .24, F change (3, 167) = 29.22, $p < .001$). Education level remained a statistically significant predictor of life satisfaction ($B = 2.10$, $t(167) = 3.86$, $p < .001$) and both tendency to forgive ($B = .22$, $t(167) = 2.21$, $p = .028$) and self-esteem ($B = .55$, $t(167) = 6.14$, $p < .001$) were statistically significant predictors of life satisfaction. In the final step, the interaction term for tendency to forgive and self-esteem was added to the equation. The overall model was again statistically significant and accounted for 29% of total variance in life satisfaction (R^2 change = .00, F change (4, 166) = .02, $p = .87$), although the addition of the interaction

term did not result in a statistically significant increase variance explained. In the final step, education level ($B = 2.11, t(166) = 3.85, p < .001$), tendency to forgive ($B = .22, t(166) = 2.18, p = .031$), and self-esteem ($B = .55, t(166) = 6.14, p < .001$) remained statistically significant predictors of life satisfaction. The interaction term between tendency to forgive and self-esteem was not statistically significant ($B = .003, t(166) = .16, p = .87$), indicating that self-esteem did not moderate the relationship between tendency to forgive and life satisfaction.

Hypothesis 2

Three different hierarchical multiple regression (HMR) equations were conducted to test attitudes towards forgiveness, assertiveness, and self-esteem, as moderators between tendency to forgive and physical health. In each HMR equation, predictor variables were entered in the first step and interaction terms in the second step.

The first HMR equation was conducted to test forgiveness attitudes as a moderator of tendency to forgive and physical health. In the first step, tendency to forgive and forgiveness attitudes were entered into the equation. The overall regression equation was statistically significant ($F(2, 169) = 3.70, p < .001$) and accounted for 4% of the total variance in physical health. Tendency to forgive was not a statistically significant predictor of physical health ($B = .02, t(169) = .19, p = .85$), although forgiveness attitudes was ($B = .16, t(169) = 2.37, p = .019$). In the next step, the interaction term for tendency to forgive and forgiveness attitudes was added to the equation. The overall model was again statistically significant and accounted for 5% of total variance in physical health (R^2 change = .004, F change (3, 168) = .42, $p = .42$), although the addition of the interaction term did not result in a statistically significant increase variance explained. In

the final step, only forgiveness attitudes was a statistically significant predictor of physical health ($B = .19, t(168) = 2.5, p = .013$), whereas both tendency to forgive ($B = .01, t(168) = .08, p = .94$), and the interaction term between tendency to forgive and forgiveness attitudes ($B = .01, t(168) = .81, p = .410$), were not statistically significant. Results indicated that forgiveness attitudes do not moderate the relationship between tendency to forgive and physical health.

The second HMR equation was conducted to test assertiveness as a moderator of tendency to forgive and physical health. In the first step, tendency to forgive and assertiveness were entered into the equation. The overall regression equation was not statistically significant ($F(2, 168) = 1.54, p = .217$), and accounted for only 2% of the total variance in physical health. Both tendency to forgive ($B = .09, t(168) = 1.27, p = .21$), and assertiveness ($B = .06, t(168) = 1.13, p = .26$), were found not to be statistically significant predictors of physical health. In the next step, the interaction term for tendency to forgive and assertiveness was added to the equation. The overall model was again not statistically significant and accounted for only 2% of total variance in physical health (R^2 change = .000, F change (3, 167) = .00, $p = .99$) and resulted in no additional variance explained in physical health above the predictor terms entered in the first step of the HMR equation. In this step of the analysis, all predictor terms failed to predict physical health. Results, therefore, indicated that assertiveness did not moderate relationship between tendency to forgive and physical health.

The third analysis for hypothesis two examined self-esteem as a moderator between tendency to forgive and physical health. In the first step, tendency to forgive and self-esteem were added as predictors of physical health into an HMR equation. The

overall regression equation was statistically significant ($F(2, 168) = 13.05, p < .001$), and accounted for 13% of the total variance in physical health. In terms of individual predictors of physical health, self-esteem ($B = .29, t(168) = 4.93, p < .001$) was a statistically significant predictor, although tendency to forgive was not ($B = -.01, t(168) = -.13, p = .90$). In the next step, the interaction term for tendency to forgive and self-esteem was added to the HMR equation. The overall model was again statistically significant and accounted for 14% of total variance in physical health (R^2 change = .003, F change (3, 167) = .49, $p = .49$) and resulted in no additional variance explained in physical health above the predictor terms entered in the first step of the HMR equation. In this step of the analysis, all predictor terms failed to predict physical health. Results, therefore, indicated that self-esteem did not moderate relationship between tendency to forgive and physical health.

Hypothesis 3

Two different hierarchical multiple regression (HMR) equations were conducted to test assertiveness and self-esteem as moderators between tendency to forgive and physical abuse. In each HMR equation, predictor variables were entered in the first step, and interaction terms in the second step. The first HMR equation was conducted to test assertiveness as a moderator of tendency to forgive and physical abuse. In the first step, tendency to forgive and assertiveness were entered into the equation. The overall regression equation was not statistically significant ($F(2, 167) = 1.10, p = .335$) and accounted for only 2% of the total variance in physical abuse. Both tendency to forgive, ($B = .002, t(168) = .02, p = .99$) and assertiveness ($B = -.11, t(167) = -1.49, p = .14$) were not statistically significant predictors of physical health. In the next step, the interaction

term for tendency to forgive and assertiveness was added to the equation. The overall model was again not statistically significant and accounted for only 2% of total variance in physical health (R^2 change = .003, F change (3, 166) = .88, p = .45) and resulted in no additional variance explained in physical health above the predictor terms entered in the first step of the HMR equation. In this step of the analysis, all predictor terms failed to predict physical abuse. Results, therefore, indicated that assertiveness did not moderate relationship between tendency to forgive and physical abuse.

The next HMR equation was conducted to test self-esteem as a moderator of tendency to forgive and physical abuse. In the first step, tendency to forgive and self-esteem were entered into the equation. The overall regression equation was statistically significant ($F(2, 167) = 5.03, p = .008$) and accounted for 6% of the total variance in physical abuse. In terms of individual predictors of physical abuse, self-esteem ($B = -.27, t(167) = -3.17, p = .002$) was a statistically significant predictor, although tendency to forgive was not ($B = .09, t(167) = .84, p = .404$). In the next step, the interaction term for tendency to forgive and self-esteem was added to the HMR equation. The overall model was again statistically significant and accounted for 6% of total variance in physical health (R^2 change = .002, F change (3, 166) = .28, $p = .599$) and resulted in no additional variance explained in physical abuse above the predictor terms entered in the first step of the HMR equation. In this step of the analysis, self-esteem remained a statistically significant predictor of physical abuse ($B = -.29, t(166) = -3.19, p = .002$), while both tendency to forgive ($B = .09, t(167) = .89, p = .377$) and the interaction term between tendency to forgive and self-esteem ($B = -.01, t(166) = -.53, p = .599$) failed to reach

statistical significance. Results, therefore, indicated that self-esteem did not moderate relationship between tendency to forgive and physical abuse.

CHAPTER 5

DISCUSSION

Forgiveness has long been a process extolled by major world religions (Thorsen, Luskin, & Harris, 2008) and prominent writers of various backgrounds (see Ghandi, 1908; Pope, 1709). Over the past two decades researchers have devoted increased attention to the social scientific understanding of forgiveness (Scherer, Cook, & Worthington, 2005; Worthington & Scherer, 2004) in particular, to how forgiveness relates to well-being. This research has produced a voluminous number of findings that suggest forgiveness has positive relationships with a variety of indices of well-being (see Toussaint & Webb, 2005).

In national surveys, forgiveness has been associated with greater life satisfaction and lower psychological distress (Toussaint & Webb, 2001) in addition to self-reported physical health (Toussaint, 2004). Studies have demonstrated that practicing forgiveness leads to lower blood pressure (Hannon, 2012; Lawler, 2003; Lawler-Row et al., 2008; Witlivliet, 2001) and faster cardiovascular recovery following a transgression (Whited, Wheat, & Larkin, 2010). Forgiveness has also been favorably associated with a variety of mental health outcomes including depression (Brown, 2003; Maltby, Macaskill, & Day, 2001), anxiety (Subkoviak, 1995), substance issues (Kendler et al., 2003), as well as global mental health (Berry & Worthington, 2001). As a result, forgiveness is commonly considered an important component of well-being, particularly within the positive psychology movement, where it is described as a “character strength” (Peterson & Seligman, 2004).

Although it is difficult to argue against the documented merits of forgiveness, some scholars have noted there is scant attention directed towards limitations of forgiveness on well-being (McNulty & Fincham, 2012) and that a degree of hubris has emerged towards forgiveness as a “positive” process. As McNulty and Fincham pointed out, researchers and clinicians would be wise to increase inquiry that examines possible negative implications of forgiveness, as positive findings, on average, do not equate to positive findings for all. Moreover, one hallmark of high quality social scientific research involves explorations beyond simple associations between one variable and another, but exploring when, for whom, and under what circumstances these associations exist or cease to exist. McNulty and Fincham pointed to previous research that suggested women with high levels of forgiveness may be at increased risk for domestic violence (Katz, 1997; Neto & Mullet, 2004), an obvious situation in which forgiveness might be harmful. The present study has answered McNulty and Fincham’s (2012) call for explorations of additional situations or characteristics that might interact unfavorably with forgiveness by evaluating the moderating effects of attitudes towards forgiveness, self-esteem, and assertiveness on the forgiveness/well-being relationship.

Discussion of the Findings

The present study presented three main hypotheses of variables that were proposed to interact unfavorably with forgiveness, measured by one’s tendency to forgive, and well-being. The following discussion of the findings will be organized around the three main study hypotheses and respective sub-hypotheses, with a more comprehensive discussion of findings as a whole to follow.

Forgiveness and Life Satisfaction

The primary objective of Hypothesis 1 was to determine if forgiveness attitudes, assertiveness, or self-esteem served as moderators between forgiveness and life satisfaction. Each interaction will be discussed below along with a discussion of individual predictive value of each of the independent variables. In the first analysis, forgiveness attitudes was tested as a moderator of tendency to forgive and life satisfaction, while controlling for education level. In these analyses both education level and forgiveness were statistically significant predictors of life satisfaction, though forgiveness attitudes were not. These findings are consistent with previous research that forgiveness, as measured with the Tendency to Forgive scale (TTF), favorably predicts self-reported depression (Brown, 2003; Brown & Phillips, 2005) and life satisfaction (Brown & Phillips) while controlling for the effects of forgiveness attitudes using the Attitudes Towards Forgiveness scale (ATF).

When forgiveness attitudes was tested as a moderator between the tendency to forgive and life satisfaction, this interaction was found to be statistically significant and statistically significantly increased the overall variance explained in life satisfaction, above the individual predictors, indicating that forgiveness attitudes moderated the relationship between tendency to forgive and life satisfaction. Additional analysis of the interactions via simple slopes created regression equations to test tendency to forgive as a predictor of life satisfaction at one standard deviation above the mean of forgiveness attitudes and one standard deviation below the mean of forgiveness attitudes. Results indicated that the tendency to forgive was not a statistically significant predictor of life satisfaction among participants with high levels of forgiveness attitudes. In other words,

for individuals who highly valued forgiveness, the amount of forgiveness they reported had no association with life satisfaction. Therefore, although a statistically significant interaction was found between forgiveness, forgiveness attitudes, and life satisfaction, the specific direction of the hypothesized interaction was not found. In contrast to hypotheses, results indicated that the tendency to forgive had a positive association with life satisfaction only among those with low forgiveness attitudes.

The present study hypothesized that findings would be similar to Brown's (2003) where lower levels of tendency to forgive predicted higher rates of depression among those with high forgiveness attitudes. In other words, participants who held the belief that forgiveness was a positive trait yet did not display it reported higher levels of depression. Results of the present study were similar to Brown's findings, in terms of tendency to forgive as an individual predictor of well-being. In Brown's study, tendency to forgive was negatively associated with depression and in the present study tendency to forgive was positively associated with life satisfaction. Although both studies found statistically significant interactions between forgiveness and forgiveness attitudes, the nature of these interactions were different. In Brown's study, there was a negative effect of having high forgiveness attitudes and low levels of reported forgiveness, leading Brown to conclude if participants "were low in the tendency to forgive, then they were better off also having less positive attitudes about the value of forgiveness" (p. 769). In contrast, results of the present study indicated a positive relationship between forgiveness and life satisfaction only among those with low forgiveness attitudes, indicating that participants were better off displaying high levels of forgiveness even when they did not have positive beliefs regarding the value forgiveness.

Although the present study can only offer informed conjectures as to why individuals who do not have positive attitudes of forgiveness may still be forgiving, the findings that those individuals experience higher levels of life satisfaction contrasts with previous research and the present study's hypotheses. Brown (2003) posited that his findings could be explained by Higgin's (1987) concept of self-discrepancies, where individuals who do not act in accordance with their ideal beliefs experience increased negative affect. From a counseling perspective, this is similar to Roger's (1951) concept of incongruence, a state of psychological maladjustment that exists when one denies awareness to experiences, typically those that are unpleasant or not perceived to be consistent with one's perception of self. The present study, however, failed to replicate these findings, as there was no relationship between tendency to forgive and life satisfaction among those with high forgiveness attitudes. In other words, there was not a negative consequence of holding high attitudes towards forgiveness but displaying a low tendency to forgive.

Results of the present study, however, do provide some evidence that the effects of dispositional forgiveness and life satisfaction are more pronounced among individuals with low forgiveness attitudes than those with high forgiveness attitudes, which is contrary to Brown's (2003) findings and related concepts of self-discrepancies (Higgins, 1987) and incongruence (Rogers, 1951). This leads to the question, why would forgiveness predict higher life satisfaction for people who have lower attitudes regarding the value of forgiveness? At this point, the forgiveness literature offers few theoretically based interpretations of this finding; nonetheless, several possible explanations will be explored.

At first glance, the finding that actual levels of forgiveness was only positively associated with life satisfaction among those with low forgiveness attitudes seems to directly contradict the aforementioned concepts of self discrepancies (Higgins, 1987) and incongruence (Rogers, 1987); however, the discrepancy between belief and action that was found is different in the present study than in Brown's (2003). Brown's study found negative implications for depression for individuals who failed to live up to beliefs regarding forgiveness whereas the present study found positive implications for life satisfaction among individuals who practiced forgiveness beyond their beliefs. One possible reason for this finding is that the tendency to forgive has a more pronounced effect on life satisfaction for those with low forgiveness attitudes. It could be that individuals who have low forgiveness attitudes and are still yet forgiving take the process of forgiveness more seriously or, put differently, that it is a more pronounced decision than for those with high forgiveness attitudes. If this is the case, it may be that displaying a high tendency to forgive, for those with low forgiveness attitudes, is a process more closely connected with life satisfaction than for those with high forgiveness attitudes.

Another possibility to consider is that the tendency to forgive and forgiveness attitudes may interact differently with depression and life satisfaction. Although previous research has indicated that the tendency to forgive and forgiveness attitudes both predict favorable levels of depression and life satisfaction, respectively (Brown, 2003; Brown & Phillips, 2005) this is the first study to examine their interaction with life satisfaction as the dependent variable. On the surface, one might expect that an interaction that predicts higher depression would predict lower life satisfaction; however, this is not necessarily the case. Research has indicated that positive and negative affect are two distinct

components that are differentially predicted and not inversely related (Russell & Carroll, 1999). Although life satisfaction is not synonymous with positive affect, they are closely aligned concepts as are depression and negative affect. Therefore, it may be that interactions between tendency to forgive and forgiveness attitudes are opposite in nature for life satisfaction and depression.

Another important component of the present study is that the sample consisted exclusively of female participants in committed relationships. Therefore, it could be that relational factors contributed to the surprising finding that forgiveness was positively associated with life satisfaction only among those with low forgiveness attitudes. A study of recently married couples (McNulty, 2012) found that forgiveness predicted marital satisfaction only among couples with low levels of negative behavior. In the present study, reported relational abuse was positively skewed, indicating very low amounts of average abuse reported by participants. Therefore, the finding that participants with low forgiveness attitudes experienced positive effects of forgiveness could be related to positive effects of forgiveness on marital satisfaction. It would be expected that a variable that contributes to marital satisfaction, such as forgiveness, might also contribute to life satisfaction, even though one does not personally value it. This does not, however, explain why forgiveness had no association with life satisfaction among those with high forgiveness attitudes in the present study.

Another possible explanation of the current results might also be attributed to the nature of the sample in the present study. The initial study sample was predominantly female and final analyses were conducted utilizing an exclusively female sample. It remains a possibility that this could explain the nature of the findings. For example, it

may be that displaying a tendency to forgive is more linked to life satisfaction for women with low forgiveness attitudes than it is for men. Although previous research has indicated that women are, on average, more forgiving than men (Miller, Worthington, & McDaniel, 2008), research on forgiveness and depression has shown no differences by gender (Toussaint et al., 2008; Rijavec et al., 2010; Ysseldyk, Matheson, & Anisman, 2008). This research does not indicate that there would be likely gender differences in relationships between forgiveness and life satisfaction; however, the possibility still remains, as evidenced by findings of the present study.

Although the nature of interactions was inconsistent with previous findings (Brown, 2003), results of the present study do provide further evidence of the differential effects of forgiveness and forgiveness attitudes, although further research is needed to clarify the differential effects on life satisfaction and other measures of well-being. Another question that arises out of the present findings, however, is what motivates individuals to be forgiving if they do not have positive attitudes regarding forgiveness? Although the present study does not provide definite answers to this question, several possible explanations are offered.

First, forgiveness is a process that is highly valued in many societies and among the major world religions (Thoresen, Luskin, & Harris, 2008). One does not have to look far to find numerous popular culture references to the virtues of forgiveness from a variety of sources including political activists, poets, music, movies, and the criminal justice system, just to name a few. More importantly, beyond popular culture references that promote the virtues of forgiveness, the aforementioned literature provides ample evidence that forgiveness is consistently associated with favorable outcomes. Based on

these findings, many researchers have promoted forgiveness as a positive practice and therapeutic interventions have included forgiveness as a component of counseling (Seligman, Rashib, & Parks, 2006), substance abuse recovery (Alcoholics Anonymous, 2002) or even as a primary intervention (Enright, 2001). The ever increasing literature on the positive aspects of forgiveness may have the effect of promoting forgiveness for the masses, to the degree that it impacts individuals tendency to forgive, even when they do not hold high attitudes towards forgiveness.

Another possible explanation that individuals may offer forgiveness even though they have low forgiveness attitudes is out of religious obligation. As previously mentioned, forgiveness is valued and promoted by virtually all of major world religions (Thorsesen, Luskin, & Harris, 2008). This may create scenarios where individuals feel obligated to be forgiving of others, out of religious requirements, even though they personally do not value forgiveness. A recent study by Cox et al., (2012) developed an inventory that assesses motivations for workplace forgiveness and found that as forgiveness motivated by religious obligation increased workplace stress also increased. Results of Cox et al. are therefore somewhat contradictory to the present findings. Although the motivation to forgive was not assessed in the present study, even if there were individuals who were motivated to forgive out of religious obligation, despite low forgiveness attitudes, there was a positive association with well-being, compared to the negative association in the Cox et al. study. As this discussion indicates, there are many questions that remain about the interaction between one's tendency to forgive and forgiveness attitudes on both life satisfaction and depression. Although the study

provided further evidence of this interaction and that these are two distinct concepts, additional inquiry is required to further clarify these relationships.

The next analysis used hierarchical multiple regression (HMR) to evaluate assertiveness as a moderator between forgiveness and life satisfaction. Analyses found no statistically significant interaction between forgiveness, assertiveness, and life satisfaction, while controlling for education level. In terms of individual predictors of life satisfaction, education level, forgiveness, and assertiveness were statistically significant. The hypothesis that assertiveness would moderate relationships between forgiveness and life satisfaction was based primarily on research indicating that forgiveness predicted willingness to return to abusive partners among abused women. Thus, it was hypothesized that assertiveness played a role in this relationship. More specifically, it was hypothesized that a lack of assertiveness may contribute to a reluctance to leave an abusive relationship and thus the lack of assertiveness in the presence of forgiveness could lead to more relational conflict and thus lower life satisfaction. Findings of the present study do not confirm these hypotheses as both forgiveness and assertiveness were predictive of life satisfaction and interaction analyses between the two variables were not statistically significant.

The final analysis of Hypothesis 1 used HMR to test self-esteem as a moderator of tendency to forgive and life satisfaction. Results were not supportive of Hypothesis 1C, as no statistically significant interaction was obtained between forgiveness, self-esteem and life satisfaction. Analysis of individual predictors indicated that education level, tendency to forgive, and self-esteem were all statistically significant predictors of life satisfaction and that self-esteem was the strongest individual predictor. This was not a

surprising finding, as it is expected that those who hold themselves in high regard are more likely to display more life satisfaction. Similar to assertiveness, self-esteem was tested as a possible moderator of the forgiveness/well-being relationship based on the notion that abused women, on average, display lower self-esteem (Cascardi & O'Leary, 1992; Cascardi, O'Leary, Lawrence, & Schlee, 1995) and thus high levels of forgiveness in the presence of low self-esteem might lead to lower well-being. Results are not consistent with this hypothesis and in general indicate that both forgiveness and self-esteem predict higher levels of life satisfaction.

Results of the three components of Hypothesis 1 indicated that only forgiveness attitudes moderated the relationship between tendency to forgive and life satisfaction, whereas assertiveness and self-esteem did not. The nature of this interaction was contrary to hypotheses, as forgiveness was positively associated with life satisfaction only among participants with low forgiveness attitudes. In terms of individual predictors, education level, tendency to forgive, assertiveness, and self-esteem were found to predict higher levels of life satisfaction while forgiveness attitudes did not.

Forgiveness and Physical Health

Results, overall, were not supportive of any aspects of Hypothesis 2, as forgiveness attitudes, assertiveness, and self-esteem all failed to moderate the relationship between forgiveness and physical health. Furthermore, addition of the interaction terms to the model in the second step of the HMR equation did not add to the variance explained in physical health compared to the individual predictor variables. Thus, discussion of hypothesis two will focus on individual predictors of physical health.

Both forgiveness attitudes and self-esteem were statistically significant predictors of physical health, although forgiveness was not. In Hypothesis 1, tendency to forgive was a statistically significant predictor of life satisfaction, whereas forgiveness attitudes were not. Therefore, tendency to forgive was only associated with life satisfaction and attitudes towards forgiveness was only associated with physical health.

This finding raises several questions regarding the differential predictive nature of one's tendency to forgive and forgiveness attitudes. It is somewhat perplexing why only forgiveness attitudes predicted physical health and forgiveness did not. As this is the first study to examine the role of forgiveness attitudes in the relationship between forgiveness and physical health, further research is needed to clarify these relationships. Although this finding is surprising, it does add to the literature that has demonstrate differential effects of forgiveness and forgiveness attitudes on well-being (Brown, 2003; Brown & Phillips, 2005).

As discussed in the preceding section, the finding that only forgiveness and not forgiveness attitudes is predictive of life satisfaction is consistent with previous research (Brown, 2003; Brown & Phillips, 2005). Results of the second regression equation, however, are somewhat surprising, as several previous studies have found forgiveness to predict more favorable physical health outcomes (Hannon, 2012; Lawler, 2003; Lawler-Row et al., 2008; Tousaint, 2004; Witlivliet, 2001).

Forgiveness and Relational Abuse

Results also failed to confirm any components of Hypothesis 3, as neither assertiveness nor self-esteem were found to moderate the relationship between tendency to forgive and relational abuse. In terms of individual predictors, self-esteem was the

only variable that reached statistical significance ($p = .002$), as it negatively predicted levels of relational abuse. A negative association between self-esteem and abuse is consistent with previous findings that abused women tend to have lower self-esteem than non-abused women (Cascardi & O'Leary, 1992; Cascardi, et al., 1995) and further suggest that self-esteem may play a protective role against physical abuse against women in committed relationships. Moreover, the lack of statistically significant relationships between forgiveness, the proposed moderators, and relational abuse in the present study provides no evidence of relationships between one's tendency to forgive and physical abuse in committed relationships.

Results, therefore, were generally not supportive of any of the present study's hypotheses. Although tendency to forgive was a predictor of life satisfaction, it was not a predictor of physical health. Conversely, forgiveness attitudes predicted physical health but not life satisfaction. No aspect of forgiveness was associated with relational abuse. Assertiveness was found to predict life satisfaction but was not a statistically significant moderator of forgiveness nor any of the dependent variables. Self-esteem was the only variable to predict favorable outcomes of life satisfaction, physical health, and relational abuse. Although forgiveness attitudes did moderate the relationship between tendency to forgive and life satisfaction, the nature of the interaction was not as hypothesized. The present study hypothesized that among those with high levels of forgiveness attitudes, tendency to forgive would predict life satisfaction. Instead, the study found that tendency to forgive was only predictive of life satisfaction among those with low attitudes towards forgiveness.

Limitations

As true to any study in the social sciences, the present study is limited by several threats to reliability, validity, and overall generalizability of findings. The following section will outline these threats and the limitations they place upon the present study.

One notable limitation of the present study is that it relies exclusively on participant self-reports, which are vulnerable to participant distortions (Heppner, Wampold, & Kivlighan, 2008). Furthermore, participant recruitment used a nonrandom method, which likely affected the quality of the sample. This also introduces additional error variance by limiting the ability to control for possible confounding variables that may affect results. There is no way to analyze differences in demographic characteristics of those who received recruitment letters and chose to participate versus those who did not. Although demographic data were collected and used to control for possible covariates, the nature of the design and recruitment certainly limited the ability to generalize findings. This is further problematic, as the goal of the present study was to identify broad and generalized findings regarding relationships between forgiveness and well-being. The interpretation of results, therefore, should consider these weaknesses. For example, individuals who have more personal interest in the topic of forgiveness may have been more likely to participate in the study. Although the study collected demographic data such as gender, race, religious orientation, household income, and sexual orientation, there is not way of knowing the demographic background of those who received an invitation, yet chose not to participate in the study.

Another major limitation of the study is that it is correlational and cross-sectional and, as a result, causal inferences cannot be made from findings. Even though there were

several independent variables that were statistically significant predictors of outcome variables, findings do not suggest a causal relationship, but only an association. In particular, the finding that forgiveness attitudes moderated the relationship between tendency to forgive and life satisfaction does not indicate that forgiveness tendencies produces more life satisfaction in those with low forgiveness attitudes, only that this association was found in these current sample data.

Beyond limitations of the study design, several other elements of the present study limit the application of findings. Of the proposed moderators, attitudes towards forgiveness was the only variable found to moderate relationships between forgiveness and well-being. One limitation of this finding is that the internal reliability coefficient ($\alpha = .69$) of the attitudes towards forgiveness scale was on the borderline of minimally acceptable standards (.70 and above). Thus, the accuracy of this instrument is somewhat questionable and reduces power to test the discussed interaction effects.

Similarly, the tendency to forgive scale displayed internal consistency that was only marginally above the acceptable standard ($\alpha = .74$), further weakening the interaction found between the tendency to forgive and attitudes towards forgiveness. As a result of the low reliability of the two instruments, noted interactions should be interpreted with caution.

One other possible limitation of the chosen measure of dispositional forgiveness is that three of the instrument's four items more closely relate to anger than to forgiveness (e.g., "I tend to get over it quickly when someone hurts my feelings."). From a face validity perspective, the instrument might appear to measure anger more so than it does forgiveness. Several recent definitions of forgiveness, however, have included a

reduction in negative feelings as a key component of forgiveness (Toussaint & Friedman, 2008; Worthington & Scherer, 2004). Therefore, an instrument that measures the tendency to not become angry should closely approximate one's tendency to forgive. The small amount of items and the low reliability, however, do render the instrument questionable, nonetheless.

Another possible limitation of the present study is that forgiveness was conceptualized as an individual variable, yet relationally oriented theorists would point out that forgiveness cannot occur outside of the context of a relationship. In essence, it takes two to forgive, even if the person granting forgiveness makes no contact or communication with those forgiveness is granted to. The present study focused solely on an individual's tendency to forgive and thus may not have fully captured relational nature of the concept of forgiveness. This approach, however, is consistent with much of the recent research that measures forgiveness as an individual variable.

A review of demographic characteristics of the sample also indicated several possible areas of concern. Although the initial sample recruited an adequate number of participants to meet minimum power requirements, there were only 32 male participants. Since hypotheses were based largely on previous research indicating possible negative implications for women in abusive relationships (Katz, 1997; Neto & Mullet, 2004), only data from female participants were analyzed. Thus, proposed gender analyses were not conducted and results have implications only for females, limiting the applicability of findings.

The sample was also limited by a lack of demographic diversity, as participants were highly educated, with over 60% of participants having obtained a college degree,

compared to most recent Census (U.S. Census Bureau, 2013) data, where only 31% of females reported to be college graduates. Additionally, the sample was 80% Caucasian, and 82% heterosexually-oriented, although religious diversity was strong as 27% of the sample identified as not religious, 17% as other, and 17% as atheist or agnostic. Finally, as the sample was obtained online, interpretation of results is further limited as those without internet access were not recruited for participation in the present study.

Future Directions

Despite these noted limitations in the present study's design and collected data, this is one of a small, yet growing, number of studies that has attempted to examine possible negative implications of forgiveness. It is among only a handful of studies that have examined the role of forgiveness as a possible predictor of relational abuse, and the first to assess self-esteem and assertiveness as moderators of forgiveness and well-being. Although the purpose of the study was to help clarify these relationships, results of the study have led to several additional questions that need addressed to clarify the nature of relationships between forgiveness, well-being, and relational abuse.

The present study did find a statistically significant interaction between forgiveness, forgiveness attitudes, and life satisfaction; however, the nature of this interaction was not as hypothesized. The study hypothesized negative implications for individuals who displayed high levels of forgiveness amidst low levels of forgiveness attitudes. Furthermore, it was in contrast to previous research (Brown, 2003) that indicated negative implications for depression when participants had high levels of forgiveness attitudes yet displayed low levels of actual forgiveness. The present study found that the tendency to forgive was only associated with life satisfaction, and

positively so, among those with low forgiveness attitudes. Additional inquiry is needed to further clarify these relationships. It may be that tendency to forgive and forgiveness attitudes interact uniquely with life satisfaction and depression, as research has indicated the low negative affect and high positive affect are not necessarily synonymous with each other (Russell & Carroll, 1999). Thus, the possibility remains that forgiveness attitudes moderate relationships between forgiveness and dependent variables more closely related to positive affect (e.g., life satisfaction) differently than it does variables that are more closely related to negative affect (e.g., depression). Additional research is needed to clarify the nature of interactions between the tendency to forgive, forgiveness attitudes, and various measures of well-being.

Research that has examined both forgiveness and forgiveness attitudes as multivariate predictors of life satisfaction and depression has found, however, that dispositional forgiveness predicts favorable levels of both life satisfaction and depression, whereas forgiveness attitudes do not (Brown & Phillips, 2005). It is clear that additional research is required to gain a better understanding of these relationships. Future research should examine interactions between forgiveness and forgiveness attitudes on both life satisfaction and depression. Additionally, future researchers may wish to explore this interaction on additional measures of well-being and health (e.g., anxiety, affect, happiness, meaning in life, relationship quality) to further clarify the nature of interactions between the tendency to forgive and forgiveness attitudes.

The finding that only forgiveness and not forgiveness attitudes predicted life satisfaction was expected and is consistent with previous findings (Brown, 2003; Brown & Phillips, 2005). One surprising finding, however, was that only forgiveness attitudes

and not the tendency to forgive predicted physical health in multivariate analyses. In addition, tendency to forgive was not statistically significantly associated with physical health in bivariate analyses. Currently, no other study has examined forgiveness attitudes as a predictor of physical health, although research has found forgiveness to predict physical health (Lawler et al., 2005; Toussaint et al., 2001; Wilson et al., 2008). Therefore, future research is needed to examine both forgiveness and forgiveness attitudes as a predictor of physical health to clarify these relationships.

One limitation discussed regarding the present study was that the sample was restricted to participants in committed relationships, as one of the goals was to examine relational abuse. Therefore, the possibility remains that the unexpected findings or questions raised in the present study could be a result of this sample. Future research may wish to compare the effects of forgiveness on measures of well-being between those in committed relationships and those who are not.

One other limitation of the present study was that an insufficient number of men completed protocols to allow gender comparisons. As a result these comparisons were eliminated from analyses. Future research may wish to reexamine the present study hypotheses with a sufficient sample to make gender comparisons. Another limitation of the study design was that the nonrandom recruiting strategy did not allow for any analysis of the participants who chose to participate in the study among those who were recruited. The large number of women participating in the study could possibly indicate that women are more interested in participating in forgiveness studies, which would be consistent with findings that women, on average, are more forgiving than men (Miller, Worthington, & McDaniel, 2008). Future research with a clearly targeted population

could determine if a larger number of women respond than men when recruited to participate in forgiveness studies.

The sample used in the present study also reported minimal amounts of physical abuse, making it difficult to interpret results of analyses with relational abuse as the dependent variable with an appropriate degree of validity. Future research with normally distributed amounts of relational abuse might help clarify such relationships.

Additionally, the present study chose only to examine physical abuse; therefore, research that examines verbal or emotional abuse would contribute to the understanding of the relationship between forgiveness and relational abuse.

Counseling Implications

Although the present study did not confirm hypotheses and reveal specific personality characteristics where forgiveness was unfavorably associated with well-being, there are several implications for counselors in relation to the process of forgiveness in clinical work. If nothing else, the present study has further confirmed that relationships between forgiveness and well-being are not simple ones, but rather are multi-faceted relationships dependent upon a variety of factors. The present study provides additional evidence that forgiveness attitudes are one of these factors.

As discussed in the introduction, researchers and clinicians alike should be wary of conceptualizing forgiveness as an unalloyed good. As McNulty and Fincham (2012) argued, there are situations in which one can be too forgiving or when forgiveness might have negative implications, such as in abusive or highly conflictual relationships. One of the goals of the present study was to identify personality characteristics where forgiveness might interact unfavorably with well-being, although none of these

hypotheses were confirmed. One's tendency to forgive, however, was found to predict life satisfaction and forgiveness attitudes predicted physical health in regression analyses. Bivariate correlations indicated positive associations between forgiveness and both life satisfaction and self-esteem. Forgiveness attitudes were also associated with life satisfaction and self-esteem, in addition to physical health. Rather than add to the literature on characteristics where forgiveness may have negative associations with well-being, and likewise inform clinicians of situations where forgiveness may be harmful, the present study has added to the literature that forgiveness is associated with a variety of indices of well-being. In fact, the interaction between forgiveness, forgiveness attitudes, and life satisfaction indicated that forgiveness was only predictive of life satisfaction among those with low forgiveness attitudes, indicating the possibility that forgiveness may have particular benefit for life satisfaction among those who do not hold forgiveness in high regard.

Where then, does this leave forgiveness in the realm of counseling relationships? The answer, as with many variables in the social sciences and helping professions, is complicated. It would be unwise to point to the forgiveness literature and promote forgiveness as a panacea for all past hurt, abuse, or wrongdoing and there is certainly a strong case for the argument that researchers have overstated the "positive" nature of forgiveness (McNulty & Fincham, 2012). The findings of the present study and the questions that have arisen out of these results provide further evidence that one's tendency to forgive and attitudes towards forgiveness are not synonymous. These two related, yet distinct concepts should be explored in helping relationships. Although the nature of the interplay of the tendency to forgive and forgiveness attitudes is not clearly

understood, the current research does suggest that relationships between the tendency to forgive and well-being is moderated by forgiveness attitudes. When forgiveness is a component of a counseling relationship, clinicians would be wise to explore both the level of forgiveness and beliefs about forgiveness with clients. For example, a counselor who chooses to implement a forgiveness intervention with a client to address issues of anger over a past relationship may benefit from also exploring what the client thinks about forgiveness. It may be helpful to process if the client has positive beliefs or values the process of forgiveness and explore these thoughts and feelings before addressing the actual process of granting forgiveness.

Although the argument has been made that the positive effects of forgiveness have been overstated (McNulty & Fincham, 2012) and the present study offers further evidence of the complicated nature of forgiveness, it would also be unwise for clinicians to ignore the literature on the potential healing effects of forgiveness (Reed & Enright, 2006). Beyond associations between forgiveness and well-being, forgiveness has been established as an empirically-based intervention in two separate meta-analyses (Baskin & Enright, 2004; Wade, Hoyt, Kidwell, & Worthington, 2014). Baskin and Enright (2014) found a large effect size (1.42) of process-based individual forgiveness interventions compared to a control group when emotional health was the dependent variable. Put differently, when the intervention explored the process of forgiveness with clients, emotional health was substantially higher when compared to a control group where no treatment was received.

A more recent meta-analysis (Wade et al., 2014) with a more robust sample size found an effect size of .34 for depression, .63 for anxiety, and 1.0 for hope when

forgiveness interventions were compared to no treatment. The authors argued that the evidence suggests forgiveness interventions are an effective treatment, particularly for the large number of clients that seek counseling to address relational difficulties. In regards to counseling implications, they noted that, although the particular forgiveness intervention chosen had no effect on outcomes, length of treatment did as the number of sessions was related to symptom reduction. Therefore, clients who utilize forgiveness interventions may wish to devote ample time to the process of forgiveness, particularly for those dealing with severe anger or trauma related to past transgressions.

Although the meta-analytic research does suggest forgiveness is an effective treatment option for common clinical issues, there are many questions regarding forgiveness in counseling that remain unanswered. For example, the research is not clear if certain forgiveness interventions are better suited for particular offenses or certain demographics, or the optimal time after an offense to begin forgiveness therapy (Wade et al., 2014). In essence, the literature on forgiveness interventions appears to be rather consistent with research on forgiveness and well-being. Although there is strong evidence that forgiveness is related to well-being and a useful intervention, the evidence is still tentative. In summary, counselors probably should consider forgiveness as a useful tool in their clinical toolbox, but the use of forgiveness interventions should not be used without adequate knowledge of limits and cautions of these interventions.

Summary

The present study is one of the first to answer McNulty and Fincham's (2012) call to explore personality characteristics that may interact unfavorably with forgiveness and well-being. The participants in this study were recruited online and completed measures

to assess levels of tendency to forgive, forgiveness attitudes, assertiveness, self-esteem, life satisfaction, physical health, and relational abuse. Results indicated that forgiveness attitudes moderated the relationship between tendency to forgive and life satisfaction, as this relationship was only found for those with low forgiveness attitudes. This finding is in contrast to hypotheses and previous research using depression as the dependent variable (Brown, 2003). Tendency to forgive was an individual predictor of life satisfaction but not physical health or relational abuse. Forgiveness attitudes predicted physical health but not life satisfaction or relational abuse. Thus, the study provided additional evidence that the tendency to forgive and forgiveness attitudes are two distinct concepts that are differentially related to various measures of well-being. Self-esteem predicted higher levels of life satisfaction and physical health, as well as lower amounts of relational abuse. Results failed to confirm any of the primary hypotheses of the present study or indicate that forgiveness attitudes, assertiveness, or self-esteem interact unfavorably in the relationship between forgiveness and well-being.

Results of the present study do contain a number of limitations. The sample was predominantly female. As a result, analyses were conducted with only females, eliminating the ability to conduct gender analyses. The recruitment of participants online further limits the strength of the sample and applicability of results. The sample was also highly educated and predominantly Caucasian, although it was religiously diverse. Participants in the sample reported minimal amounts of abuse, leading to a strong positive skew on this variable. Finally, the sample was nonrandom and are therefore not generalizable.

Future studies would add to the current literature by examining interactions between the tendency to forgive, forgiveness attitudes, and numerous outcome variables including life satisfaction, depression, and anxiety, as the current nature of these relationships is unclear. Future explorations of forgiveness and relational abuse would benefit from recruiting from samples that may include those in abusive relationships to obtain a normal distribution on this variable. Additionally, researchers may also investigate other forms of relational abuse, such as verbal, emotional, or sexual, as the present study only examined physical abuse.

The study does provide several implications for counseling and further suggests that forgiveness is related to life satisfaction and may be a beneficial counseling intervention for those dealing with past hurts, anger, or regret. Results do indicate, however, that there are many unanswered questions about the nature of relationships between forgiveness and well-being and counselors who work to help clients forgive others should do so with careful consideration of the complicated nature of forgiveness.

The results of the present study did indicate associations between forgiveness and well-being; however, it also produced many additional questions that need answered. Although none of the proposed moderators indicated situations in which forgiveness had negative implications for well-being, this line of research is important and would benefit from additional inquiry to add to the understanding of the complicated relationship between forgiveness and well-being.

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Appendix A: Listing of Websites Used for Recruitment

www.socialpsychology.org/expts.htm

<http://psych.hanover.edu/research/exponent.html>

<http://onlinepsychresearch.co.uk/>

www.psychforums.com/surveys-studies/

www.callforparticipants.com/

www.findparticipants.com/

Appendix B: Demographic Form

1. What is your age? _____
2. What is your gender?
 - Male
 - Female
 - Transgender
 - Other (please specify)
3. What is your highest level of education?
 - Did not graduate high school.
 - Completed high school / GED.
 - Some college
 - Obtained undergraduate degree
 - Obtained master's degree
 - Obtained terminal degree (Ph.D., M.D., etc)
4. What is your estimated yearly household income?
5. What is your race/ethnicity (Check all that apply)?
 - Caucasian/White
 - African American/Black
 - Asian American/Asian
 - Hispanic/Latina(0)
 - Native American
 - Other
6. What is your relationship status?

Single or not in a committed relationship

Partnered or in a committed relationship

7. If in a committed relationship, how long have you been in this relationship?

8. What is your sexual orientation?

Heterosexual

Bisexual

Gay/Lesbian

Other

9. What is your religious orientation?

No religion

Catholic

Protestant

Hindu

Buddhist

Muslim

Jewish

Athiest

Agnostic

Other

Appendix C: Tendency to Forgive Scale

Please rate your agreement with each of the following statements on the following scale:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

1. I tend to get over it quickly when someone hurts my feelings.
2. If someone wrongs me, I tend to think about it a lot afterwards
3. I have a tendency to harbor grudges.
4. When people wrong me, my approach is just to forgive and forget.

Appendix D: Attitudes Towards Forgiveness Scale

Please rate your agreement with each of the following statements on the following scale:

Strongly Agree 1 2 3 4 5 6 7 Strongly Disagree

1. I believe that forgiveness is a moral virtue.
2. Justice is more important than mercy.
3. It is admirable to be a forgiving person.
4. I have no problem at all at people staying mad at those that hurt them.
5. Forgiveness is a sign of weakness.
6. People should work harder than they do to let go of the wrongs they have suffered.

Appendix E: Rosenberg Self-Esteem Scale

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation
 c/o Department of Sociology
 University of Maryland
 2112 Art/Soc Building
 College Park, MD 20742-1315

Appendix F: Assertiveness Sub-Scale of International Personality Item Pool

On the following pages, there are phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes *you*. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please read each statement carefully, and then fill in the bubble that corresponds to the number on the scale.

Response Options

- 1: Very Inaccurate
- 2: Moderately Inaccurate
- 3: Neither Inaccurate nor Accurate
- 4: Moderately Accurate
- 5: Very Accurate

ASSERTIVENESS (Factor E: Dominance) [.81]

- | | |
|---------|---|
| + keyed | <ul style="list-style-type: none"> Take charge. Want to be in charge. Say what I think. Am not afraid of providing criticism. Take control of things. Can take strong measures. |
| – keyed | <ul style="list-style-type: none"> Wait for others to lead the way. Never challenge things. Let others make the decisions. Let myself be pushed around. |

Appendix G: Satisfaction With Life Scale:

The Satisfaction with Life Scale

By Ed Diener, Ph.D.

DIRECTIONS: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Neither Agree or Disagree

5 = Slightly Agree

6 = Agree

7 = Strongly Agree

_____ 1. In most ways my life is close to my ideal.

_____ 2. The conditions of my life are excellent.

_____ 3. I am satisfied with life.

_____ 4. So far I have gotten the important things I want in life.

_____ 5. If I could live my life over, I would change almost nothing

Appendix H: Severity of Violence Against Women/Men Scale

During the past year, you and your partner have probably experienced anger or conflict. Below is a list of behaviors your partner may have done during the past 12 months. Describe how often your partner has done each behavior by writing a number from the following scale.

- 0 = Never
- 1 = Once
- 2 = A few times
- 3 = Many times

- 1) Held you down, pinning you in place
- 2) Pushed you or shoved you
- 3) Grabbed you suddenly or forcefully
- 4) Shook you or roughly handled you
- 5) Scratched you
- 6) Pulled your hair
- 7) Twisted your arm
- 8) Spanked you
- 9) Bit you
- 10) Slapped you with the palm of his/her hand
- 11) Slapped you with the back of his/her hand
- 12) Slapped you around your face and hand
- 13) Hit you with an object
- 14) Punched you
- 15) Kicked you
- 16) Stomped on you
- 17) Choked you
- 18) Burned you with something
- 19) Used a club-like object on you
- 20) Beat you up
- 21) Used a knife or gun on you

Appendix I: Short-Form Health Survey: Medical Outcomes Study, Perceived Health Sub-scale

1. In general, would you say your health is:

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

Please check the box that best describes whether each of the following statements is true or false for you:

(Check one box on each line)

1 = Definitely True 2 = Mostly True 3 = Not Sure 4 = Mostly False 5 = Definitely False

- A. I am somewhat ill
- B. I am as healthy as anyone I know
- C. My health is excellent
- D. I have been feeling bad lately.

Table 1

Demographic Data Summary

	N	Percentage
Race/Ethnicity		
Caucasian	141	82%
African-American	17	10%
Hispanic / Latina	5	3%
Multiple Races	5	3%
Asian / Asian American	3	2%
Native American	1	>1%
Education Level		
High School / Some College	58	34%
Bachelor's Degree	55	32%
Graduate / Terminal Degree	60	35%
Sexual Orientation		
Heterosexual	143	83%
Bisexual	21	12%
Gay/Lesbian	7	4%
Asexual	1	>1%
No Response	1	>1%
Religious Orientation		
No Religion	48	28%

Protestant	33	15%
Other	29	17%
Catholic	25	19%
Atheist	15	9%
Agnostic	14	8%
Jewish	4	2%
Buddhist	3	2%
Muslim	1	1%
Hindu	1	1%
	<hr/>	
	Mean	S. D.
	<hr/>	
Age	36.36	12.0
Relationship Length	9.39	8.55
Household Income	\$64,827.27	\$43,425.63

Table 2

Instrument Results Summary

Instrument	Mean	SD	Cronbach's Alpha
TTF	14.74	4.68	.74
ATF	30.50	5.24	.69
RSE	30.33	5.53	.89
IPIP-A	36.29	6.39	.82
SWLS	23.49	7.11	.91
SFHS-MOF	22.67	6.02	.89
SVAWM	22.65	5.97	.97

Table 3: *Correlations of all Main Study Variables and Continuous Demographics*

	Age	Education	Income	Length	TTF	ATF	RSE	IPIP-A	SWLS	SFHS-MOF	SVAWM
Age	-										
Education	-.11	-									
Income	.22**	.24***	-								
Length	.71***	-.09	.20**	-							
TTF	.14	.05	.03	.04	-						
ATF	.15	.05	.06	-.03	.38***	-					
RSE	.14	.05	.11	.09	.32**	.24***	-				
IPIP-A	.15	.02	.06	.03	.07	-.04	.40***	-			
SWLS	-.13	.25***	.14	-.04	.32***	.23***	.50***	.18**	-		
SFHS-MOF	.01	.13	.09	-.01	.15	.25***	.42***	.12	.39***	-	
SVAWM	-.07	-.02	.10	-.06	-.01	-.09	-.23**	-.12	-.06	.02	-

*. Correlation is significant at the .02 probability level (two-tailed).

** . Correlation is significant at the .01 probability level (two-tailed).

***. Correlation is significant at the .001 probability level (two-tailed)

Table 4

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 1A Variables
(n = 172)*

	Variable	β	SE B
Step 1	Education Level	2.28***	.63
Step 2	Education Level	2.22***	.50
	Tendency to Forgive	.32**	.12
	Forgiveness Attitudes	.21*	.11
Step 3	Education	2.22***	.59
	Tendency to Forgive	.37**	.12
	Forgiveness Attitudes	.10	.11
	Forgiveness and Attitudes Interaction	-.05**	.02

Note $R^2 = .07$ for Step 1 ($p < .001$); $\Delta R^2 = .10$ for Step 2 ($p < .001$); $\Delta R^2 = .04$ for Step 3 ($p = .005$).

* ($p < .05$) ** ($p < .01$) *** ($p < .001$).

Table 5

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 1B Variables
(n = 172)*

	Variable	β	SE B
Step 1	Education Level	2.36***	.63
Step 2	Education Level	2.35***	.49
	Tendency to Forgive	.39***	.12
	Assertiveness	.21**	.07
Step 3	Education	2.35***	.60
	Tendency to Forgive	.41**	.11
	Assertiveness	.19*	.07
	TTF and Assertiveness Interaction	-.02	.01

Note $R^2 = .08$ for Step 1 ($p < .001$); $\Delta R^2 = .19$ for Step 2 ($p < .001$); $\Delta R^2 = .01$ for Step 3 ($p = .159$).

* ($p < .05$) ** ($p < .01$) *** ($p < .001$).

Table 6

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 1C Variables
(n = 172)*

	Variable	β	SE B
Step 1	Education Level	2.16***	.63
Step 2	Education Level	2.10***	.54
	Tendency to Forgive	.22*	.12
	Self-Esteem	.54***	.09
Step 3	Education	2.11***	.55
	Tendency to Forgive	.22*	.10
	Self-Esteem	.55***	.09
	TTF and Self-esteem Interaction	.003	.02

Note $R^2 = .07$ for Step 1 ($p < .001$); $\Delta R^2 = .24$ for Step 2 ($p < .001$); $\Delta R^2 = .00$ for Step 3 ($p = .871$).

* ($p < .05$) ** ($p < .01$) *** ($p < .001$).

Table 7

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 2A Variables
(n = 172)*

	Variable	β	SE B
Step 1	Tendency to Forgive	.02	.07
	Forgiveness Attitudes	.16*	.07
Step 2	Tendency to Forgive	.01	.08
	Forgiveness Attitudes	.19*	.07
	TTF and Attitudes Interaction	.01	.01

Note $R^2 = .04$ for Step 1 ($p = .027$); $\Delta R^2 = .004$ for Step 2 ($p = .419$).

* ($p < .05$) ** ($p < .01$) *** ($p < .001$)

Table 8

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 2B Variables
(n = 172)*

	Variable	β	SE B
Step 1	Tendency to Forgive	.09	.07
	Assertiveness	.06	.05
Step 2	Tendency to Forgive	.09	.07
	Assertiveness	.06	.05
	TTF and Assertiveness Interaction	.00	.01

Note $R^2 = .02$ for Step 1 ($p = .217$); $\Delta R^2 = .000$ for Step 2 ($p = .985$).

* ($p < .05$) ** ($p < .01$) *** ($p < .001$)

Table 9

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 2C Variables
(n = 172)*

	Variable	β	SE B
Step 1	Tendency to Forgive	-.01	.07
	Self-Esteem	.29***	.06
Step 2	Tendency to Forgive	-.004	.08
	Self-Esteem	.28*	.06
	TTF and Self-Esteem Interaction	-.01	.01

Note $R^2 = .13$ for Step 1 ($p < .001$); $\Delta R^2 = .003$ for Step 2 ($p = .485$).
* ($p < .05$) **($p < .01$) ***($p < .001$)

Table 10

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 3A Variables
(n = 172)*

	Variable	β	SE B
Step 1	Tendency to Forgive	.002	.10
	Assertiveness	-.11	.07
Step 2	Tendency to Forgive	-.01	.10
	Assertiveness	-.10	.07
	TTF and Assertiveness Interaction	.01	.02

Note $R^2 = .001$ for Step 1 ($p = .335$); $\Delta R^2 = .003$ for Step 2 ($p = .506$).
* ($p < .05$) **($p < .01$) ***($p < .001$)

Table 10

*Summary of Hierarchical Multiple Regression Analysis for Hypothesis 3B Variables
(n = 172)*

	Variable	β	SE B
Step 1	Tendency to Forgive	.09	.10
	Self-Esteem	-.27**	.09
Step 2	Tendency to Forgive	.09	.10
	Self-Esteem	-.29**	.09
	TTF and Self-Esteem Interaction	-.01	.02

Note $R^2 = .06$ for Step 1 ($p = .008$); $\Delta R^2 = .002$ for Step 2 ($p = .599$).

* ($p < .05$) **($p < .01$) ***($p < .001$)

Figure 1. Simple slopes for interactions between forgiveness, forgiveness attitudes, and life satisfaction.



