THE EFFICACY OF THE REACH FORGIVENESS INTERVENTION FOR FOREIGN
STUDENTS AND VIRGINIA STUDENTS

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science
at Virginia Commonwealth University

By: YIN LIN

M. A., University of Delaware, 2010
B. Law, Nanjing University, China, 2007

Director: Everett L. Worthington, Jr., Ph.D.
Professor
Department of Psychology

Virginia Commonwealth University
Richmond, Virginia
May, 2012
Acknowledgements

First and foremost, I offer my sincerest gratitude to my academic advisor, Dr. Everett Worthington, who has supported me throughout my thesis with his patience, forgiveness and knowledge. Without him, this thesis would not have been started or completed. Even more than that, he sets up a model for me, probably for all his students, being an enthusiastic researcher, supportive mentor, loving husband, cooperative colleague and dedicated Christian.

Great gratitude is also due to the members of my thesis committee, Dr. Sandy Gramling and Dr. Robert Andrews. Without their knowledge and assistance, this study would not have been successful.

I wish to express my deepest love and gratitude to my husband, Haifeng Wang, for his understanding and endless love. He had to spend many evenings alone after work in Fairfax for these past two years because I stayed at Richmond for my graduate studies. He chose to give up fun activities when we met during the weekend because I needed to focus on my thesis. Without his sacrificial love, I would seriously struggle between study and family.

I am blessed with having my beloved parents and parents-in-law for supporting me, physically and emotionally, throughout my pregnancy, childbirth and postpartum. Both of my parents and parents-in-law flew to the U.S and took up most of our housework. Especially when I went back to school one month after giving birth, my parents-in-law came to stay with me in Richmond, taking care of the little baby when I could study for full time. I owe a huge thank you to my big family!

Last but not the least, I worship the omnipresent God, for showing me how weak I am in front of the difficulties, for answering my prayers for giving me the strength to hold on, and for granting me forgiveness when I disobeyed his teaching. I know, without you, Lord, I have nothing.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>iv</td>
</tr>
<tr>
<td>List of Figure</td>
<td>v</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Review of the Literature</td>
<td>4</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>52</td>
</tr>
<tr>
<td>Method</td>
<td>61</td>
</tr>
<tr>
<td>Results</td>
<td>84</td>
</tr>
<tr>
<td>Discussion</td>
<td>107</td>
</tr>
<tr>
<td>List of References</td>
<td>117</td>
</tr>
<tr>
<td>Appendix: Measures Used in the Study</td>
<td>128</td>
</tr>
<tr>
<td>Vita</td>
<td>137</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Predicted (and Relevant) Effects for Condition by High or Low Individualism for Each of the Three Main Dependent Measures</td>
<td>73</td>
</tr>
<tr>
<td>2. Correlation Matrix for All Variables</td>
<td>86</td>
</tr>
<tr>
<td>3. Means and Standard Deviations of Dependent Variables by Time, Condition and Country</td>
<td>88</td>
</tr>
<tr>
<td>4. Factor matrixes for both subsamples</td>
<td>92</td>
</tr>
<tr>
<td>5a. Hierarchical Multiple Regression Analyses Predicting Decisional Forgiveness and Emotional Forgiveness at different time from Self-construal-Collectivism and condition</td>
<td>103</td>
</tr>
<tr>
<td>5b. Hierarchical Multiple Regression Analyses Predicting Decisional Forgiveness and Emotional Forgiveness at different time from Self-construal-Individualism and condition</td>
<td>105</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The CONSORT Flowchart.</td>
<td>69</td>
</tr>
<tr>
<td>2a. The hypothesized relationship between Emotional Forgiveness and time for High Individualists</td>
<td>75</td>
</tr>
<tr>
<td>2b. The hypothesized relationship between Emotional Forgiveness and time for Low Individualists</td>
<td>75</td>
</tr>
<tr>
<td>3a. The hypothesized relationship between Decisional Forgiveness and time for High Individualists</td>
<td>77</td>
</tr>
<tr>
<td>3b. The hypothesized relationship between Decisional Forgiveness and time for Low Individualists</td>
<td>77</td>
</tr>
<tr>
<td>4a. The hypothesized relationship between Forbearance and time for High Individualists</td>
<td>79</td>
</tr>
<tr>
<td>4b. The hypothesized relationship between Forbearance and time for Low Individualists</td>
<td>79</td>
</tr>
<tr>
<td>5. Hypothesized Relationship of EF or DF by Treatment Condition</td>
<td>82</td>
</tr>
<tr>
<td>6. Negative Emotional and Motivational Expression after Transgressions (NEMET-7)</td>
<td>93</td>
</tr>
<tr>
<td>7. Actual Relationship of Emotional Forgiveness by Condition and Time</td>
<td>97</td>
</tr>
<tr>
<td>8a. Actual Relationship of Emotional Forgiveness by Treatment Condition and Time for Foreign Students</td>
<td>99</td>
</tr>
<tr>
<td>8b. Actual Relationship of Emotional Forgiveness by Treatment Condition and Time for Virginia Students</td>
<td>99</td>
</tr>
</tbody>
</table>
Abstract

THE EFFICACY OF THE REACH FORGIVENESS INTERVENTION FOR FOREIGN STUDENTS AND VIRGINIA STUDENTS

By Yin Lin, M.A.

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

Virginia Commonwealth University, 2012.

Major Director: Everett L. Worthington, Jr., Ph.D.

Professor
Department of Psychology

People agree that forgiveness is a virtue in essentially all countries. However, different cultures have different ideas about how willing one should forgive and under what circumstances. Although the study occurred in the USA, I recruited both foreign-extraction and Virginia born-and-raised female college students (N=102) to participate a six-hour REACH forgiveness intervention, promoting their forgiveness through psychoeducational groups. In my thesis, I investigated whether students of foreign extraction and Virginia-born students would respond similarly to the intervention. I operationalized culture in two ways—by country and by individual self-reported self-construal. I measured forgiveness using two...
measures—decisional forgiveness and emotional forgiveness. I found that the six-hour REACH forgiveness intervention enhanced participants’ forgiveness regardless of their culture background. But foreign students who were functioning in a US university did not respond differently than Virginia-born students. The similar findings also applied to participants who perceived themselves differently in Collectivism and Individualism.
The study of forgiveness has increased in the field of psychology (for reviews, see Enright & Fitzgibbons, 2000; Fehr, Gelfand, & Nag, 2010; McCullough, Pargament, & Thoresen, 2000; Worthington, 2005, 2006). Forgiveness research has been growing substantially in various areas of counseling and other subfields of psychology. Research has addressed how to define and measure forgiveness, and how to analyze the relationship between forgiveness and other social constructs, such as religion, physical and mental health, personality, and interventions to promote people’s forgiveness (Worthington, 2005b).

Despite the rapid development in many areas of forgiveness research, the multicultural awareness within a scientific forgiveness agenda still needs to be further investigated (see Sandage & Wiens, 2001). One particular problem regarding the studies on relationship between forgiveness and culture is that the most current empirical studies were neither designed nor organized based on one or more theoretical bases. The constructs of individualism and collectivism have been used extensively to examine the cultural differences (for a review, see Hook, Worthington, & Utsey, 2009). To date, the established theoretical approaches or models that have explored the relationship between forgiveness and culture generally include: (1) Worthington’s (2006) stress-and-coping theory on forgiveness, which has been applied in various cultures throughout the world (for a review, see Hook, Worthington, & Utsey, 2009); (2) Hook, Worthington, and Utsey (2009)’s collectivistic forgiveness model that was tested and supported in a variety of settings including Nepal (Watkins, Hui, Luo, Regmi, Worthington, Hook, & Davis, 2011), China and New Zealand (Hook et al., 2010), and the United States (Hook, Worthington, Utsey, Davis, & Burnette, 2011). (3) Theorizing (though not a formal theory) by
Mullet and his colleagues on cross-cultural consistency and differences in the experience of forgiving (e.g., Bagnulo, Munoz-Sastre, & Mullet, 2009; Kadiangandu, Gauche, Vinsonneau, & Mullet, 2007; Neto & Pinto, 2010; Paz, Neto & Mullet, 2008; Suwartono, Prawasti, & Mullet, 2007; Tripathi & Mullet, 2010).

In this thesis, I organize and review the empirical studies on forgiveness in non-U.S. settings from 2005 to 2011 in Chapter 2. In that review, I conclude that three points need to be addressed.

(a) Some ways that culture has been operationalized have not been up to current standards of cultural research. For example, taking country as a proxy for culture or for individualistic or collectivistic self-construal is, at best, a gross over-simplification. Generally it is more accepted practice to measure individualism and collectivism separately. Those dimensions have been found to not necessarily be orthogonal to each other.

(b) I describe a suspected weakness in the theorizing of Hook, Worthington, and Utsey. They suggested that people from collectivistic cultures typically respond to transgressions with decisional forgiveness, favoring it over emotional forgiveness (which is more characteristically sought in individualistically oriented cultures). I propose a theoretical modification of the Hook et al. (2009) theorizing—the necessity to consider forbearance in addition to emotional and decisional forgiveness. Forbearance is defined as the suppression of emotional expression.

(c) Whereas there is a good accumulated body of research on forgiveness within the basic psychological scientific areas of social and personality psychology, there is little research on forgiveness interventions. Some interventions—notably Enright’s and Worthington’s—have been investigated within various cultural contexts. Sometimes they have been adapted to culture. At other times they have not been adapted to culture. Rather, the intervention is applied in a way
similar to the use in the United States. This raises questions about how people in non-United States countries might respond to a non-adapted forgiveness intervention.

With the research base of this review of the literature, I report an empirical study of an intervention to promote forgiveness in Chapter 3, Chapter 4 and Chapter 5, and Chapter 6. I report an intervention study that is conducted within the United States in which a six-hour version of the REACH Forgiveness model (Worthington, 2006) is used. To address the two major questions arising from my literature review, I examine both Virginia-born-and-raised students and international or first-generation foreign-extraction students to see their response to the REACH Forgiveness intervention group. I examine decisional forgiveness, emotional forgiveness, and forbearance as responses within the groups.
REVIEW OF THE LITERATURE

In the present review of empirical literature, I survey studies of forgiveness conducted in the non-U.S settings from 2005-2011. I define the main theoretical constructs, outline my method of obtaining research studies, and analyze the studies found. Then, I propose a research agenda for future study.

Defining the Main Constructs

Definition of Forgiveness

For many years, definitions of forgiveness have been proposed, justified, challenged, and debated by scholars in the field of forgiveness (Enright & Fitzgibbons, 2000; McCullough et al., 2000).

What forgiveness is not. By 2005, the field seemed to come to a consensus on what forgiveness is not (Worthington, 2005b). For example, forgiveness is different from excusing, condoning, justifying, pardoning or reconciliation (Enright & Fitzgibbons, 2000). Some acts that also reduce unforgiveness were recognized as being distinct from forgiveness (Worthington, 2001), such as successful vengeance, forgetting, accepting and moving on, forbearing, obtaining justice, relying on God, and seeking divine retribution by God.

What forgiveness is. Some researchers understand forgiveness as processes of reducing negative emotions and motivations based on unforgiveness (i.e., resentment, bitterness, anger, etc.; Worthington, 2005b). Some researchers have argued that positive experiences (emotions, motivations, and cognition) are also promoted by forgiveness (Fincham et al., 2005). However, Worthington (2005b) suggested that forgiveness had been simply defined as reducing negative experiences when researchers studied people who were strangers or were in a non-continuing or non-valued relationships, while forgiveness had been defined as both eliminating negative experiences and seeking to experience net positive emotions when researchers studied people in
a continuing or valued relationships. Furthermore, he suggested (Exline, Worthington, Hill, & McCullough, 2003) that there were two types of forgiveness: decisional forgiveness and emotional forgiveness, which I will explore later. It is likely that forgiveness is a multidimensional construct that can be defined variously depending on the focus of the researcher. Thus, how forgiveness is defined depends on the relationship context and on what a researcher focuses on as a marker of forgiveness.

Different Models of Forgiveness

Forgiveness can be viewed as intrapsychic processes, which occur within a person, or one can contextualize forgiveness within interpersonal processes that occur within an interpersonal dyad (Worthington, 2005a). Maybe because of the different processes, forgiveness theories or models have been created from a variety of perspectives (Miller, Worthington, & McDaniel, 2008). For instance, intrapsychic/ intrapersonal models of forgiveness include emotion-focused models (Malcolm & Greenberg, 2000), cognitive models (Gordon, Baucom, & Synder, 2000), decision-based models (DiBlasio, 1998), process models focusing on cognition, affect, and behavior (Enright & Fitzgibbons, 2000), motivational-change model (McCullough, Fincham, & Tsang, 2003), and stress-and-coping models (Witvliet, Ludwig, Vander, & Kelly, 2001; Worthington, 2006). Interpersonal models that explain forgiveness by examining interpersonal contexts include evolutionary-based models (McCullough, 2001), interdependence theory-based models (for a review see Rusbult & Van Lange, 2003) and reconciliation-based models (Sapolsky & Share, 2004). Most interpersonal models of forgiveness are better thought of as interpersonal contexts within which people might experience forgiveness.

Forgivingness and Conceptualization of Forgiveness

Forgivingness, the disposition to forgive that is relatively consistent across time, people, and events, has been frequently used in Mullet and his colleagues’ research (Neto & Pinto, 2010;
Paz et al., 2008; Suwartono et al. 2007). Roberts (1995) defined forgivingness as, “the disposition to abort one’s anger (or altogether to miss getting angry) at persons one takes to have wronged one culpably, by seeing them in the benevolent terms provided by reasons characteristic of forgiving” (p. 290). The difference between forgivingness and forgiveness lies in that forgivingness emphasizes the disposition or willingness to forgive in life generally while forgiveness emphasizes forgiving a particular offender(s) in a particular transgression.

Mullet, Barros, Frongia, Usai, Neto, and Riviere-Shafighi (2003) used the Forgivingness Questionnaire and identified a three-factor structure of forgivingness using exploratory factor analysis in a western-European sample. Mullet et al. named the three factors as lasting resentment, sensitivity to circumstances of the offense and willingness to forgive (sometimes labeled as “the unconditional forgiveness”). Lasting resentment is the tendency to keep the negative cognition, emotions, or avoidance behaviors towards offenders. Sensitivity to circumstances of the offense is the ability to decide whether to forgive or not forgive the offender based on the circumstances of the transgression (i.e., someone is more likely to forgive a family member than anyone else; someone will not forgive anyone unless the offender apologizes or begs for forgiveness). Willingness to forgive (sometimes labeled as the unconditional forgiveness) is the tendency to forgive the offender in any circumstance, even when the offender refuses to apologize or the transgression causes huge damage to the victim. Evidence supporting a three-factor structure of the Forgivingness scale has been found in many cross-cultural articles (Neto & Pinto, 2010; Paz et al., 2007, 2008; Suwartono et al., 2007).

The conceptualization of forgiveness is a different concept from forgivingness. Specifically, the conceptualization of forgiveness focuses on the way that people comprehend the nature of forgiveness. Forgivingness emphasizes the dispositional desire to practice forgiveness (Kadiangandu et al., 2007). Thus, two people might be both willing to forgive a particular
offense, but understand forgiveness quite differently. Alternatively, two people might each be willing to forgive an offense, but to one forgiver, forgiveness is understood as a decision to act differently toward a person and to the other forgiver, forgiveness is understood as a complete change in emotion toward the offender.

Four factors related to the conceptualization of forgiveness were identified in the French sample (Mullet, Girard, & Bakhshi, 2004). One factor was called change of heart, which means that they expect that forgiveness can change people’s attitudes and emotions through replacing negative emotions with positive emotions. A second factor was called more-than-dyadic process (sometimes labeled as broader process), which suggests that forgiveness not only occurs between people with direct conflicts, but also involves close relationships or others. That is, more than the conflicting dyad can be swept into a conflict and can end up with feeling unforgiving. A third factor, Mullet et al. (2004) described as encourages repentance (sometimes labeled as “forgiveness is good”) because forgiveness helps encourage the offender to express regret and repentance. A fourth factor was called immoral behavior (sometimes labeled as “forgiveness is bad”) because forgiveness may be taken as approval for the offense (even though the forgiver did not intend that) and could thus encourage irresponsibility of the offender. Similarly, he found that a four-factor structure of forgiveness has also been supported in many cross-cultural articles (Bagnulo et al., 2009; Kadiangndu et al., 2007; Tripathi & Mullet, 2010).

Culture: Individualism and Collectivism

In many articles, culture, especially when collapsed across individualistic and collectivistic societies, may affect people’s forgivingness (Sandage & Wiens, 2001; Sandage & Williamson, 2005). In an individualistic society, people conceive the self as an independent individual, and they emphasize personal achievement, well-being and responsibility. Thus, forgiveness is often seen as an intrapersonal construct. In a collectivistic society, people
conceive the self as an interdependent individual, and they emphasize collective goals, well-being and relationships. Therefore, the interpersonal context of forgiveness is often emphasized.

**Theoretical Approaches**

**Stress-and-Coping Theory of Forgiveness (Worthington, 2006)**

Worthington (2006) adapted general stress-and-coping theory to include forgiveness. In the adapted theory, a stressor (i.e., the rejection or hurt) makes a demand on a person to respond. The person engages in various appraisals (i.e., the cognitive, emotional, and motivational evaluations of the degree and types of psychological damage done by the rejection or hurt and the threat that the damage makes to one’s self-system or relational or personal identity and the threat to one’s sense of justice and honor). Primary appraisals are evaluations of threat (or not), and secondary appraisals are evaluations of coping capability. On the basis of the appraisals, people have cognitive, emotional, physiological, and motivational stress reactions (i.e., the unforgiveness complex of emotions, motivations, and ruminations). They try to cope with the situation and their emotional reactions to it. There are many ways to cope (Worthington, 2006) with experiences of stressful unforgiveness. These include the following. One can engage in angry, vengeful acts to pay back the damage done or get revenge. One can simply put the person out of one’s physical life and try not to think about the person, avoiding the person physically or cognitively. One can suppress one’s emotional expression and negative behaviors for the good of the future of the relationship or the harmony in the groups to which the couple belongs; this is called forbearance (Worthington, 2006). One can attempt to repair the relationship through talking about the transgression and arriving at some understanding, usually called reconciliation.

The stress-and-coping conceptualization of unforgiveness and forgiveness has been shown to take place in cultures throughout the world (for a review, see Hook, Worthington, & Utsey, 2009). These nations in which stress-and-coping theory is prominent include African
nations, far Eastern nations like Korea and China, Middle Eastern nations like Lebanon, Israel, and Arab nations, Australia and New Zealand, Central and South American nations, Western and Eastern European nations, and (of course) the United States and Canada (where the most research has been done).

**Collectivistic Forgiveness and Forbearance (Hook, Worthington, & Utsey, 2009)**

Hook, Worthington, and Utsey (2009) proposed a model of collectivistic forgiveness. In their model, they classified research into whether it occurred in largely collectivistic or individualistic cultures. They suggested two propositions relating to collectivistic forgiveness. First, they proposed that most people within individualistic cultures typically focus more on reducing emotional, motivational, and cognitive discomfort than do people in collectivistic cultures. People in collectivistic cultures are thought to be more likely to conceptualize hurts and wrongs in terms of their likelihood of damaging group harmony, and thus they are more focused (than most people in individualistic cultures) on restoring the relationship and on not behaving in ways that damage group harmony. The second proposition of Hook et al. (2009) suggested that, when people in collectivistic cultures forgive, it will more often be concerned with decisions to forgive (i.e., intent to behave in ways that do not express negative emotions or motivations and do treat the other person as a person of value) than with emotional forgiveness (i.e., restoring a sense of inner harmony and emotional equanimity within an individual). In individualistic cultures, emotional forgiveness was theorized to take a higher relative importance than was decisional forgiveness when compared to collectivistic cultures.

Hook et al. (2009) have dealt with forgiveness in individualistic versus collectivistic cultures. However, much research has shown that regardless of the overall culture, people within any culture array along a normal curve on individualism and collectivism. When comparing two cultures there might be differences in the means around which the normal distributions center.
Furthermore, those dimensions are not fully complementary to each other. Namely, some people can be high (or low) in both individualism and collectivism (Oyserman, Coon, & Kemmelmeier, 2002; Triandis, 1995). There are also regional differences in mean individualism and collectivism within a country or other geographical entity.

Hook and his colleagues tested their model of collectivistic forgiveness in a variety of settings including Nepal (Watkins et al., 2011), the United States (Hook et al., 2011), and China and New Zealand (Hook, Worthington, Davis, Watkins, Hui, Luo, Fu, Shulruf, & Morris, 2011). In the empirical tests, the model was generally supported. However, in the article on China and New Zealand, Hook et al. (2011) surveyed Chinese respondents (N=172) and New Zealand respondents (N=91). They found that overall, participants from New Zealand were more forgiving than were Chinese participants. They interpreted their findings as not fully supporting the model. Namely, in China, there was less evidence of any type of forgiveness—decisional or emotional—than in New Zealand. Hook et al. (2011) suggested that within China, when forgiveness occurred, people more often engaged in decisional than emotional forgiveness, and that concerns with preserving group harmony led Chinese participants more frequently to attempt to suppress emotional expression and curb expression of negative motivations—defined as, forbearance—even at cost to their emotional equanimity.

The main concern in the collectivistic culture of China was to restore group harmony through allowing the rejecting/offending person to save face publicly. This suggests that the importance of (a) group harmony and (b) forbearance in the process of forgiving within cultures and individuals who value collectivism, motivated by concerns for preserving group harmony and face-saving for the offender.

The New Big Five Personality Processes (McAdams & Pals, 2006)
In an effort to contribute a comprehensive framework to personality psychology, McAdams and Pals (2006) put forward five fundamental principles for understanding a whole person. They conceive of personality as an individual’s uniqueness. People are unique due to differences in five domains—the “new big five” in contrast to Costa and McRae’s Big Five. The new big five personality processes are these: evolutionary, dispositional, adaptational, narrative, and cultural processes. Each of these new big five processes is thought to be tied to mini-theories within the forgiveness literature. First, uniqueness and evolutionarily set factors due to evolution and human nature are addressed in McCullough’s (2008) evolutionary approach to revenge and forgiveness. People might act in ways driven by evolution—both biological and social evolution. Second, dispositional traits affect people’s forgivingness. The Big Five dispositions fit McAdams and Pals’ scheme when applied to forgivingness, as has been shown in a review by Mullet, Neto, and Riviere (2005). Third, there are varieties of characteristic adaptations that people make to environmental demands. Stress-and-coping theory might describe these adaptations in the forgiveness literature (Worthington, 2006). Fourth, complex and detailed life narratives are created by individuals to explain their own “stories” of the transgressions they face and the ways they deal with them. Few theorists have specifically applied narrative psychological methods to forgivingness. However, several theoretical approaches explain how people’s narratives or “stories” might differ or be similar within groups. For example, both cultural perspectives and the stress-and-coping theory might explain people’s narratives. Fifth, people differ in their responses to transgressions due to being situated in different cultures. Thus, cultural considerations—such as research cross-culturally by Mullet and his colleagues and theorizing by Hook and his colleagues might be considered to affect responses to transgressions.

Thus, in summary, in the present section, I have described some important theoretical perspectives—the stress-and-coping perspective on forgiveness and the cultural perspective on
forgiveness. I also provided a meta-theory—McAdams and Pals’ (2006) new big five personality processes, within which we might contextualize the two smaller personality perspectives. In the remainder of the review, I will use most frequently the cultural and stress-and-coping theories specifically applied to forgiveness and the events surrounding transgressions. I will review the empirical research with these two theories in the forefront of explanation.

**Method of the Review**

I reviewed empirical research journal articles about interpersonal forgiveness. I limited the review to empirical studies conducted in the non-U.S. settings from 2005-2010.

On Oct 10, 2010, I searched *PsycINFO* (Psychological Abstracts) with the forgiveness and culture as keywords. I chose articles only from 2005 to 2010. After excluding studies conducted in the U.S. or involved intergroup forgiveness, I found only six empirical articles that addressed interpersonal forgiveness that were also conducted using samples outside of the U.S. I then reviewed the discussion and references sections of the 6 articles. I found an additional 16 articles that also met my criteria (thus, the total \( n \) was 22 to that point).

On March 20, 2011, I surveyed the 22 articles, and identified the four journals that contained the most articles discussing the forgiveness issue in the international settings. These were *Journal of Conflict Resolution, International Journal of Psychology, Journal of Cross-Cultural Psychology*, and *Personality and Individual Differences*. In identifying all articles in those journals within the range of 2005 to 2010, I searched for forgiveness articles with authors from foreign universities. I found another 10 articles about the interpersonal forgiveness studies done in the non-U.S. countries. Thus, I found a total of 32 articles that addressed the interpersonal forgiveness issue out of the U.S. Those articles were the corpus of articles I reviewed. They are indicated by an asterisk in the reference list.

**Results of the Review of the Empirical Literature**
In this section, I organize and discuss the actual results of the empirical studies on forgiveness in non-U.S. participants. The empirical findings are discussed in the following areas: the comparison of forgiveness and forgiveness-related constructs between two countries or cultures; the relationship between personality and forgiveness; the relationship between religion and forgiveness; forgiveness within marriages and families; forgiveness among adolescents; other forgiveness-related social constructs; and interventions to promote forgiveness.

The Comparison of Forgiveness and Forgiveness-related Constructs between Two Countries or Cultures

Seven articles involved participants from two countries, in which one of the countries was presumed to be (on the average) more individualistic and the other to be more collectivistic (Bagnulo, Munoz-Sastre, & Mullet, 2009; Hui & Bond, 2009; Kadiangandu, Gauche, Vinsonneau, & Mullet, 2007; Neto & Pinto, 2010; Paz, Neto & Mullet, 2008; Suwartono, Prawasti, & Mullet, 2007; Tripathi & Mullet, 2010). Through the comparison of the forgivingness level or understanding of forgiveness between participants from two different countries, these studies aimed to explore how forgiveness might be experienced or perceived differently in individualistic and collectivistic societies. Another one study (Ballester, Munoz-Sastre, & Mullet, 2009) investigated the relationship between forgivingness and the conceptualizations of forgiveness with a French sample.

Mullet’s studies. Six of the studies are from Mullet and his collaborators’ (i.e., Neto) laboratory. The lone article from a different lab is by Hui and Bond (2009). Three studies (Neto & Pinto, 2010; Paz, Neto & Mullet, 2008; Suwartono, Prawasti, & Mullet, 2007) shared a similar method and analysis (i.e., exploratory factor analysis or/and confirmatory factor analysis) to examine differences in forgivingness between two countries. They all recruited voluntary participants and administered either the original or modified Forgivingness Questionnaire
(Mullet et al., 2003). They expected to test whether the three-factor structure of forgiveness, supported by several studies in the western countries (Mullet, Barros, Frongia, Usai, Neto, & Shafighi, 2003; Neto & Mullet, 2004) was also found in the sample of collectivistic societies.

From their previous research, the three-factor structure of forgiveness includes the following. First, lasting resentment is the tendency to keep the negative cognition, emotions or avoidance behaviors towards offenders. Second, sensitivity to circumstances of the offense is the ability to decide whether to forgive or not forgive the offender based on the circumstances of the transgression. For example, someone is more likely to forgive a family member than anyone else. Also, someone might not be willing to forgive anyone unless the offender apologizes or begs for forgiveness. Third, the willingness to forgive is the tendency to forgive the offender in any circumstance, even when the offender refuses to apologize or the transgression causes huge damage to the victim. the authors intended to replicate the three-factor structure across the samples. These articles compared the levels of forgiveness across samples, for each individual factor.

All three articles supported that the three-factor structure of the forgivingness measure was replicated (with some small differences) in different samples. It was hypothesized in all three articles that the participants from more collectivistic countries should demonstrate higher sensitivity to circumstances and higher willingness to forgive, but lower levels of lasting resentment than would the participants from more individualistic countries.

Suwartono et al. (2007) compared the levels of forgiveness between 126 Indonesian students and 203 French students. They found consistent results with the hypotheses. Indonesians had higher willingness to forgive and sensitivity to circumstances, but lower lasting resentment towards the perpetrator than did French participants. Neto and Pinto (2010) compared 251 participants from Portugal with 112 participants from Angola. Their’s findings partially
supported the hypotheses. As hypothesized, Angolan participants showed a lower level of lasting resentment towards the offender and a higher level of willingness to forgive the offender than did Portuguese participants. Contrary to their expectation, Portuguese participants demonstrated higher sensitivity to circumstances than did Angolan participants. Paz, Neto, and Mullet (2008) recruited 766 Chinese and 801 French as their participants. Their findings were contrary to their expectations. Compared with their counterparts from France, Chinese participants were higher in both sensitivity to circumstances and lasting resentment. But there was no difference between Chinese and French samples in willingness to forgive. Only from the three articles reviewed above, we cannot obtain a consistent conclusion based on their hypotheses.

In three other articles (Bagnulo, Munoz-Sastre & Mullet, 2009; Kadiangndu, Gauche, Vinsonneau, & Mullet, 2007; Tripathi & Mullet, 2010), Mullet and his colleagues measured different levels of understanding forgiveness between two samples of participants from one collectivistic country and one individualistic country. Mullet et al. (Mullet, Girard, & Bakhshi, 2004) computed an exploratory factor analysis on the first half of the total 1029 French participants and then a confirmatory analysis on the other half of the sample. Four factors related to the understanding of forgiveness were identified in the French sample (Mullet et al., 2004). They were change of heart, more-than-dyadic process, encourages repentance, and immoral behavior. In the each of the three articles that I will review, the four-factor structure of conceptualizations of forgiveness was labeled a little differently, but represented similar meanings. For example, Kadiangandu et. al. (2007) labeled the factor called “encourages repentance” (in other studies) as “forgiveness is good,” and the factor called “immoral behavior” (in other studies) as “forgiveness is bad.”

It seems obvious that people understand forgiveness as being either good or bad. For some, justice is all-consuming, and forgiveness is seen as anathema because forgiveness may
approve the offense and encourage the irresponsibility of the offender. For others, their religion might make forgiveness a desired virtue among believers since forgiveness helps encourage the offender to express the regret and repentance. Mullet et al. (2004) also found that some people understand forgiveness as a change of heart, which means that they expect that forgiveness can change people’s attitudes and emotions through replacing negative emotions with positive emotions. The factor that Mullet et al. labeled “more-than-dyadic process” suggests that forgiveness not only occurs between people with direct conflicts, but also involves close relationships or others. That is, more than the conflicting dyad can be swept into a conflict and can end up with feeling unforgiving.

All three articles found that the four-factor structure of conceptualizations of forgiveness was evidenced in collectivistic samples. Among these three articles, two articles (Bagnulo et al., 2009; Kadiangandu, et al., 2007) shared the similar methods and procedure. They both used a modified version of the Conceptualizations of Forgiveness Questionnaire by Mullet et al. (2004) to measure participants’ understanding of forgiveness. They both recruited participants from one collectivistic country and one individualistic country and then compared the results of two samples. Bagnulo et al. (2009) studied N = 188 people from Uruguay and N = 258 people from France. Kadiangandu et al. (2007) studied N = 276 people from the Congo and N = 343 people from France. The investigators in both studies used confirmatory factor analysis and a series of analyses of variance (ANOVAs). They both found that conceptualizations of forgiveness was described by the four factors in the samples. Their results showed a little difference as below. Kadiangandu et al. (2007) found that the main difference between the way that the Congolese and French people understood forgiveness was in their ratings of the change-of-heart factor. Congolese participants scored higher on this factor than did their French counterparts. Congolese participants agreed more on the items linked with more-than-dyadic process than did French...
participants. The same result was also found for the factor, forgiveness is good. The forgiveness-is-bad factor resulted in no differences between French and Congolese participants. Bagnulo et al. (2009) found that Uruguayan participants agreed more on the items linked with more-than-dyadic process than did French participants. But the opposite result was found for the “immoral behavior” factor. In addition, they did not find the difference of the scores for the “change of heart” factor and the “encourages repentance” factor between Uruguayan and French participants.

Tripathi and Mullet (2010) differed from the above two articles in that Tripathi and Mullet (2010) recruited Hindu participants and compared the result of the sample with the results from the past research (instead of collecting a comparison group). Compared with the western Europeans, Hindus’ scores for the “encourages repentance” and “immoral behavior” were much higher while the score for “change of heart” was lower. Besides, Tripathi and Mullet (2010) got the similar score for “broader process.” Between western Europeans and Hindus Compared with Congolese adults, Hindus’ scores for “encourages repentance,” “immoral behavior,” and “change of heart” were higher; whereas, the score for “broader process” was much lower.

Apparently, how people perceive forgiveness and how they generally practice forgiveness should be somewhat correlated. Ballester et al. (2009) initiated the investigation first in France. Participants (N=423) completed the Conceptualizations of Forgiveness Questionnaire (Mullet et al., 2004) and the Forgivingness Questionnaire (Mullet et al., 2003). Ballester et al. (2009) found that perceiving forgiveness as a change of heart was positively correlated with unconditional forgiveness and sensitivity to circumstances. Perceiving forgiveness as a broad process (more-than-dyadic process) was also positively correlated with unconditional forgiveness. Perceiving forgiveness as an immoral behavior was positively correlated with lasting resentment. This was a good attempt to connect the research of forgivingness and of
conceptualization of forgiveness, however, whether the results can be replicated in other countries, especially in collectivistic culture, still needs to be explored further.

**Hui and Bond’s (2009) study.** A more complex study conducted by Hui and Bond (2009) introduced a model that examined individuals’ face loss, motivations, and culture. Their relationships with forgiveness and their interactive influences were also examined. College students in Hong Kong (China; \( N = 92 \)) and in the U.S.A (\( N = 111 \)) participated the study. Students recalled a psychological transgression or hurt by someone else within the previous two years. They then completed several related questionnaires to measure their perceived face loss, motivation to seek revenge or to maintain the relationship, self-construal and willingness to forgive. Hui and Bond (2009) employed structural equation modeling (SEM), obtaining a final model to support both cultural-general and cultural-specific pathways to forgiveness. For both the U.S. and the Hong Kong sample, perceived face loss directly affected the willingness to forgive the perpetrator. This effect was found across cultures. In addition, the strength of relationship between the individual’s intention to maintain the relationship and forgiveness was not found to be different between two samples. However, only in the Hong Kong sample, the target’s motivations to retaliate against their offenders were negatively associated with the willingness to forgive them.

**Critique from Theoretical Perspectives**

The hypotheses in Mullet et al.’s studies were based on the idea that culture, especially in individualistic or collectivistic societies, may affect the forgivingness of people (Sandage & Wiens, 2001; Sandage & Williamson, 2005). In an individualistic society, people conceive of the self as an independent individual and emphasize personal achievement, well-being and responsibility. Thus, forgiveness is often seen as an intrapersonal construct. In a collectivistic society, people conceive the self as an interdependent individual and emphasize collective goals,
well-being and relationships. Therefore, forgiveness is often seen as more of an interpersonally embedded construct.

In their review and theoretical article, Hook et al. (2009) suggested the second proposition, that when people in collectivistic cultures forgive, it will more often be concerned with decisions to forgive than with emotional forgiveness. In individualistic cultures, emotional forgiveness will take a higher relative importance than will decisional forgiveness when compared to collectivistic cultures.

Therefore, Mullet et al. did share some similar thoughts with Hook et al. when they measured different levels of “understanding the forgiveness” in different cultures. Two factors related to understanding the forgiveness they identified were “Change of heart” and “more-than-dyadic.” Linked with Hook et al.’s two propositions, “Change of heart” was more alike emotional forgiveness and “more-than-dyadic” is more alike group value. Most articles done in Mullet’s lab (Bagnulo et al., 2009; Kadiangandu, et al., 2007; Tripathi & Mullet, 2010) supported that people in more collectivistic culture agreed more on the items linked with “more-than-dyadic” or “broader process” than their counterparts in more individualistic culture when they conceptualize the forgiveness. Therefore, Hook et al (2009)’s first proposition can be evidenced that collectivists focus on preserving the group harmony and thus restoring the relationship for the sake of the group. But the same or the opposite pattern cannot be found for the factor of “change of heart” when comparing the levels between different cultures (Bagnulo et al., 2009; Kadiangndu et al., 2007; Tripathi & Mullet, 2010).

**The Relationship between Religion and Forgiveness**

Religion plays an important role in the studies of forgiveness, especially unconditional forgiveness that is highly valued in many religious beliefs. From various perspectives, five articles (Akl & Mullet, 2010; Hui, Watkins, Wong, & Sun, 2006; Mullet & Azar, 2009; Neto,
2007; Neto & Mullet, 2007) explored the relationships or comparisons between religion, culture and forgiveness (conceptualization or practice). Two of them (Akl & Mullet, 2010; Neto, 2007) focused on the relationship between three-aspect construct of forgiveness and religion.

**Perception of God and forgiveness.** Akl and Mullet (2010) hypothesized that their presumed three-factor structure of human forgiveness (Lasting Resentment, Sensitivity to Circumstances, and Willingness to forgive) would be related to individuals’ conceptualizations of God’s forgiveness. In addition, they predicted that people would conceptualize divine forgiveness, according to the following patterns: Resentful God, Sensitive God and Unconditionally Forgiving God. Christians living in Paris (N = 182) participated in the study. They filled out the Forgivingness Scale (Mullet et al., 2003), the Intrinsic Religious Motivation Scale (Hoge, 1972), and several questionnaires referring to participants’ possible conceptualizations of divine forgiveness. The data supported Akl and Mullet (2010)’s hypothesized pattern of conceptualizing God. In addition, they found that unconditionally forgiving others was mainly correlated with how people conceptualized divine forgiveness. If participants conceptualized divine forgiveness as coming from an unconditionally forgiving God, then they tended to endorse unconditional forgiveness of human offenders. If they conceptualized divine forgiveness as due to a sensitive God, then they tended to forgive human offenders depending on certain circumstances (i.e., presumably exercising their own sensitivity to circumstances). Furthermore, Akl and Mullet (2010) found that lasting resentment of human offenders was associated with believing that God was unpredictable. We might infer that people were either mirroring in their own life what they considered was divine forgiveness or that people were projecting on God what they typically did in their own life. There are, of course, other causal inferences, but these immediately present themselves.
Religious belief in God and forgiveness. Neto (2007) investigated a traditionally important question as to whether people with strong religious involvement have more willingness to forgive and less lasting resentment than do people who do not believe in God. He recruited 152 college students in Portugal who completed the Forgivingness Scale (Mullet et al., 2003). Participants who stated that they held religious beliefs (not religious involvement) reported higher propensity to forgive and lower enduring resentment than did people without endorsing religious beliefs. But there was no difference of sensitivity to circumstances between religious people and non-religious ones. That is, people who reported holding religious beliefs and who did not report holding religious beliefs did not differ when deciding whether to forgive or not forgive the offender based on some circumstances.

Religious practices and forgiveness. Hui, Watkins, Wong, and Sun (2006) further investigated the effect of religious practice (not reported belief) on people’s forgiveness levels and also the conceptualization of forgiveness. They recruited 944 students and teachers from secondary co-educational schools in Hong Kong, who completed the Chinese Concepts of Forgiveness Scale devised by the authors and also the forgiveness questionnaire (Kadiangandu et al., 2001). Hui et al. (2006) found that people with religious practice or without religious practice did not show any difference in their own forgiveness levels. However, religious practice made a significant effect on how people perceive forgiveness. For example, people who reported religious practice viewed forgiveness as a benefit, and reported more generosity, compassion and religious obligation relative to those who did not report engaging in religious practices. In addition, people who reported religious practice expressed the idea of forgiveness more frequently and tended to forgive others due to social harmony.

Trying to disentangle religious and cultural reasons for forgiving. Religion is sometimes—perhaps often—confounded with culture. It is difficult to determine which is
affecting forgiveness more. Neto and Mullet (2007) and Mullet and Azar (2009) attempted to disentangle the two. They attempted to do so by examining forgiveness, using the Forgivingness Questionnaire to assess three components of forgivingness by people of different religions within a localized culture (e.g., Macau, China). The presumption is that by limiting a sample to a small locality, culture could be nearly equalized and thus, the effects of religious preferences might be discriminated from culture.

**Comparing people of different religions and similar cultures on forgiving.** Neto and Mullet (2007) studied the similarities and differences in forgiveness for people who followed Buddhist principles ($n = 238$), Christian principles ($n = 123$) and mixed principles ($n = 130$) in Macau of China. Participants completed the extended version of the Forgivingness Questionnaire (Mullet et al., 2003). The three-factor structure of forgivingness was evidenced in both Christian and Buddhist Chinese samples. However, the Christian participants scored higher in willingness to forgive and slightly lower in lasting resentment than did the Buddhist participants. There was no difference in sensitivity to circumstances between Christian and Buddhist participants. Mixed-religion participants showed more similar results to the Buddhist sample for enduring resentment, and more similar results to the Christian sample for willingness to forgive. Neto and Mullet sought to eliminate the effect of Chinese ethnicity to determine differences due simply to religion. While their approach yields some intriguing findings, we must note that they did not, indeed, eliminate cultural factors. Both Chinese Buddhists and Christians might be different from Indian Buddhists, Buddhists in the United States, of from Indian Christians and Christians in the United States. The cultural and religious confounds cannot be eliminate by single ethnicity samples. At best, they found some ethnicity-minimized differences within a single localized community.
When religious practices are constant, but countries differ. In the article conducted by Mullet and Azar (2009), the opposite tack was taken. Religious preferences were held constant across two different countries and (thus) cultures. Compared with the previous article with all participants living in China, Mullet and Azar recruited participants from both Lebanon and France. They assessed 119 Lebanon Muslim (LM), 121 Lebanon Christians (LC) and 151 French Christians (FC). Participants completed the extended version of the Forgivingness Questionnaire (Mullet et al., 2003). Thus LM and LC shared the similar culture (both are Lebanese) and LC and FC shared a similar religious tradition (both are Christians). Because forgiveness is not unconditional in the Muslim tradition and apologies and repentance are part of procedures prior to offering forgiveness, the researchers hypothesized that a different structure of forgivingness with the presence of apologies should be evidenced in the Muslim sample. Thus, Muslims were hypothesized to differ in sensitivity to circumstances (which assess the factors of response to apology, etc.). Through the confirmatory factor analyses and exploratory factor analyses, they found that three-factor structure of forgivingness was replicated in the sample of Christians (both LC and FC) and as hypothesized, a different structure of forgivingness was evidenced in the Muslim sample (LM). In addition, the unconditional forgiveness score for the LM sample was lower than that for both LC and FC samples. Of course, this runs into a difficulty by presuming that religion is uniform across cultures. France is highly Roman Catholic, and furthermore, few people endorse religion in France—perhaps as few as 5 percent. Those who do endorse religion are likely different from other French people in many ways. In Lebanon, in contrast, religion is highly polarized through years of religiously flavored civil war. People who identify publicly as Christians or as Muslims are often targets for violence. Thus, personality characteristics of such people are likely highly differentiated from those associated with religion in France. Again, the attempts to separate religion from culture through simple comparisons are likely highly over-
simplified and it is unclear what is being identified. Most certainly it is not merely the effects of religion or of culture.

**Critique of attempts to disentangle religion and culture.** Mullet’s research seeks to discern differences in forgiveness due to cultural, religious, and self-construal factors. His methods often are not as strong as they could be for a number of other reasons as well. One reason is methodological. He repeatedly re-analyzes his three-factor Forgivingness Questionnaire. In different studies, different items end up factoring together. It becomes difficult to generalize across studies even though Mullet and his collaborators name the factors similarly across the studies. A second reason is his strategy of confining his comparisons to one or at most two locations. Separating religious and cultural aspects of forgiveness will likely take a large sample of people all over the world of all major religious groups. Third, he does not summarize and compare across studies. His research is ripe for a meta-analytic review. But, at present, that synthetic review has not been forthcoming.

**Theoretical Critique**

McAdams and Pals (2006) put forward five fundamental principles for understanding a whole person. In their model, personality is conceived as an individual’s uniqueness based on the general evolution and human nature, demonstrated as the dispositional traits, along with varieties of characteristic adaptations, woven with complex and detailed life narratives, situated in different culture. Characteristic adaptations, such as motives, goals, values, plans, virtues, etc are contextualized in time, place or social role. Culture influences the development of dispositional traits, characteristic adaptations and life narratives in different ways. For example, characteristic adaptations may be occurred at different time and in different ways in different culture. From the perspective of this model, a person’s religious orientation/belief is shaped by the culture that the person attaches to. It is impossible to disentangle the two constructs. For example, in Mullet
and Azar (2009)’s article, they investigated the role of religion (Islam or Christianity) in Lebanese’s forgiveness. However, Muslim and Christians in Lebanon are unavoidably influenced by Lebanese culture and therefore compared with other culture, there may exist some difference in either religious principles or traditions or both.

**The Relationship between Personality and Forgiveness**

Five articles (Ballester, Munoz Sastre, & Mullet, 2009; Chiaramello, Munoz Sastre, & Mullet, 2008; Munoz Sastre, Vinsonneau, Chabrol, & Mullet, 2005; Neto, 2007; Strelan, 2007) examined the relationships between personality and forgiveness. They maintained different foci. First, I will summarize their methods. Then, I will review the results of the studies. Then, I will comment on generalizations and critiques.

**Methods of the studies.** Neto (2007) examined the way that forgiveness is correlated with the personality traits in the five-factor model of personality. Five-factor model of personality includes neuroticism-emotional stability, extraversion-introversion, openness-closeness to experience, agreeableness-antagonism, and conscientiousness-undirectedness.

Ballester et al. (2009) investigated the relationship between three-factor structure of forgivingness and some major personality traits, such as openness, agreeableness and neuroticism. French participants ($N = 423$) completed the Forgivingness Questionnaire (Mullet et al., 2003) and the International Personality Item Pool (Goldberg, 1999).

In contrast to the two studies mentioned above measuring multiple personality variables, Sastre and his colleagues (2005) only attempted to examine the relationship between forgivingness and the paranoid personality style. They studied the paranoid tendencies because paranoid personality style can be perceived as including both neuroticism and non-agreeableness.

Chiaramello and his colleagues (2008)—which include Mullet—focused on the relationship between personality and seeking forgiveness from the perspective of the offenders.
They assumed that there are three factors of seeking forgiveness for the perpetrators would correspond to the three factors of granting forgiveness identified repeatedly by Mullet. The adapted factors are (a) lasting inability to seek forgiveness (corresponding to resentment), (b) sensitivity to circumstances to seek forgiveness, and (c) readiness to apologize or seek forgiveness (corresponding to willingness to forgive). Besides the Big Five, Chiaramello et al. (2008) also measured many other personality characteristics, such as anger, anxiety, cynicism, paranoid tendencies, guilt, and punitive tendencies.

From a different perspective, Strelan (2007) examined the roles of two different individual difference variables, narcissism and proneness to guilt on three aspects of dispositional forgivingness—self-forgivingness, forgivingness of others and forgivingness of situations—identified by the Heartland Forgiveness Scale (Thompson et al., 2005). Forgiveness of situations represents forgiveness of the circumstances surrounding a transgression (e.g., illness or accident) when it is hard to identify the source of transgression as being self or others. Furthermore, Strelan (2007) also attempted to explain the supported relationship through mediation analysis. They recruited 176 undergraduates at a large Australian university and required them to complete multiple scales or inventory measuring their personality and their forgiveness. They include The Heartland Forgiveness Scale (HFS; Thompson, Snyder, Hoffman, Michael, Rasmussen, & billings, et al., 2005), The Narcissism Personality Inventory (NPI; Raskin & Terry, 1988) and The guilt subscale of the revised Harder Personal Feelings Questionnaire (PFQ2; Harder & Zalma, 1990).

**Results of the five studies.** The five studies had different foci, and participants were from different countries (one from Portugal, one from Australia and three from France). Nevertheless, the results from four articles (Ballester et al., 2009; Chiaramello et al., 2008; Munoz Sastre et al., 2005; Neto, 2007) showed some similarities, especially on the relationship...
between neuroticism or agreeableness and forgiveness or seeking forgiveness. For example, Neto (2007) and Ballester et al. (2009) both found agreeableness was negatively associated with lasting resentment.

There were different findings across the studies. Neto (2007) found that agreeableness was positively associated with willingness to forgive. Neuroticism was positively associated with lasting resentment, but negatively associated with willingness to forgive. Gratitude predicted a generally positive attitude towards forgiveness.

Ballester et al. (2009) found that neuroticism was positively correlated with sensitivity to circumstances. Openness was negatively associated with lasting resentment. Because paranoid tendencies combine high neuroticism and low agreeableness, we may understand the findings from the two articles examining the role of paranoid tendencies. Sastre and his colleagues (2005) found that paranoid tendencies were positively related to lasting resentment and negatively related to willingness to forgive. Chiaramello and his team (2008) showed that anger, cynicism and paranoid tendencies were positively related to reluctance to seek forgiveness. Low agreeableness and low openness were related to reluctance at seeking forgiveness. Meanwhile, cynicism was related to sensitivity to circumstances in seeking forgiveness. Future-oriented participants preferred more seeking forgiveness than past-oriented participants maybe because they hope to maintain group relations in the future.

Strelan (2007) studied narcissism and forgiveness. Narcissism manifests in two ways. Narcissists have an inflated view of self-functioning and self-confidence. Narcissists also might have a sense of entitlement. Strelan (2007) focused on the sense of entitlement in which the narcissist presumes that he or she should be treated in a superior way in an interpersonal relationship. Narcissistic entitlement was negatively associated with forgiveness of others; agreeableness was positively associated with forgiveness of others. He also studied self-
forgiveness. Narcissism was positively associated with self-forgiveness and proneness to guilt was negatively associated with it. Narcissistic entitlement was unrelated to forgiveness of situations. To further explain these relationships, Strelan (2007) examined the mediation between entitlement and forgiveness of others and also between entitlement and self-forgiveness. Agreeableness mediated between entitlement and forgiveness of others. Guilt proneness and self-esteem each mediated between narcissism and self-forgiveness.

Critique of the studies. The three out of five articles (Ballester et al., 2009; Munoz Sastre et al., 2005; Neto, 2007) that have assessed the relationships between forgiveness and personality have employed the same self-report questionnaire method –The Forgivingness Questionnaire (Mullet et al., 2003). In addition, most articles (except Neto, 2007) recruited participants from individualistic countries. For example, three researches were conducted in France (Ballester et al., 2009; Chiaramello et al., 2008; Munoz Sastre et al., 2005) and one was conducted in Australia (Strelan, 2007). This research tendency of overly replying on a single forgiveness questionnaire or constricting the personality research into only individualistic countries will not yield many insights into the field. Furthermore, we find no attempt to contextualize the study within the cultures from which the samples were taken. Given that much prior research has pointed out the effects of culture, religion, and self-construal, the investigation of personality attributes and of the Big Five traits, without consideration of culture seems that it did not fully use the data. McAdams and Pals (2008) have suggested their “new big five” personality processes. If we examine the studies on personality and forgiveness from this theoretical point of view, we see that this research on personality considers only one aspect of McAdams and Pals’ theory—the person’s dispositional signature. That, at best, isolates traits from all other levels of personality and social interaction. Other aspects of personality need investigation.
Forgiveness within Marriage

Paleari and his colleagues (Paleari, Regalia, & Fincham, 2009; Paleari, Regalia, & Fincham, 2010) conducted two studies regarding forgiveness in close relationships, especially between couples (engaged, married, or cohabiting). The earlier article (Paleari et al., 2009) examined the estimated reliability and construct validity of the Marital Offense-Specific Forgiveness Scale (MOFS) with 328 married couples in Italy, a more individualistic country. Specifically, through Studies 1, 2, and 3, the estimated internal consistency and evidence bearing on the discriminant validity, convergent validity and predictive validity of the new measure were assessed. For example, the two dimensions of the scale are Benevolence (positive) and Resentment-Avoidance (negative), both of which had strong estimated internal consistency. Convergent construct validity of the new scale was supported by the correlation between the dimensions and a couple of variables associated with forgiveness. Based on the new measure they created and supported, Paleari et al. (2010) recruited 92 childless couples (56 engaged, 22 married and 14 cohabiting) in Italy and tested a mediational model of effective arguing on the effect of conflict strategies and forgiveness dimensions, which further predicted the couple relationship. These couples recalled the most serious transgression by their partners and some other information related to the transgression. They completed several questionnaires that measured their marital forgiveness of a specific offense, the strategies to solve conflicts, perceived effective arguing, and marriage quality. Generally, the relationship between conflict strategies and relationship quality was mediated by effective arguing for both partners. However, there was gender difference for this mediation. Men’s perceived relationship quality was essentially predicted by their own positive conflict strategies (i.e., compromising and benevolent). But women’s appraisals were predicted by both their own and their partner’s positive strategies. For both men and women, compared with the negative dimensions of conflict
strategies, positive responses (i.e., benevolent and compromising ones) played an overall weaker role in predicting their effective arguing.

**Forgiveness in Family**

**Methods.** Two articles by the Mullet team (e.g., Akl & Mullet, 2010; Mullet, Riviere, & Munoz Sastre, 2006) addressed forgiveness in the family relationship and examined whether as well as how father, mother and children in a family interacted to influence the forgiveness of each individual. Both articles shared a similar design and investigated the relationship of individuals’ forgiveness in the family by the comparison of forgiveness levels between parents and children.

One of the differences between these two articles was that Akl and Mullet (2010) only measured adults’ childhood memories about their parents’ forgiveness situations while Mullet et al. (2006) actually recruited both adults and their biological parents and measured their parents’ forgiveness directly. A second difference between these two studies was that participants for Akl and Mullet (2010)’s article were 182 Christians living in Paris, France, and participants for Mullet et al.’s (2006) study were 166 young adults and their biological parents (166 fathers and 166 mothers) in France. A third difference between these two studies was the use of different questionnaires to assess forgivingness. Akl and Mullet (2010) used the three-factor version of Forgivingness Scale (Mullet et al., 2003), but Mullet et al. (2006) used the four-factor version of the Forgivingness Questionnaire (Mullet et al., 2003; Munoz Sastre et al., 2005).

**Results.** Despite of these differences, the results of two studies were not contradictory. Generally, Mullet et al. (2006) differentiated the gender difference of the parents’ influence associated with children’s forgivingness factors. For example, Akl and Mullet (2010) found that lasting resentment of adult children was associated with unpredictability in the family and also associated with their resentful parents. Mullet et al. (2006) explored parent-adult child
Lasting resentment was positively associated with adult children’s mothers’ lasting resentment. Similarly, Akl and Mullet (2010) found that children’s sensitivity to circumstances was mainly related to participants’ reports about their parents’ sensitivity to circumstances. Mullet et al. (2006) pinpointed that sensitivity to circumstances was also positively associated with their fathers’ sensitivity to circumstances. Moreover, willingness to seek revenge in young adults was positively associated with the willingness to seek revenge in their fathers (but not mothers).

**Critique of marriage and family studies.** Little research has studied parent-child relationships. There are a number of critiques of the extant research. In many ways, these critiques mirror all other sections in this present review. First, in both of the studies reviewed here, the participants are adult children—not children in their childhood or adolescent years. By the time children become adults, the effects of their parents have become moderated by many factors. More studies are needed of actual young children and adults. Second, the samples are geographically restricted to France and largely to those who identify as Christians. There are no considerations that attempt to contextualize the findings in cultural context. There are no comparisons with Asian countries, Australian countries, African countries, middle Asian countries, South or Central American countries. France is like other countries in Western Europe and shares many cultural similarities with the United States. Investigators need to go further afield for studies of the family, and they need to systematically compare different countries around the world. Third, Mullet relied completely on questionnaires. This is characteristic of the methods used by his team, but sole reliance on questionnaires is always fraught with risks of lack of validity of the insights of the respondents. Studies that manipulate conditions in experimental designs, longitudinal methods, and measures that involve non-questionnaire responding (e.g., cortisol, behavior ratings, reaction time, etc.) need to be employed to relate questionnaire
responses to other behavior and markers of unforgiveness and forgiveness. Fourth, specifically, the questionnaires used are those developed by Mullet, which sample only a limited perspective on forgiveness. Other measures need to be employed.

**Context of Forgiveness**

Compared with the two articles described above, Maio, Thomas, Fincham, and Carnelley (2008) focused on the broader context where forgiveness happens, including the individual-level, relationship-level and family-level. To achieve this goal, they created a forgiveness measure among family relationships and tested its psychometric properties through a series of analyses. Finally, they ran a longitudinal study to examine whether the antecedents and consequences of forgiveness could still be modeled by the measure after 1 year. Individuals (N=342) from 114 families were recruited, including two opposite-sex parents and one of their children (12-16 year-old). The participants were primarily white and British. Participants attended two 2-hour lab sessions (with one-year interval between them) and completed several questionnaires. For example, they rated their tendency to forgive other family members and to perceive forgiveness tendencies of other family members. Moreover, they also completed many measures of other related variables. Strong support for concurrent validity of the measure was evidenced by the correlations between forgiveness and the variables of different relationship levels. At the individual level, family members with higher trait forgivingness, self-esteem, emotional stability, agreeableness, intellect and lower levels of anxiety and depression showed higher levels of forgiveness of family members. At the relationship level, unique patterns of forgiveness were found in six potential dyads within the family units, such as child forgives father, mother forgives child, father forgives mother, etc. Children’s forgiveness was found associated with the tendencies to repeat offences and the existence of apologies from parents. In addition, forgiveness was also correlated with relationship quality, closeness and conflict within each
dyad. At the family level, higher forgiveness of other family members predicted a more cohesive family environment as a whole. Furthermore, they also showed that interparental forgiveness played a stronger role than parental forgiveness of the child. If parents reported their earlier forgiveness to their child, they were more likely to expect later forgiveness from their child.

**Critique.** In this study, by Maio et al. (2008), some of the weaknesses of the Mullet method were corrected. Young children were considered rather than merely adult children. Parents of the young children were surveyed using a variety of measures, not just Mullet’s measures. Finally, participants were measured twice rather than on a single occasion.

**Forgiveness among Adolescents**

One article (Chiaramello, Mesnil, Munoz Sastre, & Mullet., 2008) discussed the forgivingness structure of adolescents and differed in the levels of each forgivingness factor between older adolescents and younger adolescents. Chiaramello et al. (2008) recruited 509 adolescents from secondary schools in a city of France. These participants were presented with Modified Forgivingness Scale (Munoz Sastre et al., 2005). Chiaramello et al. (2008) used exploratory factor analysis. They found four factors of forgivingness. They also found the same basic structure of factors that had been found with adults were also observed in the young adolescents. Compared with older adolescents, younger adolescents reported higher scores on sensitivity to circumstances and willingness to forgive, but lower scores on lasting resentment and willingness to avenge.

**Other Forgiveness-related Social Constructs**

Seven articles (Barber, Maltby, & Macaskill, 2005; Gauche & Mullet, 2005; Kikuchi, Sato, & Abe, 2007; Mullet, Riviere, & Munoz Sastre, 2007; Strelan, 2007; Strelan & Sutton, 2011; Struthers, Eaton, Mendoza, Santelli, & Shirvani, 2010) examined how other-related social constructs take effects on offering others forgiveness or self-forgiveness. These seven articles
can be generally categorized into three groups. One group of articles (Gauche & Mullet, 2005; Kikuchi, Sato, & Abe, 2007; Mullet, Riviere, & Munoz Sastre, 2007) focused on investigating the role of some social factors that are traditionally considered important to the occurrence of forgiveness. These social constructs include apologies from the offender, social closeness with the offender, cancellation of consequences, etc. The second group of articles (Strelan, 2007; Strelan & Sutton, 2011) specifically examined the relationship between just-world beliefs (including about oneself and about others) and forgiveness. The last group (Barber, Maltby, & Macaskill, 2005; Struthers, Eaton, Mendoza, Santelli, & Shirvani, 2010) investigated the effects of two related social constructs (e.g., anger rumination from the victim and appraised appropriateness to forgive the offender) on granting forgiveness to others.

**Three articles on factors affecting forgiveness.** For Gauche and Mullet (2005), Kikuchi et al. (2007), and Mullet et al. (2007), many different scenarios about transgressions were presented to participants who then completed questionnaires assessing their responses. Gauche and Mullet (2005) recruited 215 French adults to rate their agreement to 12 scenarios about either a physical or a psychological transgression. Mullet et al. (2007) reported two studies with identical procedures. In Study 1, 224 French participants in either a blame condition or a forgiveness condition were presented with 32 scenarios about a medical error committed by a doctor. Thus, participants can either blame or forgive the doctor in different contexts. In Study 2, the similar procedure was followed except with more participants (258 French) and also participants as victims assigned in four different conditions: willingness to prosecute, willingness to avenge, experiencing resentment, and willingness to reconcile. Thus, participants will be in a range from unforgiveness (prosecute, avenge, resentment) to forgiveness (reconcile) responding to the medical error.
In Klkuchi et al.’s (2007) study, 122 Japanese college students were presented with three scenarios when one person tried to deceive the other person with a reason after arriving late to an appointment. Gauche and Mullet (2005) and Mullet et al. (2007) found that apologies and intention from the offenders predicted forgiveness of victims. Specifically, Gauche and Mullet (2005) also showed that the effect of apologies and intention from the offenders affected forgiveness of a physical transgression more than of a psychological transgression. Mullet et al. (2007) found an interaction effect of negligence and apologies from the offenders on offering forgiveness from the victims when participants were in the forgiveness condition in Study 1 (or in willingness to reconcile condition in Study 2). These two studies had different results about the effect of cancellation of consequences. Gauche and Mullet (2005) found that cancellation of consequences showed a stronger impact in granting forgiveness in psychological transgression than in physical transgression. However, Mullet et al. (2007) did not find the cancellation of consequences to predict the granting of forgiveness.

These three articles, which examined whether the social relationship between offenders and victims affected forgiveness, and had different results. Gauche and Mullet (2005) and Klkuchi et al. (2007) found that social proximity affected forgiveness. But Mullet et al. (2007) showed that social closeness was not a factor for forgiveness in both blame and forgiveness conditions in study 1.

Two articles regarding just-world beliefs and forgiveness (Strelan, 2007; Strelan & Sutton, 2011). People’s just-world beliefs were predicted to have consistent relationships with forgiveness, depending on the type of justice belief and the conceptualization of forgiveness. Just-world beliefs suggest that people get what they deserve and deserve what they get. Strelan and Sutton (2011) distinguished belief in a just-world (BJW) as between BJW-self and BJW-others. BJW-self is usually associated with adaptive and pro-social orientation to injustices and
stressors while BJW-others is usually associated with punitive motivation and coping styles. Differently from Strelan and Sutton (2011), Strelan (2007) distinguished BJW as General BJW, Personal BJW and Belief in an Unjust World (BUJW). General BJW refers to what an individual perceives how people are generally treated. Personal BJW refers to what an individual believes how he/she is treated. BUJW refers to belief sets in which an individual believes that the world is unjust. Therefore, though the authors used the same term (just-world beliefs), the different operationalizations of the term actually affected results of the research.

Strelan and Sutton (2011) recruited 157 Australian undergraduate students who were assigned to read scenarios with either high or low transgression severity. Then these students completed severity manipulation checks and a series of questionnaires related to the scenario they read. These questionnaires include presence of positive forgiveness and the absence of negative forgiveness subscales of Rye et al. (2001) forgiveness scale. For low severity transgressions, BJW-self was positively correlated with positive responding to transgressions and negatively correlated with negative responding to transgressions.

Strelan (2007) recruited 275 undergraduates, who completed questionnaires related to just world beliefs include Just World Scale (Rubin & Peplau, 1975), Dalbert (1999) ’s Personal Belief in a Just World Scale, the others and self subscales of the Heartland Forgiveness Scale (Thompson et al., 2005). In addition to the relationship between just world beliefs and forgiveness, Strelan (2007) explored the mediation explaining the relationship. He found that gratitude was a mediator between personal BJW and forgiveness of others and also between unjust world beliefs and forgiveness of others. Self-esteem was a mediator between general BJW and self-forgiveness and also between personal BJW and self-forgiveness.

**Forgiveness and anger.** Two articles examined forgiveness and its relationship to angry rumination (Barber et al., 2005; Struthers et al., 2010). Barber et al. (2005) examined the
relationship between forgiveness and victim’s anger rumination. Social science undergraduate students in U.K. (N = 200) completed the Heartland Forgiveness Scale (Yamhure-Thompson & Snyder, 2003) and the Anger Rumination Scale (Sukhodolsky, Golub, & Cromwell., 2001). Forgiveness was negatively correlated with anger rumination. Specifically, angry memories predicted uniquely inhibition of self-forgiveness and thoughts of revenge predicted uniquely difficulty of forgiving others.

De et al. (2010) considered the degree to which the injured party assesses whether the forgiveness of the transgressor is appropriate, or important, or necessary. This factor was labeled as the victim’s appraised appropriateness to forgive (AAF) the transgressor. De et al. (2010) argued that AAF could explain the discrepancy of research findings about the relation between attributions of responsibility and forgiveness. Three studies investigated the interrelationships among victim’s attributions of responsibility, AAF, and forgiveness. In Study 1, a retrospective/narrative design, 168 full-time workers recalled a recent transgression with a coworker. Conceptualization of responsibility inferences (Weiner, 1995) was used to measure the victim’s responsibility judgment. A single item, “Did your coworker really need to be forgiven in this situation,” measured victim’s AAF. Forgiveness measures include Transgression-related interpersonal motivations scale (TRIM-Avoid and Revenge; McCullough et al., 1998) and the Forgiveness Scale (Eaton & Struthers, 2006). De et al. (2010) found that responsibility was found positively associated with victim’s AAF and negatively associated with latent forgiveness. Victim’s AAF was negatively associated with latent forgiveness. In addition, a victim’s AAF was a partial mediator between responsibility judgments and forgiveness. More specifically, when responsibility judgment increases, forgiveness decreases and victim’s AAF increases. Different from Study 1, which is a retrospective study, both Study 2 and Study 3 use experimental designs. In Study 2, 90 undergraduate students read a case and
collaborated with an online partner to answer multiple-choice questions. In Study 3, 250 workers were assigned to different experimental conditions (12 total). They completed similar questionnaires as in Study 1. Study 2 and Study 3 also supported the findings of Study 1. Namely, a victim’s AAF was a unique and important social construct. Particularly, when responsibility increases, forgiveness decreases and victim’s AAF increases.

**Interventions to Promote Forgiveness**

Recently, many intervention studies have been conducted to promote forgiveness in psychotherapy (for reviews, see Enright & Fitzgibbons, 2000) and in psychoeducational groups/programs (for reviews, see Wade, Worthington, & Meyer, 2005). However, there are only a few intervention studies to promote forgiveness that have been done recently in the non-U.S countries. I found four such articles. These were conducted in Canada (Greenberg, Warwar, & Malcolm, 2010; Struthers, Dupuis, & Eaton, 2005), North Ireland (Enright, Enright, Holter, Baskin, & Knutson, 2007), and the Philippines (Worthington, Hunter, Sharp, Hook, Tongeren, Davis, et al., 2010), respectively.

**Purposes of the studies.** The general purpose of all four articles is similar. All investigated the efficacy of their forgiveness intervention through scientific experiments or the effectiveness in real clinical settings. But specifically, the four interventions were planned to apply in different culture and for people at different ages. Struthers and his colleagues (2005) aimed to promote forgiveness among co-workers after a work-related transgression in Canada, a country that is conceived as generally individualistic. They created the “Social Motivational Training” that helps the co-workers achieve the goal of forgiveness through retraining attributions of events. Greenberg et al. (2010) examined the efficacy of their emotion-focused couples therapy (EFT-C) and whether couples’ forgiveness is promoted after treatment. EFT-C is systemic treatment that helps the couples develop a secure emotional connection by correcting
their old negative interaction patterns. The couples in the study are from Canada. They had all experienced within the last two years an emotional injury in the relationship. Enright and his colleagues (2007) focused on improving mental health of elementary-school children in Belfast, North Ireland, which has been characterized by violence and poverty. They hoped to reduce the children’s anger and enhance forgiveness by introducing teacher-led forgiveness education to these children. Worthington and his colleagues (2010) adapted their five-step REACH model to several samples of Christians in the Philippines, a country conceived as more collectivistic than Canada or Ireland. Worthington et al. (2010) adapted the REACH Forgiveness protocol to both Filipino culture and Christian religion.

Methods of the studies and results of the studies. Although these interventions were generally effective to help promote forgiveness in different settings, their methods and procedures are not quite similar. For example, both Struthers et al., (2005) and Enright et al. (2007) used a treatment group and a control group. Greenberg et al. (2010) did not have a separate control group; instead, they compared a treatment with a no-treatment waitlist control period (before treatment) with the same group of participants. The Philippines study (Worthington et al., 2010) did not have an alternative control group.

Lacking a control group in the intervention is a big limitation for the Philippines study. Worthington, Sandage and Berry (2000) suggested that multiple facilitators, multiple groups, and treatment manuals should be used for the intervention with psychoeducational groups. The Philippines study resembles a single-case design that is replicated in multiple cases. For instance, Worthington et al. (2010) recruited participants from five places: a (secular) university dormitory, a Christian retreat center, and three different churches. The ages of participants ranged from 17 to 60. Participants included individuals and couples. Three facilitators were first trained by the senior investigator and then led the psychoeducational groups. A revised manual
for Filipinos (Christian version) describing each step of the REACH model was followed in each of the Christian cases. However, in the university dormitory, the REACH Forgiveness model was adapted only for Filipino culture but occurred in a secular university. Some measures they used include: Trait Forgiveness Scale (Berry, Worthington, O’Connor, Parrott, & Wade, 2005), Transgression-related Interpersonal Motivations Inventory (McCullough et al., 1998), and Single-Item Forgiveness Scale (Berry, Worthington, Parrott, O’Connor, & Wade, 2001). Due to the limited statistical power of small samples, Worthington et al. (2010) found that the REACH Forgiveness adapted groups were responsible for few differences in their forgiveness of an index transgression. But Worthington et al. (2010) found positive changes for the combined samples between pre-intervention and post-intervention.

Similar with Worthington et al.’s (2010) study, Greenberg et al. (2010) also followed a specialized treatment manual that developed from a nine-step (Johnson & Greenberg, 1988) and three-stage (Johnson, 2004) mode. The treatment was conducted by eleven therapists. A battery of self-reported measures was administered to twenty couples before and after the waitlist period and also after treatment. The waitlist period was approximately 10-12 weeks before couples entered treatment. Some of the measures included the Enright Forgiveness Inventory (Enright, Rique, & Coyle, 2000), Trust Scale (Rempel, Holmes, & Zanna, 1985), Dyadic Adjustment Scale (Spanier, 1976), and Global Symptom Index of the Symptom Checklist 90 revised (Derogatis, 1983). Greenberg (2010) found that compared with waitlist period, when only three couples reported some forgiveness and none had completely forgiven the partner, most couples (17 couples) after treatment forgave their partners in different levels and 11 of them claimed complete forgiveness. In addition, the promotion of forgiveness after treatment was due to the decrease in marital distress and the increase in trust, but not due to reduction in symptoms.
Compared with the two research mentioned above, Struthers et al.’s (2005) study is more like “individual training” and Enright et al. (2007)’s study is more like “group education” without discussion. For example, Struthers reported two studies. In both Study 1 and Study 2, Struthers et al. (2005) followed the same procedure. Each participant received face-to-face either JST (Job Satisfaction Training) or SMT (Social Motivation Training) individually delivered by the same trainer. In both studies, Struthers et al. (2005) used similar questionnaires assessing the responsibility attribution and forgiveness to a transgression by a co-worker for pre-training and post-training. Struthers et al. (2005) found that there was a difference in forgiveness between pre-SMT and post-SMT, no matter whether participants were presented a writing vignette about an imaginary transgression at work (Study 1) or thought about a real transgression at work (Study 2). Furthermore, SMT had stronger effects than JST.

In Study 1, Enright et al. (2007) tested the anger levels of the first graders from Belfast, Milwaukee and Madison. In Study 2, they used a 17-session program for the first graders. In Study 3, they employed a 15-session program for the third graders. For both first graders and third graders, forgiveness was learned through hearing a story. The children identified a personally experienced hurt (called an index transgression), but the children were not required to discuss their hurt with others in class. In both Study 2 and Study 3, Enright et al. (2007) adopted the Beck Anger Inventory—Youth (Beck, Beck, & Jolly, 2001). In Study 3, another two measures were added: Enright Forgiveness Inventory for Children (EFI-C; Enright, 2000) and the Beck Depression Inventory—youth (BDI-Y; Beck, Beck, & Jolly, 2001). For both first graders and third graders, Enright et al. (2007) found that the anger levels for the treatment group decreased more than those for the control group. More importantly, for the third graders, they found that the treatment group showed more forgiveness than did the control group on the index transgression.
Critique of the studies. The studies provide four snapshots of adapting forgiveness interventions for non-US samples. The four articles report a variety of cases in which this occurred—multiple settings and replications in each article. However, except the Philippines study (Worthington et al., 2010), no attempt was made to investigate the elements of culture that were included in the adaptations. It is critical for the adaptations to be identified, and then for different adaptations to be investigated against the USA version of the intervention. Only then can we discern which adaptations are really necessary and which seem to make sense but in fact do not affect people of different cultures differently.

Women in failed relationships. Rye and Pargament (2002) and Rye, Pargament, Pan, Yingling, shogren, and Ito (2005) each studied women in failed relationships. In both controlled trials, they studied a religiously adapted (Christian) forgiveness intervention (the REACH forgiveness model) compared to the non-religiously adapted REACH model. They found few differences in the two models. This mirrored the results of religiously and spiritually adapted psychotherapeutic interventions of all sorts (Worthington, Hook, Davis, & McDaniel, 2011). In post-hoc interviews, Rye and his colleagues found that women who were assigned to the non-religious REACH intervention employed their own religious private practices (like praying for the offender and praying for help at forgiving) even though the secular intervention did not mention religion. I might suggest that this is a possibility in adapting models of forgiveness—Enright’s or the REACH model or others—to different cultures. It might be that the participants make their own cultural adaptations and respond culturally, and that the secular USA version of the intervention works as well as the adapted version. However, it is impossible to say until this is investigated. Thus, intervention studies might consider post-study qualitative interviews or debriefing questionnaires to determine whether cultural adaptations are made by individual participants, and if so, what kinds.
Discussion

I have reviewed the research conducted in the six years of 2005-2010 in light of theories regarding culture. As an overarching theory, I examined McAdams and Pals’ (2006) new big five personality processes. Within that, I examined three theories in more detail. The other major theories were (a) theorizing (though not a formal theory) by Mullet on cross-cultural consistency and differences in the experience of forgiving, (b) the Worthington (2006) stress-and-coping theory, and (c) the Hook et al. (2009) collectivistic forgiveness theory within self-construal theory. I will analyze the adequacy of each theory in light of the research in the last six years.

Self-Construal Theory and Hook et al.’s Collectivistic Forgiveness

Four research efforts regarding the relationship between forgiveness and personality correlates that I reviewed from 2005 to 2010 were conducted in presumably individualistic countries (France and Australia; Chiaramello, Munoz Sastre, & Mullet, 2008; Munoz Sastre, Vinsonneau, Chabrol, & Mullet, 2005; Ballester, Munoz Sastre, & Mullet, 2009; Strelan, 2007). With some different foci, they all found that personality dispositions, such as agreeableness, openness, neuroticism, and paranoid tendencies, played large roles in people’s willingness to forgiveness. It was consistent with the previous researches (Tsaung, Eaves, Nir, Jerskey, & Lyons, 2005; Berry, Worthington, O’Connor, Parrott, & Wade, 2005; McCullough, Bellah, Kilpatrik, & Johnson, 2001). Only one article (Neto, 2007) was done in Portugal, which was comparatively collectivistic. Neto (2007) showed that agreeableness, neuroticism, openness and gratitude either positively or negatively correlated to willingness to forgive, which was not consistent with the previous studies in collectivistic culture (Watkins & Regmi, 2004; Fu, Watkins, & Hui, 2004; Neto & Mullet, 2004). Fu et al. (2004) suggested that when considering forgiveness or not, people in collectivistic culture might put more focus on other variables, for example, social harmony and personal relationship with the offender, than on individual
personality variables. Hook, Worthington, and Utsey (2009) proposed that the correlation between propensity to forgive and the emotion variables was weaker, but the correlation between forgiveness and the other personality variables (involving more decision to forgive) was stronger in collectivistic culture than in individualistic culture. However, it was not supported by Neto (2007)’s study.

Hook et al. (2009, see their review) put forward that the differences in forgiveness across collectivistic cultures had not been investigated widely. They took Arab fundamentalists and Chinese rural workers as example to illustrate the fact that there may exist more difference than similarities between the collectivistic societies. Many other factors, such as gender and level of industry in the society, should be taken into account since they may moderate the relationship between forgiveness and collectivism as well as individualism. The similar opinion was also stated by Paz et al. (2008). They used the effect of religion as example that Christian-non-Christian effect may counteract the effect of individualism and collectivism. Hence, additional research that elaborates the similarities and differences within either individualistic or collectivistic culture is needed. Furthermore, Hook et al. (2009) emphasized that individual difference in individualism and collectivism should not be ignored in the research. A person can not be assumed as either individualistic or collectivistic only based on the category of the cultural group he/she belongs to. Thus the common design of simply comparing participants from one collectivistic culture with participants from one individualistic culture should be upgraded to advanced design. For example, a better way to evaluate an individual’s type of worldview is to assess his/her level of individualism or collectivism through appropriate measures.

Despite of some drawbacks in the research, Mullet and his colleagues have successfully shown that resentment, for many cultures, is long lasting (Paz et al., 2008; Suwartono et al, 2007;
Neto & Pinto, 2010). Yet people reconcile and people continue to interact without disrupting the group. Thus, the Hook, Worthington, and Utsey solution—suggesting that some cultures (mostly individualistic) are very concerned about emotional forgiveness while collectivistic cultures are very concerned about decisional forgiveness—does not account for the resentment shown in Mullet et al.’s studies (Paz et al., 2008; Suwartono et al, 2007; Neto & Pinto, 2010). Instead, the concept of forbearance—suppressing one’s reaction for the sake of group harmony—needs to be taken more seriously.

Theorizing by Mullet on Cross-Cultural Similarities and Differences in Forgiveness

Relative to being slightly mentioned in the most recent literature review about the forgiveness in individualistic and collectivistic countries (see Hook, Worthington, & Utsey, 2009), Mullet and his colleagues have made more efforts to investigate the difference of forgivingness between cultures since 2005. These efforts include three articles exploring the difference of practicing forgiveness between people in different culture (Neto & Pinto, 2010; Paz et al., 2008; Suwartono et al, 2007;) and three articles exploring the difference of understanding forgiveness between people in different culture (Bagnulo, et al., 2009; Kadiangndu et al., 2007; Tripathi & Mullet, 2010). Their strategy of continuing to take the questionnaire and simply apply it to different cultures comparatively is not likely to yield much that is scientifically interesting. However, I think that they have done a great job of identifying the three-factor structure of forgivingness includes (1) lasting resentment, (2) sensitivity to circumstances of the offense, and (3) willingness to forgive. In addition, they also identified the four-factor structure of conceptualizations of forgiveness:(1) change of heart, (2) more-than-dyadic process (broader process), (3) encourages repentance (forgiveness is good), and (4) immoral behavior (forgiveness is bad).
Though these three-factor structure of forgivingness and four-factor structure of conceptualizations of forgiveness were all evidenced in these six articles, we could not make an absolute conclusion about the difference, especially how it differed in understanding or practicing forgiveness for people in individualistic and collectivistic countries. Take the three-factor structure of forgivingness as example, Suwartono et al. (2007) and Neto & Pinto (2010) supported their general hypotheses that people in more collectivistic culture had higher willingness to forgive, but lower lasting resentment towards the perpetrator than did people in more individualistic culture. However, Paz et al. (2008) found that there was no difference in Chinese sample and French sample in willingness to forgive. In addition, Chinese participants showed higher lasting resentment than the French counterparts, which was opposite to their expectation. For another instance, when comparing the “change of heart” level in different culture, Kadiangandu et al. (2007) found that Congolese participants scored higher on this factor than did their French counterparts; Bagnulo et al. (2009) did not find the difference of this factor between Uruguayan and French participants; Tripathi and Mullet (2010) showed that the score for “change of heart” was lower for Hindu than for western Europeans. Therefore, we should not conclude with confidence that there was difference of understanding or practicing forgiveness between different culture only based on the categorization of individualism and collectivism.

**Worthington’s (2006) Stress-and-Coping Theory**

Worthington’s (2006) stress-and-coping theory of forgiveness emphasized people’s multiple (i.e. cognitive, emotional, physiological and motivational) stress reactions and coping strategies to the life stressor via various appraisals. The process can be evidenced in some recent research. For example, the three-factor structure of forgivingness identified and researched by Mullet’s lab (Neto & Pinto, 2010; Paz et al., 2008; Suwartono et al., 2007) can partly demonstrate Worthington’s (2006) stress-and-coping theory of forgiveness. The factor “lasting
resentment” can be viewed as one type of people’s stress reactions or negative coping strategies. “Sensitivity to circumstances” can be viewed as a collection of various appraisals. “Willingness to forgive” (unconditional forgiveness) can be regarded as one positive coping strategy.

Some research (Barber et al., 2005; Gauche & Mullet, 2005; Hui & Bond, 2009; Kikuchi et al., 2007; Mullet et al., 2007; Paleari et al., 2010; Struthers et al., 2010) was designed based on stress-and-coping theory of forgiveness. For example, Hui and Bond (2009) asked the participants to recall a psychological transgression within two years—a stressor. Then Hui and Bond (2009) examined the relationship between the participants’ perceived face loss (appraisals), motivation to revenge (stress reactions) and willingness to forgive (coping strategy). For another instance, Barber et al. (2005), Gauche & Mullet (2005), Kikuchi et al. (2007), and Mullet et al. (2007) focused on investigating the role of some social factors (i.e., victim’s appraised appropriateness to forgive the transgressor, apologies from the offender, social closeness with the offender, cancellation of consequences) on granting forgiveness. These social factors are generally viewed as various appraisals to stressors.

In addition, most intervention studies conducted for these six years (Enright et al., 2007; Greenberg et al., 2010; Struthers et al., 2005; Worthington et al., 2010) were theorized with a stress-and-coping perspective, hoping to help change the old/maladaptive cognitions/emotions into positive coping. For instance, Struthers and his colleagues (2005) aimed to promote forgiveness among co-workers after a work-related transgression through retraining attributions of events. Greenberg et al. (2010) made use of emotion-focused couples therapy to help the couples develop a secure emotional connection by correcting their old negative interaction patterns.

The new big five personality processes are these: evolutionary, dispositional, adaptational, narrative, and cultural. Each of these new big five processes are tied to mini-theories within the forgiveness literature. Below are the detailed analyses:

(1) Evolution and human nature provide a general design that all the individuals should share the similar human nature despite under different social consequences. Mullet and his colleagues (Bagnulo, et al., 2009; Kadiangndu et al., 2007; Neto & Pinto, 2010; Paz et al., 2008; Suwartono et al, 2007; Tripathi & Mullet, 2010) showed that the three-factor structure of forgivingness and four-factor structure of conceptualizations of forgiveness were evidenced in several countries across Europe, South-Asia, East Asia and Africa.

(2) Dispositional traits can tell how people feel, think and behave across situations and over time, which are the most stable, broad and rough outlines of human individuality. In terms of forgiveness literature, four research efforts regarding the dispositional traits that I reviewed from 2005 to 2010 (Chiaramello et al., 2008; Munoz Sastre et al., 2005; Ballester et al., 2009; Strelan, 2007) found that personality dispositions, such as agreeableness, openness, neuroticism, and paranoid tendencies, played large roles in people’s willingness to forgiveness.

(3) Compared with dispositional traits, characteristic adaptations, such as motives, goals, values, plans, virtues, etc are contextualized in time, place or social role. Stress-and-coping theory describes these adaptations in the recent forgiveness literature (Barber et al., 2005; Gauche & Mullet, 2005; Hui & Bond, 2009; Kikuchi et al., 2007; Mullet et al., 2007; Paleari et al., 2010; Struthers et al., 2010). For instance, Gauche & Mullet (2005), Kikuchi et al. (2007), and Mullet et al. (2007) investigated the role of some external factors (i.e. apologies from the offender, social closeness with the offender, cancellation of consequences) on granting forgiveness of victims.
(4) Life narratives are life stories that individuals construct to construe their own lives, to make meaning and to establish their own identity. Few theorists have specifically applied narrative psychological methods to forgivingness.

(5) Culture influences the development of dispositional traits, characteristic adaptations and life narratives in different ways. Most of recent studies done in Mullet’s lab (Bagnulo et al., 2009; Kadiangandu, et al., 2007; Tripathi & Mullet, 2010) found that people in more collectivistic culture agreed more on the items linked with “more-than-dyadic” or “broader process” than their counterparts in more individualistic culture when they conceptualize the forgiveness. It also supported Hook et al (2009)’s first proposition that collectivists focus on preserving the group harmony and thus restoring the relationship for the sake of the group.

Research Agenda

Based on this summary of research and my analytical discussion, I recommend the following research directions for the field.

(1) The nature of forgiveness differs across cultures—namely it seems to differ in the ease with which people forgive or forgiveness perhaps does not even enter their frame of reference. Researchers should investigate the degree to which this is true. Mullet has attempted to conduct substantial research comparing cultures; however, he has not systematically integrated the findings from the many varieties of studies. He simply seems to repeat the same methods and compare across cultures without organizing and analyzing the findings under some theoretical scheme that guides future research. The field needs an integrative review paper and meta-analysis simply on differences across culture. Then additional studies need to test propositions in that review paper.

(2) The amount of residual grudge or internal resentment that people seem to hold toward others seems to be a function of culture. Researchers need to determine the causal variables
explaining the residual grudge. Is it self-construal? Might it be due to different cultural narratives? To what degree is it due to different histories of conflict within societies or between societies? For example, the Middle East, Balkans, and China have histories that are filled with conflict. Other countries or regions have spent large portions of their histories under the domination of an outside group either militarily (such as the Roman rule of the European and North African areas) or culturally (such as Greek cultural dominance in that same region). Might countries or regions that have been characterized by subjugation differ from those that have experienced lots of conflict? Other areas (like the United States) have recent histories and have little experience with conflict (e.g., the relatively short conflicts with England, and the American Civil War). Might their histories have shaped grudge holding?

(3) The sensitivity that people have to external conditions like apology, or making restitution, or adhering to social convention, or attending to group harmony and its disruption all might condition their views toward forgiveness. What forces culturally or historically might have heightened sensitivity to conditions that mitigate or work against harmony? Do cultures of honor (Cohen & Nisbett, 1997; Cohen, Nisbett, Bowdle, & Schwarz, 1996; Nisbett & Cohen, 1996) predispose regions and peoples to intractable conflict?

(4) The research literature has been focused on forgiveness and unforgiveness. There are many alternatives to those responses to transgressions (Worthington, 2006). In particular, there are needs to develop a measure of forbearance and then use it in different cultures, to develop some measure of acceptance, and to develop measures of justice.

(5) The use of interventions to promote forgiveness and the degree to which these ought to be adapted to culture have been under-investigated. We know little about how interventions that were developed in Western, individualistic cultures might be responded to by people in other countries. Only four intervention studies were located in the six years from 2005 to 2010. Three
of those were in Western societies, and the other was in the Philippines, which is primarily
collectivistic but has spent substantial parts of its recent history under United States influence.
An agenda of investigation of the efficacy and effectiveness of the Enright and Worthington interventions is needed. One way to approach this systematically would be to investigate them in the United States, but with international students or first-generation adults. This might allow investigation of the effects of culture on reception of the interventions to promote forgiveness.

The fifth suggestion will serve as the basis for the remaining chapters of this thesis. I examine individualism and collectivism in Virginia-born and raised students and in international students who attend a REACH forgiveness intervention. I specifically also measure forbearance (suggestion 4) besides measuring forgiveness.
STATEMENT OF THE PROBLEM

Forgiveness has been investigated with increasing frequency in the last 15 years (Fehr, Gelfand, & Nag, 2010), but little has been done to investigate forgiveness in cultures other than the United States and Western Europe. In fact, in 2005, Scherer, Cooke, and Worthington identified over 950 articles on forgiveness. But, in 2009, Hook, Worthington, and Utsey, reviewed the research on forgiveness in collectivistic cultures and their review identified only about 20 articles. Burnette, Van Tongeren, O’Boyle, Worthington, and Forsyth (2011), in June 2011, recently reviewed and meta-analyzed research on political forgiveness and they identified only a few articles addressing forgiveness in non-US or non-Western European cultures. Thus, the investigation of research on forgiveness across cultures is in an embryonic state relative to forgiveness in the Western cultures. In the current review, I examine such research between 2005 and 2010 to determine some of its implications for theorizing on cross-cultural forgiveness.

Life Involves Dealing with Transgressions, Which is Internally Stressful

Part of life is dealing with interpersonal rejections and hurts—regardless of culture (Hook, Worthington, & Utsey, 2009). Such rejections and hurts are accompanied by inner turmoil involving emotions like anger, anxiety, and sadness (Worthington, 2006). Negative emotions are accompanied by motivations like wanting revenge or seeking to avoid the rejecting person (McCullough et al., 1997; McCullough et al., 1998). However, because relationships are often valued, emotions like guilt and shame over one’s own contribution to the hurt or rejection, and more relationship enhancing motivations like wishing reconciliation or desiring benevolence for the person might also attend the aftermath of the hurt/rejection. For many people, rumination
is likely a continuing experience after a break-up (Berry et al., 2005). Rumination is mulling the situation, its antecedents, and its consequences repeatedly. Imaginary conversations, actions, and scenes are played and replayed mentally, arousing the person as the event and its aftermath and likely future are rehearsed.

The internal experience of unforgiveness is typically considered stressful (Lazarus, 1999; Worthington, 2006). That is, the jumble of emotions, motivations, and ruminations constitute a stress reaction. The stress reaction has been labeled unforgiveness (Worthington & Wade, 1999) even though the person who was rejected or hurt might not use the lexicon of “forgiveness” to describe his or her experience. According to a stress-and-coping theory of forgiveness or unforgiveness (Worthington, 2006), this process can be described using classic stress-and-coping theoretical terminology. The theory suggests four parts: (1) a stressor (i.e., the rejection or hurt), (2) appraisals (i.e., the cognitive, emotional, and motivational evaluations of the degree and types of psychological damage done by the rejection or hurt and the threat that the damage makes to one’s self-system or relational or personal identity and the threat to one’s sense of justice and honor), (3) stress reaction (i.e., the unforgiveness complex of emotions, motivations, and ruminations), and (4) attempts to cope with the situation and one’s emotional reactions to it.

**Coping with Stress in Myriad Ways**

There are many ways to attempt to cope (Lazarus, 1999; Lazarus & Folkman, 1984; Worthington, 2006) with experiences of stressful unforgiveness. These include the following. One can engage in angry, vengeful acts to pay back the damage done or get revenge. One can simply put the person out of one’s physical life and try not to think about the person, avoiding the person physically or cognitively. One can suppress one’s emotional expression and negative behaviors for the good of the future of the relationship or the harmony in the groups to which the couple belongs; this is called forbearance (Worthington, 2006). One can attempt to repair the
relationship through talking about the transgression and arriving at some understanding, usually called reconciliation (Freedman, 1998; Waldron & Kelly, 2008). This attempted talk about the transgression involves acts on the part of victim and offender such as the following: (1) the victim makes a request for an explanation of the rejecting partner’s behavior (called a reproach); (2) the victim listens to the offender’s account of the behavior, which might include relationship harmful accounts (like denying wrongdoing or justifying one’s acts or clumsy excuses) or making relationship-restorative accounts (like offering an apology, offering to make restitution, requesting forgiveness and absolution, etc.; (3) the victim might verbally say that he or she forgives the rejecting or offending person or can at least move past the incident; (4) the rejecting/offending person accepts or rejects the offer of forgiveness, or in the event that the victim refuses to forgive, the rejecting/offending person might either seek that forgiveness through making additional amends or give up on the relationship; (5) both persons seek to behave in ways that move them toward their relationship goals (which might or might not be the same goal).

Internally, the victim of the hurt or rejection (even if the rejection was to some degree mutual) will usually attempt to minimize the internal upheaval and regain emotional, motivational, and cognitive equilibrium through a variety of coping mechanisms (Worthington & Wade, 1999). These might include internal acts such as excusing or justifying the rejection/hurt, accepting that bad things happen in life and trying to let go of the turmoil, turning the matter over to God or a transcendental being or state of being, and perhaps forgiving.

**Forgiving as a Way of Coping with the Interpersonal Stress of Transgressions**

There are two different types of forgiving (Exline, Worthington, Hill, & McCullough, 2003). Decisional forgiveness is making an intent statement (to oneself) that one intends to put aside vengeance and avoidance (unless it is dangerous to continue interaction) and to treat the
other person as someone of value. Emotional forgiveness involves replacing negative emotions associated with unforgiveness with positive other-oriented emotions (such as empathy, sympathy, compassion, or love for the offender). Decisional and emotional forgiveness are internal processes on the part of the victim and they tend to reduce the distress of the rejection/hurt (Fincham, 2000), have mental health benefits (Toussaint & Webb, 2005), and have physical health benefits (Worthington, Witvliet, Pietrini, & Miller, 2007).

**Culture’s Roles in Stress and Coping**

The stress-and-coping conceptualization of unforgiveness and forgiveness has been shown to take place in cultures throughout the world (for a review, see Hook, Worthington, & Utsey, 2009), including African nations, far Eastern nations like Korea and China, Middle Eastern nations like Lebanon, Israel, and Arab nations, Australia and New Zealand, Central and South American nations, Western and Eastern European nations, and (of course) the United States and Canada (where the most research has been done). However, culture shapes how people perceive of and cope with the stressor of a hurt or rejection. Culture affects both the internal and external attempts to cope (see Hook et al., 2009, for a review and theory).

Hook, Worthington, and Utsey (2009) have proposed a model of collectivistic forgiveness. In their model, they analyzed research according to whether it occurred in largely collectivistic cultures or largely individualistic cultures. They suggested two propositions. First, they proposed that most people within individualistic cultures are more focused on reducing emotional, motivational, and cognitive discomfort than are people in collectivistic cultures. People in collectivistic cultures are thought to be more likely to conceptualize hurts and wrongs in terms of their likelihood of damaging group harmony, and thus they are more focused (than most people in individualistic cultures) on restoring the relationship and not behaving in ways that damage group harmony. The second proposition of Hook et al. suggested that when people
in collectivistic cultures forgive, it will more often be concerned with decisions to forgive (i.e., intent to behave in ways that do not express negative emotions or motivations and treat the other person as a person of value) than with emotional forgiveness (i.e., restoring inner harmony within an individual). In individualistic cultures, emotional forgiveness will take a higher relative importance than will decisional forgiveness when compared to collectivistic cultures.

**Forbearance as a Complement to Decisional and Emotional Forgiveness**

Hook and his colleagues have tested the model in a variety of settings including Nepal (Watkins et al., 2011), the United States (Hook et al., 2011), and China and New Zealand (Hook et al., 2011). In the empirical tests, the model was generally supported. However, in the article on China and New Zealand, Hook et al. interpreted their findings as not fully supporting the model. Namely, in China, there was less evidence of any type of forgiveness—decisional or emotional—than in New Zealand. Hook et al. (2011) suggested that within China, when forgiveness occurred, it was more often decisional than emotional, and that concerns with preserving group harmony led Chinese participants more frequently to attempt to suppress emotional expression and curb expression of negative motivations—defined as, forbearance—even at cost to their emotional equanimity.

The main concern in the collectivistic culture of China was to restore group harmony through allowing the rejecting/offending person to save face publicly. This suggests that the importance of (a) group harmony and (b) forbearance in the process of forgiving within cultures and individuals who value collectivism.

**Some hypotheses related to collectivism and individualism.** On one hand, in collectivistic countries with largely collectivistic cultures, there should be a cultural difference (relative to individualistic countries with individualistic cultures) in decisional and emotional forgiveness, value of the importance of group harmony, practice of attempted suppression of the
expression of negative feelings, motives, and behaviors (i.e., forbearance); and (because emotional suppression has been shown to be not particularly effective at controlling emotions; Gross, 1998), we may see elevated anger, vengeful motives, anxiety, depression, and rumination. That might also produce elevations in shame and guilt due to inability to calm emotions toward a more relationship-enhancing equanimity. On the other hand, we might expect exactly the same pattern in individuals—regardless of their country or its culture—who test higher on collectivism and lower on individualism (relative to those in the same of other countries and cultures who test at the other end of both spectra).

Forbearance (suppression of emotional expression and expression of negative motives) is differentiated from suppression of emotional experiences.

Above, I argued that we “may see elevated anger, vengeful motives, anxiety, depression, and rumination,” and I based this on the research by Gross (1998) on emotional expression. It is important to see conceptually why this is a tentative hypothesis, not a firm hypothesis. Emotional suppression is defined by Gross as a largely unconscious attempt to suppress the experience of emotion, frequently for defensive purposes. Namely, the person who suppresses emotional experience tries consciously or unconsciously to prevent himself or herself from actually feeling some threatening or unwanted emotion. This is, in fact almost impossible to do (see Wegner’s [1994] white bear studies in which people try to suppress thinking about white bears and consequently think about them more than do people who merely distract themselves.)

In forbearance, however, I am making an important distinction with suppression of emotional experience. I am suggesting that one who forbears attempts to suppress the visible signs of emotion (emotional expression) and visible behaviors (suppression of the expression of negative vengeful or avoidant motives). I might hypothesize that in many cultures, the concern for the good of the group or collective even at the expense of emotional suffering of the
individual might provide a rationale for forbearance (i.e., the suppression of emotional expression and the expression of negative motivations). Likewise we may view a person who is individualistically oriented to vent his or her negative emotions and motives on a deserving offender. The consequence is to obtain the personal emotional release of cathartic emotional expression or venting or rational processing of one’s emotions and motivations; however, by doing so, the offender is made to lose face, feel shame and guilt, experience remorse, sadness, anxiety, and perhaps anger. The individualist obtains peace at the expense of the other. The collectivist, however, suppresses emotional expression, which actually heightens a sense of internal pressure and individualized suffering, but which saves the offender’s face and likely preserves harmony in the group.

The Promotion of Positive Coping in the Face of Transgressions in Different Cultures

In both collectivistic and individualistic cultures, forgiveness is seen as a virtue. But there are competing virtues, importantly maintaining justice, honor, and group harmony. Thus, in coping with the stress of a transgression, one must balance motives and emotions in the calculus of how to respond to transgressions. Although conceiving of the choice as stated in the preceding two sentences makes the process appear to be a logical calculation and cognitive decision primarily involving the prefrontal cortex and its decision making and executive functioning, that over-simplifies the psychology of coping. The limbic system, gut responses, hormonal systems, and musculature feedback systems are involved internally, and a host of external factors—like culture, religion, immediate stimuli and pressures, social norms, etc.—impinge and affect decisions without conscious consideration.

Because forgiveness is almost universally seen as a virtue, many people say they “want to forgive but cannot,” “should forgive but can’t bring themselves to do so,” or “have tried to
forgive and failed repeatedly.” Several interventions have become publicly available and have been tested empirically that people can employ to forgive when they desire to do so.

**Interventions to Promote Forgiveness**

There have been a number of interventions to promote forgiveness that have been developed originally in the United States but have been applied across cultures. The two most-frequently used interventions are the process model of forgiveness (Enright & Fitzgibbons, 2000) and the REACH Forgiveness model of Worthington (2006). For example, Enright’s model has been tested in Northern Ireland, Hong Kong, and South America. The REACH Forgiveness model (Worthington, 2006) has been tested in Hong Kong, the Philippines, and South America.

**The REACH Forgiveness intervention.** Forgiveness interventions, like other psychoeducational and psychotherapeutic interventions, tend not to be equally effective for all participants. The REACH model has been found to be efficacious for university students in a secular state university. For example, this has been shown in McCullough & Worthington, 1995; McCullough et al., 1997; Sandage & Worthington, 2010; Worthington et al., 2000. They are often adapted to particular clientele. For example, they have been adapted to couples (Burchard et al., 2003; Ripley & Worthington, 2002) and parents (Kiefer et al., 2010). They have also been adapted to culture (Worthington et al., 2010) and religion. In most investigations, of religion, it has been adapted to Christians (Lampton, Oliver, Worthington, & Berry., 2005; Rye & Pargament, 2005; Rye et al., 2002; Stratton, Dean, Nooneman, Bode, & Worthington., 2008; Worthington et al., 2010). While the secular and Christian versions have not been compared head to head but twice (Rye & Pargament, 2005; Rye et al., 2002) with no statistical differences, it appears from a meta-analysis (Davis, Worthington, & Hook, 2010) that the adapted versions might be more efficacious than the non-adapted versions. Also, the REACH model has been
tested in other labs besides ours (e.g., Blocher & Wade, 2010; Rye & Pargament, 2005; Rye et al., 2002).

The Present Study

Thus, in the present study, I tested the REACH Forgiveness intervention with people (a) who are foreign-born United States citizens and those who are first-generation children of immigrant parents, which I denoted as foreign-extraction college students, as compared to (b) Virginia-born-and-raised college students. Psychoeducational groups, using waiting-list controls, are composed of both foreign-extraction and Virginia-born college students within the same groups. Students were assessed on a variety of dispositional and personality attributes initially, and they identified a transgression that was assessed at three times during the experiment.

In this study, I attempted to answer the following questions:

1. Will introducing the REACH forgiveness intervention increase an individual’s reported emotional forgiveness and decisional forgiveness?

2. Will the introduction of the REACH forgiveness intervention be similarly effective for both Virginia-born students and foreign-extraction students? Alternatively, will REACH forgiveness intervention be effective for both individualists and collectivists, in terms of their emotional forgiveness and decisional forgiveness?

3. Will initial differences in Individualism-Collectivism interact with treatment condition (immediate treatment or Waitlist Control) and time (T1, T2, T3) to produce differences in decisional, emotional forgiveness and forbearance?
METHOD

Participants

Women college students (N = 105) volunteered to participate in assessment and a six-hour intervention to promote forgiveness for a transgression within a group. I selected only women participants for several practical and design reasons. (1) When men and women are both participants in group research, the dynamics can change people’s experience in the groups and introduce non-experimentally controlled factors. (2) Men and women leaders have similarly different and uncontrolled effects. (3) If I have men and women participants, I would have to at least double the number of participants, and in fact, because I would likely get sex interactions, I would have to quadruple the number of participants to get the same power. (4) Furthermore, if I have men and women participants, I must also have men and women leaders. (That would at least double, yet again, the N.) (5) In the past, investigators have limited participants to those in a single sex (e.g., Rye & Pargament, 2002; Rye et al., 2005), so this is not unheard of in forgiveness research.

As an inclusion criterion, all participants must identify a transgression in a group, e.g., a work group, sorority, family, student group that they attested (a) still bothers them and creates negative feelings and (b) that they would like to work on in a group to promote forgiveness for the offender(s) and (c) they are willing to discuss within the group. Half of the participants were selected to be from foreign extraction (either an international student or a first-generation student born to immigrant parent or parents), and half were born and raised in Virginia.

Design

Research Design
A wait-list control design was employed. Thus, the wait-list control design can be displayed as follows, with O indicating an observation or assessment and X indicating treatment. The designation O_D indicates an observation occasion in which participants complete Demographics (and person variables) online through Sona-Systems © and the three observation points (O_1, O_2, and O_3) are the three testing points prior to any treatment (O_1), one week later (O_2), and one week later (O_3). Treatment took place on a Friday (Spring semester) and a Saturday (Fall semester) for six hours of treatment over a 6-hour period. O_1, O_2, and O_3 occurred online through Sona-Systems ©.

\[
\begin{align*}
O_D & O_1 & X & O_2 & O_3 & \text{(Immediate Treatment; IT)} \\
O_D & O_1 & O_2 & X & O_3 & \text{(Waitlist Control; WC)}
\end{align*}
\]

**Independent and Dependent Variables**

The current study had several independent variables including country of origin (Virginia-born versus foreign-extraction college students), Self-construal of individuals (individualism and collectivism), condition (Immediate Treatment versus Waitlist Control), and time (T1, T2 and T3). Dependent variables include decisional forgiveness (DF), emotional forgiveness (EF) and forbearance.

**Treatment**

A secular 6-hour psychoeducational model to help people REACH Forgiveness (Worthington, 2006; see [www.people.vcu.edu/~eworth](http://www.people.vcu.edu/~eworth) for treatment manuals for participants and for leaders) was followed. Twelve cohorts of participants each were run—six cohorts each by two female undergraduate and six cohorts each by two female graduate group leaders. Each cohort included both Virginia-born students and Foreign-extraction students. IT and WC conditions were differentiated based on the dates of intervention. For example, Feb 5 was IT, Feb 12 was WC, Feb 19 was IT and Feb 26 was WC. IT and WC intervention was one week apart.
Without knowing the different conditions, participants signed up for dates when they were available to get intervention, which can be seen as a random assignment. Each group leader was supervised and trained by a female graduate student in Counseling Psychology (using a DVD training video and Q&A from the group’s creator, Worthington), under the supervision of a licensed Clinical Psychologist in Virginia (e.g., Worthington). These manual-driven psychoeducational groups have been conducted by mental health professionals, clergy, students in training for mental health professions, undergraduate students in dormitories, and non-college-educated lay people in churches. Over 10,000 people have participated the psychoeducational groups in the United States and worldwide, and no negative incident has yet occurred or reported to the investigator.

**Instruments**

**Country of Origin**

Students on Sona-Systems© were screened to insure that they are either of foreign extraction (as defined above) or Virginia-born and raised.

**Individualism and Collectivism**

Individualism and collectivism, which refers to one’s tendency to see himself or herself as independent or interdependent from others, were measured by the Self-Construal Scale (SCS; Singelis, 1994). The SCS consists of 24 items that measure one’s tendency to think of oneself as independent or interdependent from others. Twelve items assess the independent self, and twelve items assess the interdependent self. Items are randomly ordered, and participants rate each item on a 7-point rating scale from 1 = *Strongly disagree* to 7 = *Strongly agree*. A comparison between Asian Americans and Caucasian Americans on the SCS showed that Asian Americans were more interdependent than Caucasian Americans, and Caucasian Americans were more independent than Asian Americans (Singelis, 1994). These group differences are consistent with
Markus and Kitayama’s (1991) characterizations of Asians as interdependent and North Americans as independent. Also, the interdependent subscale of the SCS predicted attributions to situational and contextual influences among Asian Americans and Caucasian Americans (Singelis, 1994).

**Decisional Forgiveness Scale (DFS)**

Decisional forgiveness of a person on a target offense was measured by the Decisional Forgiveness Scale (DFS, Worthington, Hook, Utsey, Williams, & Neil, 2007). The DFS consists of eight items that measure the degree to which one has made a decision to forgive someone of a specific offense (e.g., If I see him or her, I will act friendly; I will try to get back at him or her [reverse scored to indicate forgiveness]). Participants indicated their agreement with each item on a 5-point rating scale from 1 = *strongly disagree* to 5 = *strongly agree*. Scores on the DFS had Cronbach’s alpha coefficients ranging from .82 to .86 (Worthington et al., 2007). The estimated 3-week temporal stability coefficient was .73 (Worthington et al., 2007). Scores on the DFS also showed evidence of construct validity and were correlated with other measures of state forgiveness, trait forgivingness, forgiveness-related constructs such as empathy and anger, and a behavioral measure of forgiveness (Worthington et al., 2007). For the cross-cultural comparison samples for China and New Zealand (Hook et al., 2010) the Cronbach’s alpha coefficients were .81 (95% CI = .76-.85; China) and .79 (95% CI = .71-.85; New Zealand). We are thus sensitive to different response possibilities of people who are of foreign extraction versus those who are Virginia born.

**Emotional Forgiveness Scale (EFS)**

Emotional forgiveness of a person on a target offense was measured by the Emotional Forgiveness Scale (EFS, Worthington et al., 2007). The EFS consists of eight items that measure the degree to which one has experienced emotional forgiveness and peace for a specific offense
(e.g., I feel sympathy toward him or her; I no longer feel upset when I think of him or her). Participants indicated their agreement with each item on a 5-point rating scale from 1 = strongly disagree to 5 = strongly agree. Scores on the EFS had Cronbach’s alpha coefficients ranging from .69 to .83 (Worthington et al., 2007). The 3-week temporal stability coefficient was .73 (Worthington et al., 2007). Scores on the EFS also showed evidence of construct validity and were correlated with other measures of state forgiveness, trait forgivingness, forgiveness-related constructs such as empathy, rumination, anger, and a behavioral measure of forgiveness (Worthington et al., 2007). For the cross-cultural comparison samples for China and New Zealand (Hook et al., 2010), the Cronbach’s alpha coefficients were .61 (95% CI = .52-.69; China) and .83 (95% CI = .78-.88; New Zealand).

**Procedure**

Participants logged in to Sona-system® and read the inclusion criteria (below) of the study. Also the study was briefly explained to them online. If participants were interested in the study and met the inclusion criteria, they would read the consent form online carefully and agree to participate the study online by clicking the button, “I agree to participate the study.” We requested a waiver of documentation of consent for completing online questionnaires from the IRB and it was granted. Participants signed up for the time when they were available to get the intervention, which was either a Waitlist Control or immediate treatment group. They were required to complete (a) online personal assessments (one hour or less); (b) three online assessments of the target transgression completed one week apart (approximately 20 minutes each); (c) attendance of all 6 hours of a Friday (Spring semester) or Saturday (Fall semester) workshop.

**Recruitment**
Participants were recruited to participate through the psychology department undergraduate research study website. The current study was presented as a study about forgiveness in people from different cultural backgrounds. It involved identification of a particular offense within a group, such as a work group, sorority, family, student group, etc. (called the target transgression) that the participant would explicitly like to be able to forgive but at that time was still hurtful and engendered unforgiving feelings. The inclusion criteria are listed below.

**Inclusion Criteria**

Students wishing to participate in the study complete questions about inclusion criteria as follows.

Indicate the numbers (below) of **ALL** that apply to you. To participate in this study you must have indicated all of the following—1, 2, 3, 4, 5, 6 and either 7a or 7b:

1. 18-year-old or older
2. Female
3. You have experienced a transgression within a group, such as a work group, sorority, family, student group, etc. that still bothers you enough to create negative feelings (e.g., anger, resentment, bitterness, hate, feelings of wanting to hurt the person back, anxiety, hostility).
4. When you rate your current unforgiveness (0 = *no present unforgiveness*; 1 = *a little unforgiveness*; 2 = *some substantial unforgiveness remains*; 3 = *a lot of unforgiveness*; 4 = *an extreme amount of unforgiveness*), you must rate at 2, 3, or 4 to be eligible for participation.
5. You would like to work on your memory of that experience in a group of other women with the idea of possibly forgiving the person.
6. You are willing to discuss the transgression within the group.

7. **Either** (a) or (b) (below) must be indicated. If applicable, please fill the blank of either (a) or (b).

   (a) born and raised primarily in Virginia (Where? _____________________) or

   (b) be an international student (What country? _____________________) who is going to school here or a person who was born to parents who immigrated to the USA (either before or after you were born) (How long have you, yourself, lived in the USA? ________________)

If you meet the inclusion criteria and are interested in participating our study (completing the questionnaires and attending psychoeducational groups on a Saturday), please click the button below “I agree to participate the study”. You will be contacted by emails and told of your selection as well as details for the study in one week. You will be provided a written consent form prior to the group beginning on a Friday or Saturday and sign up for participating the study.

**Inclusion for Analyses**

I excluded participants according to the criteria below (see Figure 1, The Consort Flow Chart). After consenting to participate in my study online, some students decided not to participate (for WC, n=4, for IT, n=1) and dropped out due to various reasons. Some students did not show up for the six-hour intervention (for WC, n=8, for IT, n=1). If the participant was in the Waiting-list Control condition and did not fill out T3 and at least one of T1 and T2 or if the participant was in the Immediate Treatment condition and did not fill out T1 and at least one of T2 and T3, then those participants were dropped. Finally, 78 subjects were retained for the main analyses. (In the exploratory factor analyses, which were conducted for the measure of forbearance created for the present
study, there were 96 participants because I computed them with all students who completed T1 assessment).
Self-Assessed for Eligibility (n=105)

Enrollment (n =102)

Excluded (n =3)
- Did not consent

Allocation to Condition

Randomly assigned to WC (n =56)

Completed T1 (n =53)

Decided not to participate (n=4)

Completed T2 (n =44)

No show for group (n=8)

Completed T3 (n =37)

Analyzed (n = 37)

Randomly assigned to IT (n =46)

Data factor analysis (PCA) (n=96)

Completed T1 (n =43)

Decided not to participate (n=1)

Completed T2 (n =41)

No show for group (n=1)

Completed T3 (n =39)

Analyzed (n =41)

Treatment Analysis (n=78)

Figure 1  CONSORT flowchart
Hypotheses and Analyses

In general, the main hypothesis is this: people from Virginia will respond differently to the REACH Forgiveness intervention (not culturally adjusted) over time than people from other countries (although people from Western European countries will respond similarly to those in the USA). I hypothesize that this is due to differences in individualism and in collectivism (and furthermore differences in those variables will actually occur within countries as well as between countries), so it will be important to analyze by people’s scores on individualism and on collectivism.

I will test these hypotheses through one multivariate analyses of variance (MANOVA) using country (Virginia, Foreign individualistic, and Foreign collectivistic) as IV and two Hierarchical Multiple Regression using individualism (continuous) and collectivism (continuous) as IVs. In the MANOVA, the main hypotheses are captured in the three-way interaction among condition (immediate treatment versus wait-list control), the cultural variable (country), and time, which is within subjects. I will do MANOVA and Hierarchical Multiple Regression (HMR) separately only because the measured individualism and collectivisms are both continuous variables. According to the assumptions of MANOVA, all the independent variables must be categorical. Therefore, though I will do both MANOVA and HMR in my analyses and results, I will only report the hypotheses related to MANOVA as an example.

In the MANOVA and subsequent ANOVAs, the most efficient way of stating my research hypotheses is to simply describe the expected three-way interaction. I will examine, within the MANOVAs and subsequent ANOVAs, the other two-way interactions [e.g., treatment x culture, treatment x time(S), and culture x time(S)] and
main effects [e.g., treatment, culture, and time(S)], but the only interaction that is remotely of interest is whether the treatments, with culture collapsed, are effective [e.g., the treatment x time(S) interaction]. Thus, below, I will describe the expected differences in response to treatment according to culture on the multivariate dependent variables first and then each of the dependent variables.

**Research Hypotheses, Rationale, and Analyses**

**Research Hypothesis 1**

**Statement of the Hypothesis.** I hypothesize that there will be overall group differences in Condition (Immediate Treatment, Waitlist Control) and Country within time (T1, T2, T3) along two measures: Emotional Forgiveness and Decisional Forgiveness. I also tentatively hypothesize that there will be group differences in condition (IT, WC) and Country within time (T1, T2, T3) on Forbearance. Individualism-Collectivism will be measured three ways—country (VA, foreign individualistic, foreign collectivistic); high and low individualism, and high and low collectivism. For Country, I anticipate that Virginia students from Individualistic countries behave similarly to those students who are high in Individualistic Self-Construal. People in Foreign countries that are collectivistic behave similarly to people who are low in individualism. For High versus Low Collectivism, the effects are thought to follow the same shapes but the graphs will be reversed in direction relative to High versus Low Individualism (see Figure 2, 3, 4).

**Rationale.** Hook, Worthington, and Utsey (2009) have proposed a model of collectivistic forgiveness. In their model, they analyzed research according to whether it occurred in largely collectivistic cultures or largely individualistic cultures. They
suggested two propositions. The second proposition of Hook et al (2009) suggested that when people in collectivistic cultures forgive, it will more often be concerned with decisions to forgive (i.e., intent to behave in ways that do not express negative emotions or motivations and treat the other person as a person of value) than with emotional forgiveness (i.e., restoring inner harmony within an individual). In other words, in individualistic cultures, emotional forgiveness would take a higher relative importance than will decisional forgiveness when compared to collectivistic cultures.

**Analysis.** I performed a Condition (Immediate Treatment, Waitlist Control) x Country x time (S) [2 x 3 x 3(S)] multivariate analysis of variance (MANOVA) on two dependent variables—decisional forgiveness and emotional forgiveness. In the MANOVA, the measure of individualism-collectivism was operationalized as Virginia-born and raised, foreign extraction (individualistic countries), and foreign extraction (collectivistic countries).

When significant multivariate effects were found, univariate analysis of variance (ANOVAs) was conducted on each dependent measure to determine the locus of the effects. When significant three-way interactions were found (which are hypothesized in each case, see table 1), I used simple main effects analyses (analyzing people scoring high and low in individualism or collectivism separately) to determine the locus of the effects.
Table 1.

*Predicted (and Relevant) Effects for Condition by High or Low Individualism for Each of the Three Main Dependent Measures*

<table>
<thead>
<tr>
<th>Effect Under Investigation</th>
<th>Emotional Forgiveness</th>
<th>Decisional Forgiveness</th>
<th>Forbearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>C * IC * t(S)</td>
<td>For Hi I, both WC and IT benefit more from treatment than people who are Lo I; Hi I starts at a higher level at t 1 than do people who are Lo I</td>
<td>For Hi I, both WC and IT benefit less from treatment than people who are Lo I; Hi I starts at a LOWER level at t 1 than do people who are Lo I</td>
<td>For Hi I, both WC and IT score lower on forbearance than for people who are Lo I, who actually improve from treatment; Hi I starts at a LOWER level at t 1 than do people who are Lo I</td>
</tr>
<tr>
<td>C * t(S)</td>
<td>IT &gt; WC @ t2; IT = WC @ t3</td>
<td>IT &gt; WC @ t2; IT = WC @ t3</td>
<td>Not previously investigated, so hypotheses are exploratory</td>
</tr>
<tr>
<td>IC * t(S)</td>
<td>Do not care</td>
<td>Do not care</td>
<td>Do not care</td>
</tr>
<tr>
<td>C * IC</td>
<td>Do not care</td>
<td>Do not care</td>
<td>Do not care</td>
</tr>
<tr>
<td>C</td>
<td>Do not care</td>
<td>Do not care</td>
<td>Do not care</td>
</tr>
<tr>
<td>IC</td>
<td>Hi I &gt; LoI</td>
<td>Hi I &lt; LoI</td>
<td>Hi I &lt; LoI</td>
</tr>
<tr>
<td>t(S)</td>
<td>Do not care</td>
<td>Do not care</td>
<td>Do not care</td>
</tr>
</tbody>
</table>

*C=Condition (Immediate Treatment vs Waitlist Control); IC= Individualism-Collectivism (measured three ways—country (VA, foreign); high and low individualism, and high and low collectivism); t(S) = time (S)*
Research Hypothesis 2

Statement of the hypothesis. I hypothesize that the initial differences in Individualism-Collectivism will interact with Treatment Condition (Immediate Treatment or Waitlist Control) and time (within-subjects, T1, T2 and T3) to produce differences in Emotional Forgiveness. Specifically, I hypothesize that for high Individualists, both IT and WC will benefit more from treatment than people who are Low Individualists. In addition, High Individualists start at a higher level at t1 than do people who are Low Individualists (see Figure 2 a, b).

Rationale. Hook, Worthington, and Utsey (2009) have proposed a model of collectivistic forgiveness. In their model, they analyzed research according to whether it occurred in largely collectivistic cultures or largely individualistic cultures. They suggested two propositions. The second proposition of Hook et al (2009) suggested that in individualistic cultures, emotional forgiveness would take a higher relative importance than will decisional forgiveness when compared to collectivistic cultures.

Analysis. When significant multivariate effects were found, univariate analysis of variance (ANOVAs) was conducted on Emotional Forgiveness. A mixed-design (between-within subjects) analysis of variances (ANOVA) was conducted.
Figure 2a. The hypothesized relationship between Emotional Forgiveness and time for High Individualists

Figure 2b. The hypothesized relationship between Emotional Forgiveness and time for Low Individualists
Research Hypothesis 3

**Statement of the hypothesis.** I hypothesize that the initial differences in Individualism-Collectivism will interact with treatment condition (Immediate Treatment or Waitlist Control) and time (within-subjects, T1, T2 and T3) to produce differences in Decisional Forgiveness. Specifically, I hypothesize that for high Individualists, both IT and WC will benefit less from treatment than people who are Low Individualists. In addition, High Individualists start at a lower level at t1 than do people who are Low Individualists (see Figure 3a, b).

**Rationale.** Hook, Worthington, and Utsey (2009) have proposed a model of collectivistic forgiveness. In their model, they analyzed research according to whether it occurred in largely collectivistic cultures or largely individualistic cultures. They suggested two propositions. The second proposition of Hook et al (2009) suggested that when people in collectivistic cultures forgive, it will more often be concerned with decisions to forgive (i.e., intent to behave in ways that do not express negative emotions or motivations and treat the other person as a person of value) than with emotional forgiveness (i.e., restoring inner harmony within an individual).
Figure 3a. The hypothesized relationship between Decisional Forgiveness and time for High Individualists

Figure 3b. The hypothesized relationship between Decisional Forgiveness and time for Low Individualists
Analysis. When significant multivariate effects were found, univariate analysis of variance (ANOVAs) was conducted on Decisional Forgiveness. A mixed-design (between-within subjects) analysis of variances (ANOVA) was conducted. The mixed-design was 3 (Virginia, individualistic foreign, collectivistic foreign) x 2 (IT, WC) x 3 (time, within subjects).

Research Hypothesis 4

Statement of the hypothesis. I hypothesize that the initial differences in Individualism-Collectivism will interact with treatment condition (Immediate Treatment or Waitlist Control) and time (within-subjects, T1, T2 and T3) to produce differences in Forbearance. Specifically, for High Individualists, both WC and IT score lower on forbearance than for people who are Low Individualists, who actually improve from treatment; High Individualists start at a lower level at t1 than do people who are Low Individualists (see figure 4a, b).
Figure 4a. The hypothesized relationship between Forbearance and time for High Individualists

Figure 4b. The hypothesized relationship between Forbearance and time for Low Individualists
**Rationale.** Hook and his colleagues have tested the model in a variety of settings including Nepal (Watkins et al., 2011), the United States (Hook et al., 2011), and China and New Zealand (Hook et al., 2011). In the empirical tests, the model was generally supported. However, in the article on China and New Zealand, Hook et al. interpreted their findings as not fully supporting the model. Namely, in China, there was less evidence of any type of forgiveness—decisional or emotional—than in New Zealand. Hook et al. suggested that within China, when forgiveness occurred, it was more often decisional than emotional, and that concerns with preserving group harmony led Chinese participants more frequently to attempt to suppress emotional expression and curb expression of negative motivations—defined as, forbearance—even at cost to their emotional equanimity. Thus, I hypothesize that High Individualists (e.g. New Zealand) start at a lower level in forbearance at t1 than do people who are Low Individualists (e.g. Chinese). High Individualists will decrease their forbearance after obtaining the forgiveness treatment because we assume that their emotional forgiveness will be elevated, which can actually help release their emotional expression. However, we hypothesize that Low Individualists will increase their forbearance after being treated based on the assumption that they may mistakenly regard “forgiveness” as “forbearance” in the treatment.

**Analysis.** A univariate analysis of variance (ANOVAs) was conducted on Forbearance. The mixed-design was 3 (Virginia, individualistic foreign, collectivistic foreign) x 2 (IT, WC) x 3 (time, within subjects).

**Research Hypothesis 5**
Statement of the hypothesis. I hypothesize that there will be interaction effects of Condition (Immediate-Treatment or Waitlist Control) by Time (within subjects, T1, T2 and T3) on EF, DF. To explain the nature of the significant interaction effects, simple main effects are hypothesized to fit the following pattern: At T1, Immediate Treatment will be appropriately equal to Waitlist Control; at T2, Immediate Treatment will report higher levels of EF and DF; at T3, Immediate Treatment will be appropriately equal to Waitlist Control (See Figure 5).
Figure 5. Hypothesized Relationship of EF or DF by Treatment Condition
**Rationale.** The introduction of the intervention would likely decrease an individual’s tendency to revenge or avoid and hence increase their decisional forgiveness and emotional forgiveness to the transgressors. Since neither group has received the intervention, at T1, I do not expect any significant difference for people between in the Immediate Treatment group and in the Waitlist Control group. At T2, participants in the Immediate Treatment group will have been treated while the participants in the Waitlist Control group will not. Hence, I hypothesize that Immediate Treatment group will report higher levels of both emotional and decisional forgiveness. At T3, as both groups will have received the intervention, Immediate treatment group and Waitlist Control group will show the similar elevated forgiveness.

**Analysis.** I conducted two separate but similar mixed-design analyses: 2 (Immediate Treatment and Waitlist Control) x 3 ([S] Time 1, Time 2 and Time 3) repeated measures ANOVAs on EF and DF respectively. In the analyses, treatment condition was the between subjects independent variable, time was the within subjects independent variable, and either EF or DF was dependent variable. Condition x t (S) univariate ANOVAs was conducted if a significant condition x t (S) interaction was found. Simple main effects analysis testing the difference in Condition at each time point (T1, T2, T3) were conducted if significant univariate interactions were detected.
RESULTS

Preliminary Data Analyses

I first dealt with missing data and outliers. To account for missing data, the mean score for the particular group (either Virginia or Foreign, either IT or WC) on the same date was used. Outliers for some variables ($n=3$) were identified and deleted to make sure that the remaining values represent true responses. The correlation matrix for all measures and means and standard deviations are reported in Tables 2 and 3.

Exploratory Factor Analysis on the Measure of Forbearance

I hypothesized that forbearance would be affected by the REACH Forgiveness treatment and by Country and Self-construal. However, within the literature, no measure existed to assess forbearance. Thus, I developed a measure for the purpose of my analyses. I acknowledge the limitations of this analysis. I developed the measure on the same sample as I used to analyze the effects of treatment and person variables on the measure. Thus, any findings must remain exceptionally tentative. However, one unique aspect of the present thesis is the hypotheses about forbearance. I could simply have created items and measured with the theoretically relevant measure, or I could try to psychometrically refine my items but do so on the present sample. I chose the second option. Thus with full knowledge of the limitations of any findings, I report the psychometric analysis of my measure.

Scores on all 10 Negative Emotional and Motivational Expression after Transgressions (NEMET) items were assessed for missing data, normality, and the
presence of outliers. All other scales were treated similarly to insure the accuracy of the data.
Table 2.

**Correlation Matrix for All Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>SCS-C</th>
<th>SCS-I</th>
<th>T1_DFS</th>
<th>T1_EFS</th>
<th>T1_FOR</th>
<th>T2_DFS</th>
<th>T2_EFS</th>
<th>T2_FOR</th>
<th>T3_DFS</th>
<th>T3_EFS</th>
<th>T3_FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.SCS-Collectivism (SCS-C)</td>
<td>1</td>
<td>.285</td>
<td>-.063</td>
<td>.056</td>
<td>.260</td>
<td>-.114</td>
<td>-.015</td>
<td>.166</td>
<td>-.071</td>
<td>-.088</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.014)</td>
<td>(.593)</td>
<td>(.639)</td>
<td>(.025)</td>
<td>(.334)</td>
<td>(.902)</td>
<td>(.158)</td>
<td>(.549)</td>
<td>(.455)</td>
<td>(.497)</td>
</tr>
<tr>
<td>2.SCS-Individualism (SCS-I)</td>
<td>1</td>
<td>-.033</td>
<td>-.063</td>
<td>-.198</td>
<td>.087</td>
<td>-.037</td>
<td>-.263</td>
<td>-.065</td>
<td>-.093</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.780)</td>
<td>(.597)</td>
<td>(.091)</td>
<td>(.460)</td>
<td>(.757)</td>
<td>(.024)</td>
<td>(.580)</td>
<td>(.431)</td>
<td>(.998)</td>
<td></td>
</tr>
<tr>
<td>3.T1_Decisional Forgiveness (T1_DFS)</td>
<td>1</td>
<td>.476</td>
<td>.066</td>
<td>.466</td>
<td>.359</td>
<td>-.044</td>
<td>.458</td>
<td>.482</td>
<td>.054</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(&lt;.001)</td>
<td>(.563)</td>
<td>(&lt;.001)</td>
<td>(.001)</td>
<td>(.704)</td>
<td>(&lt;.001)</td>
<td>(&lt;.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.T1_Emotional Forgiveness (T1_EFS)</td>
<td>1</td>
<td>.128</td>
<td>.301</td>
<td>.646</td>
<td>.078</td>
<td>.148</td>
<td>.480</td>
<td>.148</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.264)</td>
<td>(.007)</td>
<td>(&lt;.001)</td>
<td>(.497)</td>
<td>(.195)</td>
<td>(&lt;.001)</td>
<td>(&lt;.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.T1_Forbearance (T1_FOR)</td>
<td>1</td>
<td>-.048</td>
<td>.096</td>
<td>.604</td>
<td>-.193</td>
<td>.060</td>
<td>.544</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.674)</td>
<td>(.401)</td>
<td>(&lt;.001)</td>
<td>(.090)</td>
<td>(.604)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.T2_Decisional Forgiveness (T2_DFS)</td>
<td>1</td>
<td>.561</td>
<td>-.202</td>
<td>.712</td>
<td>.571</td>
<td>-.032</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(&lt;.001)</td>
<td>(.076)</td>
<td>(&lt;.001)</td>
<td>(&lt;.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.T2_Emotional Forgiveness</td>
<td>1</td>
<td>.048</td>
<td>.392</td>
<td>.634</td>
<td>.091</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.675)</td>
<td>(&lt;.001)</td>
<td>(&lt;.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(T2_EFS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. T2_Forgiveness (T2_FOR)</td>
<td>1</td>
<td>-.211</td>
<td>-.021</td>
<td>.583</td>
<td>(.064)</td>
<td>(.853)</td>
<td>(&lt;.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. T3_Decisional Forgiveness (T3_DFS)</td>
<td>1</td>
<td></td>
<td>.579</td>
<td>-1.20</td>
<td>(&lt;.001)</td>
<td>(.296)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. T3_Emotional Forgiveness (T3_EFS)</td>
<td>1</td>
<td></td>
<td></td>
<td>.055</td>
<td></td>
<td>(.630)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. T3_Forgiveness (T3_FOR)</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a. Top number in each box is correlation coefficient and below is p value (2-tailed).
   b. Those correlations significant at Bonferroni-corrected alpha of .002 are in bold.
Table 3.

*Means and Standard Deviations of Dependent Variables by Time, Condition and Country*

<table>
<thead>
<tr>
<th>Condition</th>
<th>Country</th>
<th></th>
<th>T1_DFS</th>
<th>T1_EFS</th>
<th>T1_For</th>
<th>T2_DFS</th>
<th>T2_EFS</th>
<th>T2_For</th>
<th>T3_DFS</th>
<th>T3_EFS</th>
<th>T3_For</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>Foreign</td>
<td>Mean</td>
<td>28.20</td>
<td>22.85</td>
<td>21.50</td>
<td>28.21</td>
<td>23.89</td>
<td>23.05</td>
<td>30.32</td>
<td>24.53</td>
<td>22.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Std. Deviation</td>
<td>4.71</td>
<td>5.46</td>
<td>4.30</td>
<td>4.22</td>
<td>6.02</td>
<td>4.59</td>
<td>4.49</td>
<td>5.10</td>
<td>3.31</td>
</tr>
<tr>
<td>Virginia</td>
<td>Mean</td>
<td>27.29</td>
<td>20.81</td>
<td>20.24</td>
<td>30.15</td>
<td>25.80</td>
<td>20.10</td>
<td>31.50</td>
<td>27.06</td>
<td>19.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>5.85</td>
<td>6.25</td>
<td>5.63</td>
<td>5.59</td>
<td>7.57</td>
<td>6.63</td>
<td>5.12</td>
<td>6.38</td>
<td>5.69</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>27.73</td>
<td>21.80</td>
<td>20.85</td>
<td>29.21</td>
<td>24.87</td>
<td>21.54</td>
<td>30.89</td>
<td>25.76</td>
<td>20.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>5.28</td>
<td>5.90</td>
<td>5.00</td>
<td>5.01</td>
<td>6.84</td>
<td>5.85</td>
<td>4.78</td>
<td>5.82</td>
<td>4.78</td>
<td></td>
</tr>
<tr>
<td>WC</td>
<td>Foreign</td>
<td>Mean</td>
<td>26.88</td>
<td>21.13</td>
<td>22.50</td>
<td>25.80</td>
<td>19.87</td>
<td>24.60</td>
<td>29.50</td>
<td>24.31</td>
<td>21.31</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>7.48</td>
<td>7.59</td>
<td>5.70</td>
<td>6.98</td>
<td>8.09</td>
<td>5.38</td>
<td>6.62</td>
<td>9.18</td>
<td>5.28</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>Mean</td>
<td>29.29</td>
<td>22.25</td>
<td>22.47</td>
<td>30.63</td>
<td>23.26</td>
<td>21.79</td>
<td>32.10</td>
<td>28.48</td>
<td>22.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>8.20</td>
<td>4.27</td>
<td>5.83</td>
<td>4.63</td>
<td>3.23</td>
<td>4.49</td>
<td>5.99</td>
<td>6.15</td>
<td>6.22</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>28.24</td>
<td>21.75</td>
<td>22.49</td>
<td>28.50</td>
<td>21.76</td>
<td>23.03</td>
<td>30.97</td>
<td>26.68</td>
<td>21.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>7.89</td>
<td>5.91</td>
<td>5.69</td>
<td>6.19</td>
<td>6.03</td>
<td>5.03</td>
<td>6.32</td>
<td>7.78</td>
<td>5.77</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Foreign</td>
<td>Mean</td>
<td>27.61</td>
<td>22.08</td>
<td>21.94</td>
<td>27.15</td>
<td>22.18</td>
<td>23.74</td>
<td>29.94</td>
<td>24.43</td>
<td>21.74</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>6.04</td>
<td>6.45</td>
<td>4.92</td>
<td>5.65</td>
<td>7.18</td>
<td>4.94</td>
<td>5.49</td>
<td>7.14</td>
<td>4.27</td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>Mean</td>
<td>28.29</td>
<td>21.51</td>
<td>21.30</td>
<td>30.38</td>
<td>24.56</td>
<td>20.92</td>
<td>31.82</td>
<td>27.82</td>
<td>20.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>7.11</td>
<td>5.36</td>
<td>5.77</td>
<td>5.09</td>
<td>5.94</td>
<td>5.68</td>
<td>5.54</td>
<td>6.21</td>
<td>6.07</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27.97</td>
<td>6.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.78</td>
<td>5.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.61</td>
<td>5.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.88</td>
<td>5.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.42</td>
<td>6.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.23</td>
<td>5.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30.93</td>
<td>5.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26.22</td>
<td>6.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.23</td>
<td>5.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I used the Eigenvalue rule (Kaiser, 1960) and the scree test (Cattell, 1966) to determine the optimal number of factors. One factor best described the data. Hence, all items were analyzed using an exploratory factor analysis (EFA) with principal component analysis (PCA) constrained to one factor. Items were dropped from the NEMET if they did not load at .45 or above on their factor.

**Principal Components Analysis (PCA): Study 1**

To permit an examination of cross validation, I randomly split the sample of 96 participants in roughly half. From the original sample of 96, 55 cases were randomly selected as the first subsample. At least some of the correlations between items were larger than .30. The Kaiser-Meyer-Olkin measure of sampling adequacy was .78, above the adequate factorability of .7, and Bartlett’s test of sphericity was significant, \( \chi^2 (45) = 158.99, p < .001 \).

The NEMET-10 was subjected to principal components analysis (PCA) using SPSS 19.0. The PCA revealed the presence of 3 components with Eigenvalues exceeding 1, explaining 27.50%, 12.77%, and 9.45% respectively. The results of scree plot showed only one component because there was an elbow at the second component. A second PCA was run on subsample 1 with the 7 items of the one factor using Varimax rotation. Three items were eliminated because they failed to meet our criterion of having a factor loading of .45 or above, yielding the NEMET-7. A final EFA was run on the remaining 7 items to verify factor loadings. All items met established criteria and were retained.

The final scale for subsample 1 consisted of 7 items loading onto one factor. The factor, consisting of items 2, 3, 4, 5, 6, 8, 9, accounted for 42.85% of the total item
variance. The 7 items of the RES-7 and their factor loading values are presented in Table 4. The Cronbach’s alpha coefficient for the NEMET-7 was .83.

Replication of Factor Loadings using PCA on Subsample 2

A PCA was performed on a second, randomly selected subset of 41 cases. Based on the previous analysis, items 2, 3, 4, 5, 6, 8, and 9 were included for this analysis with a forced one-factor solution. For the second subsample, the Kaiser-Meyer-Olkin measure of sampling adequacy was .79, and Bartlett’s test of sphericity was significant, $\chi^2 (21) = 135.09, p < .001$. All the remaining items from the analysis of the subsample 1 were cleanly loaded for the subsample 2. The final scale for subsample 2 consisted of 7 items loading onto one factor. The factor, consisting of items 2, 3, 4, 5, 6, 8, and 9, accounted for 51.24% of the total variance. The final factor loadings from subsample 2 are presented in Table 4. The Cronbach’s alpha coefficient for the NEMET-7 was .84.

Evidence Supporting Construct Validity of the Measure of Forbearance (i.e., the NEMET)

I used the final sample ($n=78$) to investigate construct validity. The NEMET showed evidence of construct validity by correlating in the hypothesized direction with the Collectivism measure of Self-Construal Scale (SCS_C). Pearson’s correlation analysis revealed that the NEMET-7 had a positive correlation with SCS_C, $r (74) = .26, p = .025$. The NEMET-7 also showed evidence of discriminant validity by showing no significant correlation with scores on both Decisional Forgiveness scale (DFS), $r (78) = .07, p = .282$ and Emotional Forgiveness scale (EFS), $r (78) = .13, p = .132$. All $p$-values were one-tailed. These relationships are in the expected direction, providing evidence of
supporting construct validity of the NEMET. (for NEMET’s instruction and anchors, see Figure 6)
Table 4.

Factor matrixes for both subsamples

Factor matrix for the subsample 1 - NEMET-7

<table>
<thead>
<tr>
<th>Factor Matrix(^a)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>NEMET2</td>
<td>.47</td>
</tr>
<tr>
<td>NEMET3</td>
<td>.63</td>
</tr>
<tr>
<td>NEMET4</td>
<td>.59</td>
</tr>
<tr>
<td>NEMET5</td>
<td>.80</td>
</tr>
<tr>
<td>NEMET6</td>
<td>.71</td>
</tr>
<tr>
<td>NEMET8</td>
<td>.54</td>
</tr>
<tr>
<td>NEMET9</td>
<td>.80</td>
</tr>
</tbody>
</table>

Factor matrix for the subsample 2 - NEMET-7

<table>
<thead>
<tr>
<th>Factor Matrix(^a)</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>NEMET2</td>
<td>.75</td>
</tr>
<tr>
<td>NEMET3</td>
<td>.76</td>
</tr>
<tr>
<td>NEMET4</td>
<td>.49</td>
</tr>
<tr>
<td>NEMET5</td>
<td>.73</td>
</tr>
<tr>
<td>NEMET6</td>
<td>.78</td>
</tr>
<tr>
<td>NEMET8</td>
<td>.56</td>
</tr>
<tr>
<td>NEMET9</td>
<td>.87</td>
</tr>
</tbody>
</table>
Instructions

This scale pertains to a particular event or person who hurt or offended you. You should have identified that event in writing earlier, and this is one set of ratings about how you feel right now concerning the event. Please indicate your agreement with each item on a 5-point rating scale from 1 = strongly disagree to 5 = strongly agree.

1-----------------------2--------------------3-------------------4-------------------------5

strongly neutral strongly

disagree agree

1. ____ I am trying to control my expression of negative emotions for the sake of the group.

2. ____ When I’m angry, I do not show it.

3. ____ If I showed how I really felt, it would disrupt other people’s lives.

4. ____ I won’t express my negative emotions.

5. ____ I am trying hard not to show anger.

6. ____ I feel like never seeing this person again, but that would destroy the group we belong to.

7. ____ When I am feeling negative emotions, I make sure not to express them.

Figure 6. Negative Emotional and Motivational Expression after Transgressions
(NEMET-7)
Two points before I report and interpret my results:

a. Because 98% of foreign-extraction participants are from generally collectivistic culture (South Asia, Africa, South America), I still categorize Country variable as Virginia or Foreign, instead of three categories as I hypothesized in the chapter 4.

b. In the chapter 4, I illustrated the five hypotheses related to MANOVA and subsequent ANOVAs as example because the hypotheses related to Hierarchical Multiple Regression are similar to MANOVA and ANOVAs. The only difference is that in the MANOVA and ANOVAs, individualism-collectivism is operationalized as Country variable (Virginia, Foreign) while in the hierarchical multiple regression, individualism-collectivism is operationalized as individual scores on the subscale of individualism and collectivism separately. In the current chapter, I will report all results related to MANOVA, ANOVAs and HMR as well as some post-hoc effects.

Research Hypothesis related to MANOVA and subsequent ANOVAs

Three-way multivariate analysis of variance—test of main hypotheses. After developing the NEMET-7 to assess forbearance, I investigated my main hypotheses—that the REACH Forgiveness intervention would affect foreign-born and Virginia-born students differently over time, for waiting list and immediate treatment. A three-way country (Foreign or Virginia) x Condition (IT or WC) x time (S) multivariate analyses of variance (MANOVA) was performed with EFS and DFS as dependent measures. There was no significant multivariate three-way interaction, Wilks’ $\lambda = .988$, multivariate $F (4, 294) = .46, p = .765$. Thus, my main hypothesis (refer back to Figure 2, 3) of differential
responses of foreign-born and Virginia-born students was not supported. However, there was a significant two-way interaction between condition and time (S), Wilks’ $\lambda = .905$, multivariate $F(4,294) = 3.75, p = .005$. This indicated that the treatment worked to produce changes as expected in two types of forgiveness. To determine the locus of the multivariate interaction, I conducted univariate ANOVA on each dependent measure (for a pictorial representation of the hypotheses, see Figure 2, 3). There was no significant interaction effect for condition x time (S) for DFS, $F(2, 136) = 1.94, p = .147$. But there was a significant interaction effect for condition x time (S) for EFS, $F(2, 143) = 6.54, p = .002$.

To explain the significant interaction of condition x time (S) for EFS, I compared the IT and WC at each time point, using a simple main effects analysis. At t1, IT was not different from WC on EFS, $t(76) = .06, p = .955$. This indicates that before intervention, IT had a similar EFS score as did WC. At t2, IT was greater than WC on EFS, $t(76) = 2.18, p = .032$. This means that IT after intervention showed higher EFS than WC who had not, at that point, been treated. At t3, IT was equal to WC, $t(76) = -.82, p = .414$. Again, IT and WC achieved the similar (higher) EFS after both groups got the intervention. Altogether, these findings show that the REACH Forgiveness intervention did promote participants’ emotional forgiveness for both Virginia-born students and foreign-extraction students, but not differentially for each.
Figure 7. Actual Relationship of Emotional Forgiveness by Condition and Time
Although I did not find a significant three-way multivariate interaction for country x condition x time (S), I did find a three-way univariate interaction for EFS, and although this is not strictly interpretable due to the non-significant multivariate F, in consideration of fully explaining my findings, I will interpret it below using simple main effects. For foreign students, at t1, IT was not different from WC on EFS, $t(34) = .79, p = .433$; at t2, IT was marginally greater than WC on EFS, $t(34) = 1.77, p = .086, ns$; at t3, IT was equal to WC, $t(34) = -.07, p = .947$. (for a pictorial representation of the actual data, see Figure 8a) For Virginia students, at t1, IT was not different from WC on EFS, $t(40) = -.84, p = .405$; at t2, IT was not different from WC on EFS, $t(40) = 1.50, p = .141$; at t3, IT was equal to WC, $t(40) = -.99, p = .327$. To clarify this (for Virginia students, IT was not significant different from WC on each time point), I analyzed the data in the other way, which strictly speaking provides redundant explanations. However, because of the nature of the interaction, it is helpful for understanding the interaction. For IT, EFS at t2 ($M=25.80, SD= 7.57$) is greater than EFS at t1 ($M=20.81, SD=6.25$), $t(20) = 4.11, p = .001$. In addition, EFS at t2 ($M=25.80, SD=7.57$) is equal to EFS at t3 ($M=27.06, SD=6.38$), $t(20) = -.70, p = .494$. (This suggested that participants indeed improved when the intervention was offered and maintained their gains afterwards.) For WC, EFS at t2 ($M=23.26, SD=3.23$) is equal to EFS at t1 ($M=22.25, SD=4.27$), $t(20) = 1.34, p = .196$. EFS at t3 ($M=28.48, SD=6.15$) is greater than EFS at t2 ($M=23.26, SD=3.23$), $t(20) = 4.55, p = .000$, (Again, this suggests that participants did not change while they were waiting, but when they received the intervention, they improved.) (For a pictorial representation of the actual data, see Figure 8b)
Figure 8a. Actual Relationship of Emotional Forgiveness by Treatment Condition and Time for Foreign Students

Figure 8b. Actual Relationship of Emotional Forgiveness by Treatment Condition and Time for Virginia Students
Check to see whether hurtfulness affected the analyses. I wanted to be sure that the degree of hurtfulness did not affect the responses to the interventions. Thus, I also used “self-rated hurtfulness of the transgression” as a covariate for all of the above analyses. When I ran the similar analyses above, the use of the covariate did not affect the results. Thus, differences in degree of hurtfulness were deemed not to have affected the responses to the treatment.

Forbearance. A three-way country (Foreign or Virginia) x Condition (IT or WC) x time (S) univariate analyses of variance (ANOVA) was performed with Forbearance as dependent variable. There was no significant three-way interaction, $F(2, 148) = .82, p = .442$. In addition, there was no significant two-way [Condition x time(S)] interaction, $F(2, 148) = .29, p = .747$. Thus, the REACH Forgiveness intervention did not make an impact to participants’ forbearance, which makes sense when the forgiveness intervention intends to promote forgiveness, instead of other emotions/motivations/cognitions.

Research Hypothesis related to Hierarchical Multiple Regression

Eight hierarchical multiple regression analyses were conducted to test the hypothesis that self-construal (first as collectivistic and then as individualistic) affected response to the REACH Forgiveness intervention. Preliminary analyses were conducted for all analyses to endure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

First, two similar hierarchical multiple regressions were used to assess whether different conditions (IT and WC) and the interaction for Condition and Self-construal-Collectivism (continuous variable) will predict Decisional Forgiveness (DF, for the first
hierarchical multiple regression) and Emotional Forgiveness (EF, for the second
hierarchical multiple regression) at T2 after controlling for the DF and EF at T1. Because
the two analysis procedures for DF and EF are similar, I will only report one (DF) as an
example. But I will report the results for EF separately.

Predicting change from t1 to t2 using collectivism (see Table 5a). Decisional
Forgiveness at T1 was added in step one of the analysis, explaining 25.9% of variance in
Decisional Forgiveness at T2. After entry of the Condition (IT or WC) and the Self-
Construal-Collectivism in the second step, the total variance of the DF at T2 explained by
the model as a whole was 29.4%, $\Delta R^2 = .03$, $\Delta F (2, 70) = 1.71, p = .189$ Then the
interaction for Condition (IT or WC) and Self-Construal-Collectivism was added in the
final step. The total variance explained by the final model was 31.9%, $\Delta R^2 = .03$, $\Delta F (2,$
70) = 2.58, $p = .113$. In the final model of DF, neither Condition nor interaction was a
significant predictor ($\beta = -.17, p = .096; \beta = .52, p = .113$, respectively). However, in the
final model of EF, Condition was a significant predictor ($\beta = -.24, p = .006$) while
interaction for Condition and Collectivism was not a significant predictor ($\beta = .14, p = .595$).

Predicting change between t2 and t3 using collectivism (see Table 5a). Two
similar hierarchical multiple regressions were used to assess whether different conditions
(IT or WC) and the interaction for Condition and Self-construal-Collectivism will predict
Decisional Forgiveness (DF, for the first hierarchical multiple regression) and Emotional
Forgiveness (EF, for the second hierarchical multiple regression) at T3 after controlling
for the DF and EF at T2. Because the two analysis procedures for DF and EF are similar,
I will only report one (DF) as an example. But I will report the results for EF separately.
Decisional Forgiveness at T2 was added in step one of the analysis, explaining 55.4% of variance in Decisional Forgiveness at T3. After entry of the Condition (IT or WC) and the Self-Construal-Collectivism in the second step, the total variance of the DF at T3 explained by the model as a whole was 57.1%, $\Delta R^2 = .02$, $\Delta F (2, 70) = 1.38$, $p = .259$. Then the interaction for Condition (IT or WC) and Self-Construal-Collectivism was added in the final step. The total variance explained by the final model was 57.1%, $\Delta R^2 = .00$, $\Delta F (1, 69) = .02$, $p = .876$. In the final model of DF, neither Condition nor interaction was a significant predictor ($\beta = .13$, $p = .106$; $\beta = -.04$, $p = .876$, respectively). However, in the final model of EF, Condition was a significant predictor ($\beta = .24$, $p = .008$) while interaction for Condition and Collectivism was not a significant predictor ($\beta = -.18$, $p = .518$).
### Table 5a.

**Hierarchical Multiple Regression Analyses Predicting Decisional Forgiveness and Emotional Forgiveness at different time from Self-construal-Collectivism and condition**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>DF at T2 ΔR²</th>
<th>β</th>
<th>DF at T3 ΔR²</th>
<th>β</th>
<th>EF at T2 ΔR²</th>
<th>β</th>
<th>EF at T3 ΔR²</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.26***</td>
<td>.55***</td>
<td>.46***</td>
<td>.46***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>.03</td>
<td>.02</td>
<td>.06*</td>
<td>.06*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collectivism</td>
<td>-.10</td>
<td>.03</td>
<td>-.08</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition</td>
<td>-.17</td>
<td>.13</td>
<td>-.24*</td>
<td>.24*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>.03</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction for Collectivism x Condition</td>
<td>.52</td>
<td>-.04</td>
<td>.14</td>
<td>-.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. aControl variables are different for each dependent variable. Control variable is “DF at T1” when DV is “DF at T2”; control variable is “DF at T2” when DV is “DF at T3”; control variable is “EF at T1” when DV is “EF at T2”; control variable is “EF at T2” when DV is “EF at T3”.

*p<.10. *p<.05. ***p<.001
Predicting change between t1 and t2 and change between t2 and t3 using individualism (see Table 5b). Then, four similar hierarchical multiple regressions were conducted following the exactly same procedures with analyses above. The only difference was that Self-Construal-Collectivism was replaced with Self-Construal-Individualism (continuous variable).

For DF, neither Condition nor interaction for Condition and Individualism was a significant predictor to the change of decisional forgiveness. For EF, only Condition was a significant predictor to the change of emotional forgiveness while there was not a significant interaction effect for Condition and Individualism.

I also used “self-rated hurtfulness of the transgression” as a covariate when I ran the similar analyses above. But it did not affect the results.

Based on these hierarchical multiple regressions, I found that when controlling the Emotional Forgiveness at T1, Condition (IT and WC) negatively predicted Emotional Forgiveness at T2 ($\beta=$-.24, $p=$ .006). In addition, when controlling the Emotional Forgiveness at T2, Condition (IT and WC) positively predicted Emotional Forgiveness at T3 ($\beta=$ .24, $p=$ .008). Because I coded IT as 1 and WC as 2, the findings indicate that: a. IT (at T1: $M=21.80, SD=5.90$; at T2: $M=24.73, SD=6.73$) significantly increased more than WC (at T1: $M=21.73, SD=5.82$; at T2: $M=21.59, SD=5.88$) in Emotional Forgiveness from T1 to T2 when IT got the intervention and WC did not; b. WC (at T2: $M=21.59, SD=5.88$; at T3: $M=26.68, SD=7.78$) significantly increased more than IT (at T2: $M=24.73, SD=6.73$; at T3: $M=25.41, SD=5.70$) in Emotional Forgiveness from T2 to T3 when WC got the intervention and IT got it one week ago.
Table 5b.

*Hierarchical Multiple Regression Analyses Predicting Decisional Forgiveness and Emotional Forgiveness at different time from Self-construal-Individualism and condition*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>DF at T2</th>
<th>DF at T3</th>
<th>EF at T2</th>
<th>EF at T3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td>.26***</td>
<td>.55***</td>
<td>.46***</td>
<td>.46***</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td>.03</td>
<td>.03</td>
<td>.05*</td>
<td>.06*</td>
</tr>
<tr>
<td>Condition</td>
<td>-.14</td>
<td>-.11</td>
<td>-.04</td>
<td>-.02</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction for Individualism x Condition</td>
<td>-.14</td>
<td>-.17</td>
<td>.07</td>
<td>-.20</td>
</tr>
</tbody>
</table>

*Note. Control variables are different for each dependent variable. Control variable is “DF at T1” when DV is “DF at T2”; control variable is “DF at T2” when DV is “DF at T3”; control variable is “EF at T1” when DV is “EF at T2”; control variable is “EF at T2” when DV is “EF at T3”.

*p<.10. *p<.05. ***p<.001*
Research Hypothesis related to Leader’s training levels

I had two different levels of professional training among my leaders. Furthermore, level of leaders was confounded with semester; the undergraduates led groups in the first semester of data collection, and the graduate students led groups in the second semester of data collection. If differences of leader occur, then, we really do not know whether it is level of prior professional training that would affect outcome of semester. A likely and tentative hypothesis, if a difference occurs, is that it is due to leaders. However, replication would be needed due to the confound prior to making a definitive interpretation that education and training of the leaders made a difference.

Multivariate effect of leaders on responsiveness to treatment. A three-way Leader (Undergraduate or Graduate) x Condition (IT or WC) x time (S) multivariate analyses of variance (MANOVA) was performed with EFS and DFS as dependent measures. There was no significant multivariate three-way interaction, Wilks’ $\lambda = .969$, multivariate $F(4, 294) = 1.18$, $p = .322$. There was no significant two-way interaction for Leader (Undergraduate or Graduate) and time (S), Wilks’ $\lambda = .955$, multivariate $F(4, 294) = 1.72$, $p = .146$. It shows that forgiveness intervention worked equally with undergraduate students or graduate students as group leaders.
DISCUSSION

In my thesis, I investigated whether students of foreign extraction and Virginia-born students would respond similarly to an empirically supported psychoeducational group intervention—the REACH Forgiveness intervention. I operationalized culture in two ways—by country and by individual self-reported self-construal. I measured forgiveness using two measures—decisional forgiveness and emotional forgiveness. I also introduced a new measure that was a response to manage unforgiveness without forgiving—forbearance. I thought that forbearance might be more appropriate in collectivistic cultures and individuals than forgiveness.

Forgiveness and Culture

I found that six-hour REACH Forgiveness intervention promoted people’s forgiveness regardless of culture, which is consistent with many other empirical studies about REACH model (both secular and spiritual versions) (McCullough & Worthington, 1995; McCullough et al., 1997; Sandage & Worthington, 2010; Worthington et al., 2010; Worthington et al., 2009; Worthington et al., 2000). But the promotion of forgiveness was only shown in people’s emotional forgiveness, not decisional forgiveness. Previous research has shown similar changes in emotional forgiveness or reductions in unforgiveness. Decisional forgiveness has not been assessed in previous research on the REACH. Though I recruited both Virginia students and foreign students, the study was still conducted in the U.S, relatively high-individualistic culture.

Hook, Worthington, and Utsey (2009) proposed a model of collectivistic forgiveness. In their model, they analyzed research according to whether it occurred in largely collectivistic cultures or largely individualistic cultures. They suggested two
propositions. The second proposition of Hook et al. (2009) suggested that when people in collectivistic cultures forgive, they will more often be concerned with decisions to forgive (i.e., the intent to behave in ways that do not express negative emotions or motivations and treat the other person as a person of value) than with emotional forgiveness (i.e., restoring inner harmony within an individual). The results of the present study do not support this hypothesis.

On the other side, I hypothesized that when people in high-individualistic culture forgive, emotional forgiveness would be of more concern than would decisional forgiveness. The culture here is conceptualized as the large environment where people are currently living and being impacted by it. Despite the individual difference in individualism and collectivism within the US culture and across other cultures represented within my sample, the culture where the study was conducted—within a Virginia state university—still makes a difference. This difference may explain why the enhanced forgiveness after intervention in my study was more emotion-based than decision-based.

I hypothesized that due to difference in individualism and collectivism, people in high-collectivism (or high-individualism) would respond differently to the REACH Forgiveness intervention (not culturally adjusted) over time than people in low-collectivism (or low-individualism). Because differences in individualism and in collectivism actually occur within countries as well as between countries, I used two ways to collect and analyze the data. One way involved the country where the participants either come from or their parents immigrated from as a categorical variable to differentiate their individualism or collectivism. This was a gross measure of
individualism and collectivism. Therefore, my first hypothesis suggested that people from Virginia would respond differently to the REACH Forgiveness intervention (not culturally adjusted) over time than would people from other countries. In my sample, 98% of the foreign-born or foreign-extraction participants were from more collectivistic culture compared with U.S.

In the second way that I assessed individualism and collectivism, I used an idiographic assessment—I used the Self-Construal Scale to measure individuals’ continuous scores on individualism and on collectivism (separately). My second hypothesis can be reframed as people responded differently to the REACH Forgiveness interventions depending on their own self-reported scores on collectivism (or individualism).

Based on my analyses, I did not find the different forgiveness patterns (decisional forgiveness and emotional forgiveness) when either collectivistic or individualistic people (according to their cultural self-construal) responded to the REACH forgiveness intervention. The model worked well regardless of whether the students came from foreign cultures or were born in Virginia or were in different-level collectivism or individualism. This finding is similar in many ways to research on adapting interventions for religious/spiritual clients (Rye & Pargament 2005; Rye et al., 2002; Worthington et al., 2011). The studies reviewed and meta-analyzed by Worthington et al. found that religiously adapted and non-adapted treatments were not differentially effective for religious clients. Although it is an extension, I tentatively suggest that tailoring a group-administered psychoeducational forgiveness intervention to a different culture might not be necessary for studies done in the US College. I do not suggest, however, that tailoring
the REACH Forgiveness intervention to cultural context is not needed in other countries.

In fact, Worthington et al. (2010) found that the REACH Forgiveness intervention delivered in rural churches in the Philippines worked well when tailored to accommodate both religion and Filipino culture. There was no control condition in which a non-tailored group was compared to the tailored group, so the results are not unambiguous.

Rye et al. (2005) compared a religiously accommodated and non-accommodated REACH Forgiveness-derived intervention with Christian women. In post-hoc interviews, Rye and his colleagues (2005) found that women who were assigned to the non-religious REACH intervention employed their own religious private practices (like praying for the offender and praying for help at forgiving) even though the secular intervention did not mention religion. If we cautiously extend this to our findings, we might suspect (although I did not do qualitative interviews after the intervention) that the participants in my study might have made their own cultural adaptations and respond culturally, and that the secular USA version of the intervention works as well as the adapted version. However, it is impossible to say until this is investigated. Thus, intervention studies might consider post-study qualitative interviews or debriefing questionnaires to determine whether cultural adaptations are made by individual participants, and if so, what kinds.

**Forbearance**

Forbearance was defined as the attempts to suppress emotional expression and curb expression of negative motivations. This definition differs from the only other study of forbearance (McCullough, Fincham, & Tsang, 2003). McCullough et al. construed forbearance as the amount of backwards extrapolation using a curve defined by at least two points of measurement relative to the date of the transgression. I suggested that my
definition of forbearance as the suppression of negative emotional expression is closer to the experience of people forbearing within collectivistic cultures. In one study done in China, Hook et al. (2011) suggested that the concerns with preserving group harmony led Chinese participants more frequently to forbear, even at cost to their emotional equanimity. Because no measure existed to assess forbearance, I developed a measure (NEMET) and tested its psychometric properties. I presented some initial evidence that suggests support for the estimated reliability and the construct validity of the measure. However, I also developed the psychometric data on the measure on the single sample. Thus, I am skeptical of the validity of any findings in which I used the measure to assess outcomes. Nevertheless, this is an initial investigation of a new construct. Thus, I hypothesized that forbearance may be affected by the REACH Forgiveness intervention and by country/self-construal. But I did not find any significant effects.

In retrospect, the hypothesis was probably ill-considered. The REACH Forgiveness intervention never mentions forbearance except in the definitional phase, and in fact, the REACH Forgiveness intervention encourages people to experience changes in emotion, not merely stifling their display of negative emotion. It was probably an ill-founded hypothesis to believe that the REACH Forgiveness groups might produce changes in forbearance. In fact, no changes were found. Forbearance deserves a more appropriate experimental test before any conclusions can be drawn about it.

**Post-Hoc Study of the Effects of Leaders of the Groups**

To attract a sufficient number of participants to yield adequate statistical power, the study had to be run in two semesters—Spring 2011 and Fall 2011. A “natural experiment” manifested because in the Fall semester, the group leaders were two
undergraduate students (one foreign-born and one US-born) in Psychology, who each ran three immediate treatment and three waiting list treatment groups. At the end of the Spring semester, the undergraduate students had graduated. Thus, the replications were led by two master’s students in Counseling Psychology—each of whom ran three immediate treatments and three waiting list treatment groups. (Of course, semester was confounded with leader experience, but still this “natural experiment” could provide initial evidence about whether background and level of expertise of group leaders might make a difference. Worthington (personal communication) has trained hundreds of group leaders for the REACH Forgiveness groups and he suggests that level of training makes no difference in the outcomes of the groups. However, his statement was based on personal observations, not on data. The present study adduced the first data on the topic. I found no differences in the groups in the Fall and Spring semester. Thus, tentatively, I conclude (with proper respect for the confound of semester and leader experience) that there is no difference in group leader experience. Obviously, this is a tentative conclusion and needs a methodologically rigorous replication.

Limitations of the Current Studies

There are several limitations or concerns in this study. One of the issues involves the foreign-extraction student group. Foreign-extraction students include international students and the second-generation whose parents immigrated to the U.S. Because we have concerns that we are not able to recruit sufficient participants who come to the U.S for schooling due to its limited populations in the campus, we combine these actual two different groups into one foreign-extraction student group in our study. But doing so is to introduce threats to internal validity of the study. For example, there is probably large
difference between international students and second-generation immigrants in culture, but we simply mix them in one observed group and assume that they share the similar culture. When compared with Virginia born and raised group, it is more likely to get insignificant difference for the mixed group than for the real international student group. A way of reducing this threat is to run a preliminary analysis to test the difference between real international students and second-generation immigrants. If they do significantly differ in some responses involved culture, we need to consider separating these two groups.

Treatment diffusion is another possible threat to internal validity, but it can be controlled well if group members follow the instruction of group leaders regarding the confidentiality issue within the group. During the treatment, they will discuss a transgression and work toward forgiving that transgression. This will of necessity require revealing some personal information primarily to a partner within the group, but at times to the group as a whole. The group is cautioned about confidentiality and agreement is solicited from group members not to divulge anything told by any group member. Following the group rules not only guarantees the confidentiality of group members, but also avoids treatment diffusion that makes the result of the study distrustful.

Since the four group leaders for all treatment groups have different cultural background, attention to different qualities of group leaders may become a concern that needs to be dealt with before running the study. Two group leaders were from the U.S while the other two were born in foreign countries (Holland and Ghana). The one born in Holland can speak native American English, and she identifies herself as a native speaker. She also has spent eight years in the U.S. since her high school. The other leader
born in Ghana is not a native speaker of English and has stayed in the U.S for only three years. I ran a preliminary analysis to check whether there is significant difference between four group leaders on treatment effect. But there will be multiple confounded factors to influence the results. For example, two group leaders (from U.S and Ghana) got Master’s degrees in counseling psychology while the other two (from U.S and Holland) were senior undergraduates in psychology. Also, the two undergraduates ran the groups in the spring semester, which usually has a positive effect to treatment. The two graduates ran them in the fall, which usually makes treatment harder.

Implications for Research

In the present research, I revealed several questions that advance the research agenda on the REACH Forgiveness intervention and on interventions to promote forgiveness in general. For example,

1. I found that foreign students who were functioning in a US university did not respond differently than Virginia-born students to the REACH Forgiveness intervention. However, future research needs to investigate whether foreign students in foreign countries benefit equally from the non-culturally accommodated and a culturally accommodated REACH Forgiveness intervention.

2. Results of the current study call into question Hook, Worthington, and Utsey’s (2009) theory of collectivistic forgiveness, in spite of some supportive empirical evidence (Hook, Worthington, Utsey, Davis, & Burnette, in press). My theorizing suggests that perhaps forbearance is...
of greater concern and decisional forgiveness of less concern that Hook, Worthington, and Utsey theorized. However, the current study shed no light on whether my theorizing is true.

3. Forbearance deserves a rigorous experimental test within collectivistic cultures.

4. What degree of accommodation to culture might be necessary (if any) and sufficient (if it is found to be necessary)? Tests comparing different types and amounts of cultural accommodation are needed.

5. Does leader experience and training matter to outcomes in the REACH Forgiveness groups? This should be tested rigorously.

6. Might other psychoeducational group interventions, such as Enright’s, Luskin’s, or Rye’s result in the same pattern of results as the present study revealed?

**Implications for Practice**

To the extent that the study’s findings maintain through replication, this would suggest that counselors in USA universities and colleges might not need to specifically culturally accommodate the REACH Forgiveness groups for foreign students. It is less clear whether this would extend to individual counseling.

The groups were efficacious. This suggests that university counseling centers might be able to offer psychoeducational groups open to students with a wide range of interpersonal problems they are trying to deal with through forgiveness. Whereas initial
assessment would be needed to insure that the group was appropriate for the students, it appears that assessment for particular cultural issues might not be crucial. Good counseling practice suggests that the counselor should make that individual assessment and err on the side of protecting the client. However, this group research suggests that errors might be statistically less likely to do harm than one might think. This, of course, raises issues about statistical versus interview assessment (Kahneman, 2011; Meehl, 1996)

Conclusion

In this thesis, I conducted a controlled intervention experiment using a waiting list design. The findings are an important step in bringing forgiveness into more cultures. Forgiveness, it has been argued, is one of the keys to eventual world peace. Archbishop Desmond Tutu has eloquently in his book, *No Future without Forgiveness*, “…because of forgiveness, there is a future” (p. 282).
References


Appendices
Measures Used in the Study
Demographic Questionnaire

1. Your Gender:_______  2. Your Age:_______

3. What is your current marital status? (circle one)  Single  Married  Separated  Divorced  Widowed

4. What is your Ethnicity/Race? _________________

5. What is your religious affiliation? (for example, Baptist, Buddhist, Hindu, Muslim, Presbyterian, Roman Catholic, None...)
   ________________________________.

6a. Were you born and raised primarily in Virginia of the U.S (where:___________)?
   If yes, you are eligible for this study. Please complete the blank above (6a) and then continue with question 7;
   ________________________________.
   If no, please answer the question below:

6b. Are you an international student (what country: _________________) who is going to school here or a person who was born to parents who immigrated to the USA (either before or after you were born)? (How long have you, yourself, lived in the USA? ____________)

   If yes, you are eligible for this study. Please complete the blank above (6b) and continue with question 7;

   If no, I am sorry that you are not eligible for this study and please withdraw your participation. Thank you!

7. How many (if any) activities or services do you attend at your religious institution (circle one)?
| None | One a year | A few times a year | One a month | One a week | More than one a week |

8. How committed are you to your religion (circle one)?

Not at all | Very Little | Moderately | Very Much | Totally

9. How intense is your spiritual life (circle one)?

Not at all | Very Little | Moderately | Very Much | Totally
Self-Construal Scale (SCS)

DIRECTIONS: This scale consists of a number of statements that describe different feelings or behaviors. Please indicate the extent to which you agree with each statement. Use the following scale to record your answers.

1=strongly disagree
2=moderately disagree
3=somewhat disagree
4=neutral
5=somewhat agree
6=moderately agree
7=strongly agree

1. ____I have respect for the authority figures with whom I interact.
2. ____It is important for me to maintain harmony within my group.
3. ____My happiness depends on the happiness of those around me.
4. ____I would offer my seat in a bus to my professor (or my boss).
5. ____I respect people who are modest about themselves.
6. ____I will sacrifice my self-interest for the benefit of the group I am in.
7. ____My relationships ... are more important than my own accomplishments.
8. ____I should [consider] my parents' advice when making education/career plans.
9. ____It is important to me to respect decisions made by the group.
10. ____I will stay in a group if they need me, even when I am not happy with the group.
11. ____If my brother or sister fails, I feel responsible.
12. ____Even when I strongly disagree with group members, I avoid an argument.
13. ___ I’d rather say “no” directly than risk being misunderstood.
14. ___ Speaking up during a class (or a meeting) is not a problem for me.
15. ___ Having a lively imagination is important to me.
16. ___ I am comfortable with being singled out for praise or rewards.
17. ___ I act the same way at home that I do at school.
18. ___ Being able to take care of myself is a primary concern for me.
19. ___ I act the same way no matter who I am with.
20. ___ I feel comfortable using someone’s first name soon after I meet them.
21. ___ I prefer to be direct and forthright when dealing with people I’ve just met.
22. ___ I enjoy being unique and different from others in many respects.
23. ___ My personal identity, independent of others, is very important to me.
24. ___ I value being in good health above everything.
Identify a Particular Hurt or Offense

Please identify someone who is in your primary reference group (a group to which you strongly feel that you belong) and who has deeply hurt or offended you. Do not write their name, but make a brief note to yourself below (e.g. write their initials), so you are thinking of someone specific. Then write a brief description of what the person did to hurt or offend you. (Note: if the person has done many things, it is important to recall one specific event on which you focus.) Write a short description below to remind yourself of the event.

(NOTE: Importantly, you will discuss this event in the groups and you will complete questionnaires at three following times on this specific event. So, please remember this and use the same event each time.)

Hurtfulness of the Hurt or Offense

Please rate the hurtfulness of the offense, using the scale below. Circle your answer.

1  2  3  4  5
Very little hurt  Large amount of hurt
Think of your current intentions toward the person who hurt you. Indicate the degree to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (SD)</th>
<th>Disagree (D)</th>
<th>Neutral (N)</th>
<th>Agree (A)</th>
<th>Strongly Agree (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I intend to try to hurt him or her in the same way he or she hurt me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>2. I will not try to help him or her if he or she needs something.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>3. If I see him or her, I will act friendly.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>4. I will try to get back at him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>5. I will try to act toward him or her in the same way I did before he or she hurt me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>6. If there is an opportunity to get back at him or her, I will take it.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>7. I will not talk with him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>8. I will not seek revenge upon him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>
Emotional Forgiveness Scale (EFS)

Think of your current emotions toward the person who hurt you. Indicate the degree to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (SD)</th>
<th>Disagree (D)</th>
<th>Neutral (N)</th>
<th>Agree (A)</th>
<th>Strongly Agree (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I care about him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>2. I no longer feel upset when I think of him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>3. I’m bitter about what he or she did to me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>4. I feel sympathy toward him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>5. I’m mad about what happened.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>6. I like him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>7. I resent what he or she did to me.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>8. I feel love toward him or her.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>
Instructions

This scale pertains to a particular event or person who hurt or offended you. You should have identified that event in writing earlier, and this is one set of ratings about how you feel right now concerning the event. Please indicate your agreement with each item on a 5-point rating scale from 1 = strongly disagree to 5 = strongly agree.

1. ____ I am trying to control my expression of negative emotions for the sake of the group.

2. ____ When I’m angry, I do not show it.

3. ____ If I showed how I really felt, it would disrupt other people’s lives.

4. ____ I won’t express my negative emotions.

5. ____ I am trying hard not to show anger.

6. ____ I feel like never seeing this person again, but that would destroy the group we belong to.

7. ____ When I am feeling negative emotions, I make sure not to express them.
Vita

Yin Lin was born on October 16, 1984, in China, and is a Chinese citizen. She graduated from No. 2 High School, Yantai, China in 2003. She received her Bachelor of Law from Nanjing University, Nanjing, China in 2007. Then she came to the U.S and received a Master of Arts in Counseling in Higher Education from University of Delaware in 2010.