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Moderation and Mediation Analysis of Religious Commitment, Positive Personality Traits, Ethnic Identity, and Well-Being Among Polynesian Americans

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Forgiveness and Gratitude as Mediators of Religious Commitment and

Well-Being Among Polynesian Americans

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ABSTRACT

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An abundance of research has investigated well-being as it relates to religiosity and positive traits, with most research indicating that both relate to improvements in well-being. Moreover, several studies provide evidence for statistically significant relationships between religiosity and specific positive traits, including forgiveness and gratitude. However, few research studies have investigated how increases in positive traits might explain why religiosity enhances well-being. In addition, few studies within the religious and positive psychological literature have included adequate sampling from ethnic/racial minority populations residing in the U.S. As a result, investigations on how ethnic identity interacts with religious and positive psychological variables are virtually nonexistent. This study addressed these areas by investigating whether the positive traits of forgiveness and gratitude mediate the relationship between religious commitment and well-being among Polynesian Americans—a fast growing, yet understudied, American population. This study also investigated whether a Polynesian American's ethnic identity moderates the relationship between religious commitment and the positive traits of forgiveness and gratitude. 627 Polynesian-identified individuals residing in the U.S. completed a 40-minute online survey that contained positive trait, ethnic identity, and well-being measures. Data analyses showed that forgiveness and gratitude traits mediated the statistical relationship between religious commitment and self-esteem. Gratitude was also shown to partially mediate the relationship between religious commitment and satisfaction with life. Moreover, data analyses did not support the hypothesis that ethnic identity would moderate the relationship between religious commitment, forgiveness, and gratitude. This study provides specific implications for clinical research among Polynesian Americans.

ACKNOWLEDGEMENTS

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DESCRIPTION OF DISSERTATION STRUCTURE AND CONTENT

This dissertation, *Forgiveness and Gratitude as Mediators of Religious Commitment and Well-Being Among Polynesian Americans*, is written in a hybrid format. The hybrid format brings together traditional dissertation and journal publication formats. The preliminary pages of this dissertation reflect requirements for dissertation submission to Brigham Young University. This dissertation is presented as a journal article and conforms to length and style requirements for submitting to specifically targeted psychological research journals. The literature review is included in Appendix A. Appendix B contains this study's instruments. This dissertation format also contains two reference lists. The first reference list contains references included in the journal-ready article. The second list includes all citations used in Appendix A entitled "Review of the Literature".

Introduction

Since the end of World War II, psychological research has focused on understanding human suffering and mental illness (Park, Paterson, & Seligman, 2004; Richards & Bergin, 2005). This emphasis laid the foundation for our current standardized systems of diagnosis and provided crucial insight into the effective remediation of mental illness. However, this research did not reflect the full spectrum of the human experience. Humans also possess beliefs, strengths, and virtues that make their lives meaningful and worth living. Without adequate research on these positive human experiences, psychologists lacked the ability to effectively prevent mental illness (Richards & Bergin, 2005). In the latter part of the twentieth century, scholars responded to this neglect by investigating these positive human experiences, and presently, hundreds of studies exist as a result (Richards & Bergin, 2005). Much of this research falls within the subdisciplines of religious and positive psychology, in which the majority of studies have investigated how religiosity and positive traits effect well-being. In the paragraphs that follow, a brief review of this research is provided.

There is an extensive body of evidence supporting the relationship between religiosity and well-being, with many systematic reviews (e.g., Koenig, 2012; Koenig, McCullough, & Larson, 2001; Moreira-Almeida, Lotufo Neto, & Koenig, 2006) and meta-analyses (e.g., Bergin, 1983; McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000; Smith, McCullough, & Poll, 2003) offering stronger support for the positive, rather than negative, effects of religion on an individual's well-being. For example, Bergin (1983) conducted one of the first meta-analyses on the topic, and showed that across 24 studies, there were more positive relationships between religiosity and improved mental health than studies indicating negative relationships. A more recent meta-analysis conducted by Smith and colleagues (2003) investigated the effects of

religiousness on depressive symptomology across 147 studies. They observed a negative correlation between these variables (random effects weighted average effect size of -.096), otherwise meaning that across these studies, religiousness generally associated with lower levels of depressive symptomology. This research provided evidence contrary to the popular historical notion that religiosity was associated with emotional disturbance (Richards & Bergin, 2005). Nowadays, a majority of psychotherapists consider religious beliefs and behaviors as important sources of therapeutic change (Richards & Bergin, 2005).

Like research investigating the relationships between religiosity and well-being, there is also a plethora of research that has explored associations between positive traits and well-being. *Positive traits* may be defined as "disposition[s] to act, desire, and feel that involves the exercise of judgment and leads to a recognizable human excellence or instance of human flourishing," and are unlike other individual differences (e.g., abilities and talents) in that they are "traitlike," demonstrating generality and stability (p. 604; Park et al., 2004). Park and colleagues (2004) investigated the associations between 24 positive traits and satisfaction with life and found that most of the traits were positively associated with satisfaction with life, with hope, zest, gratitude, love, and curiosity showing the most substantial associations. Another noteworthy finding was that there was no evidence that having too much of a specific positive trait was associated with lower satisfaction with life.

Recently, the positive traits of forgiveness and gratitude have been receiving relatively more attention in psychological literature. Empirical research provides evidence that forgiveness and gratitude may buffer against symptoms of depression and anxiety, promote optimism and hope, and increase self-esteem and life satisfaction (Bono & McCullough, 2006; Breen, Kashdan, Lenser, & Fincham, 2010; McCullough, 2000; Toussaint & Friedman, 2009; Wood,

Froh, & Geraghty, 2010). One empirically supported theory purport that forgiveness and gratitude enhance well-being because they promote positive emotional states (e.g., love and peace), and cognitions (e.g., "I'm important," "I can cope"; Toussaint & Friedman, 2009. Another theory indicates that forgiveness and gratitude are related constructs because they are both prosocial responses to perceived helps and harms (Bono & McCullough, 2006). Forgiveness and gratitude likely promote prosocial emotions (e.g., empathy) and behaviors (e.g., altruism) which, in turn, enhances social relationships and well-being (Bono & McCullough, 2006; McCullough, 2000; McCullough, Emmons, & Tsang, 2002; Toussaint & Friedman, 2009).

Research also supports associations between forgiveness, gratitude, and religiosity (Alaedein-Zawawi, 2015; Ng & Chan, 2015; Krause, 2009; Mahoney, Rye, & Pargament, 2005; McCullough et al., 2002; Worthington, Berry, & Parrott, 2001). Theoretical explanations for the statistical associations between these variables tend to highlight the centrality of forgiveness and gratitude in many world religions. For example, many religious teachings and beliefs promote forgiveness and gratitude as desirable, even God-like, traits (McCullough et al., 2002; Worthington et al., 2001). Highly religious individuals may tend to internalize these teachings and beliefs, which shapes their enduring personality (Worthington et al., 2001).

Polynesian Americans

One unique aspect of this study was that it investigated religious and positive psychological phenomena among Polynesian Americans. *Polynesian Americans* are a U.S. population of persons who originate from a group of islands known as *Polynesia*, located in the northern, central, and southern areas of the Pacific Ocean (Allen & Heppner, 2011). This island group includes Hawai'i, the Kingdom of Tonga, Samoa, Tahiti, Cook Islands, New Zealand, Fiji, French Polynesia, Easter Island, and the Marquesas (Allen & Heppner, 2011). Cultural beliefs

and customs differ between Polynesian subgroups, but they share commonalities in the emphasis they place on religiosity and the cultivation of prosocial traits.

Religiosity has long been an integral part of Polynesian culture. Per the traditional beliefs of many Polynesian cultures, health is maintained through harmony with the divine (Capstick, Norris, Sopoaga, & Tobata, 2009). In contrast, physical and mental illness are said to be the result of spiritual disharmony, disconnect, and transgression. Common among many Polynesian cultures is the belief that failures to resolve spiritual transgressions engender consequences that may affect the individual, their family, their community, and/or their ancestral spirits. For this reason, discord is often dealt with swiftly to maintain social and familial harmony. When transgressions are left unresolved, some cultural narratives indicate that ancestral spirits may cause mental and physical illness as a way to motivate restitution (Capstick et al., 2009).

Polynesians also share the common belief that self is relational, in that self has no meaning independent of their relationships with family, community, land, God, and ancestral spirits (Capstick et al., 2009; Tamasese, Peteru, Waldegrave, & Bush, 2005). Moreover, traditional beliefs among Polynesian cultures posit that all relationships are interconnected, in that breaks in relationships (e.g., familial discord) will also affect other relationships (e.g., with God and community). As such, proper, respectful, and prosocial behavior, such as forgiveness and gratitude, are critically important to the maintenance and nurturance of their relationships.

Purpose of This Study

Although a plethora of research has been published on the associations between religiosity, positive traits, and well-being, there are areas of further investigation and improvement which this study seeks to address. One of these areas is to investigate why religion positively, and negatively, affects well-being (Richards & Bergin, 2005). This is important

because research on the relationship between religiosity and well-being has demonstrated

positive (improving well-being) and negative statistical effects (degenerating well-being).

Richards and Bergin (2005) proposed a research agenda for future research, with one of the most

important directions being the investigation of the healthy and unhealthy aspects of religiosity, as

well as the specific factors of religiosity that helps people to cope, change, and heal.

Due to the intersectionality of religious and positive psychology, research, although

sparse, shows how increases in specific positive traits account for several of the well-being

benefits of religiosity (Alaedein-Zawawi, 2015; Toussaint, Marschall, & Williams, 2012; Van

Cappellen et al., 2016). Research conducted by Alaedein-Zawawi (2015) and Toussaint and

colleagues (2012) showed that forgiveness fully mediated the relationship between religiosity

and well-being (depression and satisfaction with life), where the direct effect between religiosity

and well-being became nonsignificant when the indirect effect through forgiveness was included.

Research by Van Cappellen and colleagues (2016) revealed that the association between

religious church attendance and well-being was mediated by several positive emotions including

awe, love, and gratitude. These studies provide an understanding of specific aspects of religiosity

that lead to enhancements to well-being, in that they show that there is a statistically significant

likelihood that religiosity encourages the cultivation and exercise of forgiveness and gratitude,

and that increases in these traits enhance well-being. This study seeks to replicate the mediating

effects of forgiveness and gratitude by investigating their effect on the relationship between

religiosity and well-being among Polynesian American individuals.

Investigating religious and positive phenomena among Polynesian Americans and other

non-European/White populations is important because studies within these fields of psychology

have been conducted primarily among European/White populations. This is problematic because

current research may misrepresent phenomena among many of these underrepresented populations. Moreover, the clinical implications of current research may not be appropriate or congruent with the traditional ethnic cultures of these populations. The present study seeks to better understand the potentially unique experiences of Polynesian Americans, who are not only underrepresented in constructs related to religiosity, forgiveness, gratitude, and well-being, but also in many other areas of psychological research.

Another consequence of underrepresenting non-European/White populations in religious and positive psychological literature is the exclusion of studies investigating the interacting effects of cultural variables. One of these variables is ethnic identity. One definition of *ethnic identity* is "that part of an individual's self-concept which derives from knowledge of membership of a social group together with the value and emotional significance attached to that membership" (Tajfel, 1981, p. 255). The degree to which one identifies with an ethnic group determines the degree to which one's beliefs, worldviews, and behaviors tend to parallel those of the group (Ashmore, Deaux, & McLaughlin-Volpe, 2004). Among many collectivistic cultures, religiosity is a significant aspect of their traditional beliefs, values, and practices (e.g., Capstick et al., 2009). This study also seeks to examine whether Polynesian ethnic identity moderates the relationship between religiosity and the positive traits of forgiveness and gratitude. Theoretically, the more Polynesian American participants identify with their highly religious culture, the more religiously committed they may tend to be (Allen & Heppner, 2011), which may also result in religiosity having an increased effect on their dispositions towards forgiveness and gratitude.

To address the aforementioned areas of improvement, this study will investigate the following research hypotheses:

Hypothesis 1. It is hypothesized that there will be significant positive correlations among all the study's independent variables (religious commitment, forgiveness, gratitude, and ethnic identity).

Several studies conducted among non-Polynesian samples already indicate statistically significant relationships among these variables (Alaedein-Zawawi, 2015; Ng & Chan, 2015; Krause, 2009; Mahoney et al., 2005; McCullough et al., 2002; Worthington et al., 2001). Also, aforementioned theoretical and empirical research support the associations between religiosity, forgiveness, and gratitude (McCullough et al., 2002; Worthington et al., 2001). And lastly, ethnic identity may be correlated with religious commitment, forgiveness, and gratitude because common Polynesian cultural beliefs, practices, and values emphasize religiosity and the cultivation of prosocial traits like forgiveness and gratitude (Capstick et al., 2009).

Hypothesis 2. It is hypothesized that there will be significant positive correlations between all independent variables, and self-esteem and satisfaction with life dependent variables, and significant negative correlations between all independent variables and depression, anxiety, and stress dependent variables.

Recent empirical studies conducted among Polynesian samples provide support for significant statistical associations, in the hypothesized directions, between religious commitment and well-being (Allen & Heppner, 2011; Allen & Smith, 2015). In addition, aforementioned theoretical work supports the hypothesized associations between forgiveness, gratitude, and the well-being variables (Toussaint & Friedman, 2009). Increased ethnicity identity may relate to enhancements to well-being because it buffers against hardships associated with racial discrimination and acculturation (e.g., Allen, Conklin, & Kane, 2017).

Hypothesis 3. Ethnic identity is suspected to have a significant moderating effect on the relationship between religious commitment, forgiveness, and gratitude.

This hypothesis assumes that one commonality among Polynesian cultures is the high importance that is placed on maintaining and nurturing interpersonal relationships. As a result of this relational emphasis, Polynesian individuals may tend to cultivate prosocial positive traits. Because forgiveness and gratitude are prosocial in nature (Bono & McCullough, 2006), high ethnic identity will likely enhance forgiveness and gratitude. Also, aforementioned empirical and theoretical research already indicates a relationship between religiosity, forgiveness, and gratitude (McCullough et al., 2002; Worthington et al., 2001). For these reasons, associations between religious commitment, forgiveness, and gratitude, may be enhanced when the effects of ethnic identity are accounted for.

Hypothesis 4. Forgiveness and gratitude are predicted to significantly mediate the relationship with religious commitment and well-being, which is a hypothesis that is based on a theoretical model proposed by Koenig, King, and Carson (2012).

This hypothesis assumes that the direct statistical effect between religious commitment and well-being will drop in significance, either partially or fully, in the presence of religious commitment's indirect effect on well-being through forgiveness and gratitude. This hypothesis is further supported by aforementioned empirical findings of a few mediation analyses conducted among non-Polynesian samples (Alaedein-Zawawi, 2015; Toussaint et al., 2012; Van Cappellen et al., 2016).

Method

Participants

The sample for this study included 627 Polynesian American individuals residing in the U.S., with most participants reporting residence in California, Nevada, Utah, Washington, Arizona, Missouri, and Hawai'i. Male (40%) and female (60%) individuals participated in the study, with representation from the following Polynesian subgroups: Tongan (35%), Samoan (22%), Native Hawaiian (10%), Fijian (6%), Tahitian (4%), Maori (2%), and multiracial (21%). The ages of participants ranged from 18 to 76 years, with a mean age of 29 years. Participants were also asked about their religious affiliation (if any) and 93% reported affiliation with The Church of Jesus Christ of Latter-day Saints (LDS). Regarding highest education level achieved, 14% reported earning a high school diploma, 40% reported attending some college, 25% reported receiving a 4-year college degree, 7% reported receiving a master's degree, and 1.3% reported receiving a doctorate/professional degree (e.g., PhD, MD, JD).

Procedure

After receiving institutional review board approval, participants were primarily recruited via social media platforms (e.g., Facebook), with a smaller proportion having been recruited through email and large group gatherings (such as the "Utah Pacifika Festival" held annually in Provo, Utah). Snowball sampling procedures were also implemented to increase sample size. Because a majority of our primary contacts were LDS, the sampling procedure yielded more LDS participants. Although this sampling method is culturally appropriate and convenient, it likely yielded a restricted sample, in that it likely does not accurately represent the religious affiliations of the general Polynesian population in the U.S.

The participants completed a 40-minute online survey through Qualtrics research software. Upon completion of the survey, participants were prompted to provide their mailing addresses and were mailed a $10 gift card as an incentive for their time (participants who took the survey during large group gatherings were given a gift card immediately following completion). The completion rate was also tracked, resulting in a completion rate of 67%.

Instruments

Gratitude Questionnaire (GQ–6; McCullough et al., 2002). GQ–6 is a 6-item self-rated measure of an individual's disposition towards gratitude (McCullough et al., 2002). Individuals are asked to indicate how much they agree with statements per a 7-point Likert scale (ranging from strongly disagree to strongly agree). Examples of some of the statements include, "I have so much in life to be thankful for," "If I had to list everything that I felt grateful for, it would be a very long list," and "I am grateful to a wide variety of people." Scoring the GQ–6 involves reverse scoring Items 3 and 6 and then adding them to the sum of the rest of the scores; higher scores indicate higher dispositions towards gratitude. McCullough and colleagues (2002) tests of discriminant validity showed that the GQ–6 model of gratitude was related, but distinct, to constructs of life satisfaction, vitality, happiness, optimism, and hope. Other correlates indicated statistically significant relationships with personality variables (e.g., agreeableness, openness, extraversion), spiritual variables (e.g., spiritual and self-transcendence), religious variables (e.g., personal relationship with God, pray, scripture reading), and prosocial traits and behaviors (e.g., empathic concern, perspective taking). McCullough and colleagues (2002) ran tests of discriminant validity using confirmatory factor analyses and relied on the chi-square, comparative fit index (CFI), and standardized root-mean-square residual (SRMR) indices, and correlation statistics, to determine whether grateful disposition was a distinct construct from

satisfaction with life (Satisfaction With Life Scale; Diener, Emmons, Larsen, & Griffin, 1985), vitality (Vitality Scale; Ryan & Frederick, 1997), subjective happiness (The Subjective Happiness Scale; Lyubomirsky & Lepper, 1999), optimism (Life Orientation Test; Scheier, Carver, & Bridges, 1994), and hope (The Adult Trait Hope Scale; Snyder et al., 1991). Though correlation statistics indicated that grateful disposition is significantly related to these constructs, fit indices revealed that they were not equivalent constructs. Moreover, the internal consistency reliability of the GQ-6 was .82, and in the current study, Cronbach's alpha was .67.

      Trait Forgivingness Scale (TFS; Berry, Worthington, O'Connor, Parrott, & Wade, 2005). The TFS is a 10-item self-reported measure of an individual's proneness to forgive interpersonal transgressions (Berry et al., 2005). Individuals are asked to rate the degree to which they agree or disagree with statements on a 5-point Likert scale (ranging from strongly disagree to strongly agree). Examples of some of the statements include "People close to me probably think I hold a grudge too long," "I can forgive a friend for almost anything," and "If someone treats me badly, I treat him or her the same." Scoring the TFS involves reverse scoring items 1, 3, 6, 7, and 8, and then adding the remaining items; higher scores on the TFS reflect higher trait forgiveness. Berry and Colleagues determined convergent validity of the TFS by correlating it with measures that assess constructs that were shown in the literature to be associated with forgiveness, including trait anger (Kaplan, 1992), neuroticism (McCullough, 2000), and fear (Worthington & Wade, 1999). Correlational analyses confirmed significant correlations, in ways consistent with the literature, with The Trait Anger Scale (TAS; Spielberger, Jacobs, Russell, & Crane, 1983), The Big Five Personality Inventory (BFI-44; John, Donahue, & Kentle, 1992), and The Fear Questionnaire (FQ; Marks & Matthews, 1978). Moreover, classical item statistics and Rasch scaling procedures were used to determine internal validity, with results indicating

Cronbach's alpha coefficients ranging between .74 and .80. In the current study, Cronbach's alpha was .75.

   Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). The RSE is a 10-item scale that assesses the construct of self-esteem and has frequently been used among ethnically diverse populations (Phinney, 1996; Speight, Vera, & Derrickson, 1996). Individuals rate each item according to a 4-point Likert scale (ranging from strongly disagree to strongly agree), with higher scores indicating higher self-esteem. Items include statements such as "On the whole, I am satisfied with myself" and "At times, I think I am no good at all." The RSE was generally shown to have satisfactory item convergent validity, with all items correlating with their hypothesized scales ($r = .40$ or greater), and good item discriminant validity, with items generally showing greater correlation with their hypothesized scales than with The Social Relationships subscale of the Participation Measure for Post-Acute Care (PM-PAC; Gandek, Sinclair, & Ware, 2001; Sinclair et al., 2010). Moreover, the RSE demonstrated good internal reliability (alpha = .92), with a Cronbach's alpha of .84 (Rosenberg, 1965), and in the current study, Cronbach's alpha was estimated at .84.

   Depression Anxiety Stress Scale (DASS–21; Lovibond & Lovibond, 1995). The DASS–21 contains 21 items that are divided into three seven-item subscales that assesses the emotional levels of depression, anxiety, and stress. Sample items include, "I felt downhearted and blue" (Depression), "I felt I was close to panic" (Anxiety), and "I found it hard to wind down" (Stress). Each item is rated per a 4-point Likert scale that ranges from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). The DASS–21 demonstrated high convergent validity with the Beck Depression Inventory (BDI; Beck, Steer, & Brown, 1987) and the Beck Anxiety Inventory (BAI; Beck & Steer, 1990), with a Pearson's r correlation statistic of 0.81 for

the BDI, and .74 for the BAI (Lovibond & Lovibond, 1995). Also, Cronbach's alpha was .90 (Depression), .88 (Anxiety), and .87 (Stress) for each individual subscale, and .95 for the overall scale (Lovibond & Lovibond, 1995). Similar results were indicated in the current study, with a Cronbach's alpha for the overall scale estimated at .90.

Religious Commitment Inventory (RCI–10; Worthington et al., 2003). The RCI–10 assesses the "degree to which a person adheres to his or her religious values, beliefs, and practices, and uses them in daily living" (p. 85; Worthington et al., 2003). Exploratory and confirmatory factor analyses on the RCI-10 indicated that a 2-factor model best fits the data. However, because the factors were highly correlated, Worthington and colleagues (2003) suggested that a 1-factor model was most parsimonious. Each item is rated on a 5-point Likert scale ranging from 1 (not at all true of me) to 5 (totally true about me). Worthington and colleagues (2003) also investigated the validity of the RCI–10, including construct, discriminant, criterion-related, and concurrent validity. Evidence suggested that the full-scale RCI–10, and each subscale, were sufficiently valid, however, since both subscales were highly intercorrelated, the authors do not advocate the using subscale scores for clinical or research purposes. Moreover, internal consistency was strong for the RCI–10, with an alpha of .94 for the full scale, .92 for Intrapersonal Religious Commitment, and .87 for Interpersonal Religious Commitment. Test-retest reliability was measured to be .87 (full scale), .86 (Intrapersonal Religious Commitment), and .83 (Interpersonal Religious Commitment). Similar results were indicated in the current study, with a Cronbach's alpha of .93 for the full scale.

Multicultural Ethnic Identity Measure—Revised (MEIM–R; Phinney & Ong, 2007). The MEIM–R is a two-factor, 6-item, measurement of ethnic identity. The MEIM–R follows the conceptualization of ethnic identity as consisting of two main components, commitment (a sense

of belonging) and exploration (seeking information and experiences relevant to one's ethnicity; Phinney & Ong, 2007). An example of a commitment item is "I have a strong sense of belonging to my own ethnic group," and an example of an exploration item is "I have often talked to other people in order to learn more about my ethnic group." The MEIM–R was shown to have moderate degrees of construct and criterion-related validity (Ponterotto, Gretchen, Utsey, Stracuzzi, & Saya, 2003), and Cronbach alpha coefficients were computed (Phinney & Ong, 2007) for the exploration (.76) and commitment (.78) subscales, and for the full scale (.81). In the current study, Cronbach's alpha was computed to be .87 for commitment, .85 for exploration, and .90 for the full scale.

Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS is a 5-item scale that measures global life satisfaction. *Global life satisfaction* is defined as an individual's global, overall, assessment of their quality of life against a subjectively set standard (Diener et al., 1985). Items are rated on a 7-point Likert scale and include "in most ways my life is close to my ideal" and "the conditions of my life are excellent." The SWLS showed moderately strong convergent validity, in that it was shown to be significantly correlated with many other subject well-being scales (Diener et al., 1985), global satisfaction was shown to be a similar, but not equivalent, construct to domain satisfaction, test-retest reliability was measured at .84 at a 2-week and 1-month interval (Pavot, Diener, Colvin, & Sandvik, 1991), and internal consistency was tested across many samples, and ranged between .79 and .89 (Pavot & Diener, 1993). In the present study, Cronbach's alpha is .85.

Data Analysis

The participant's survey data were analyzed via IBM® SPSS® (SPSS) and IBM® SPSS® Amos (Amos) statistical software. Before addressing this study's hypotheses, preliminary

analyses were conducted in SPSS to determine whether the data met statistical assumptions for structural equation modeling (SEM), and whether there were significant differences and interactions among study variables and participant demographic data (age, gender, educational attainment, and Polynesian race).

To investigate the first and second research hypotheses, a Pearson correlation matrix was generated for independent (IV; religious commitment, forgiveness, gratitude, ethnic identity) and dependent variables (DV; self-esteem, satisfaction with life, depression, anxiety, and stress) also using SPSS.

For the third research hypothesis, moderation effects among religious commitment, ethnic identity, forgiveness, and gratitude were investigated using Amos. An SEM was conducted, with religious commitment and ethnic identity included in the model as variables predicting forgiveness and gratitude, and an interaction term between religious commitment and ethnic identity (see Figure 1). Because an interaction term was included, variables were standardized. If the direct effects were significantly affected by the presence of the interaction term (either enhancing or decreasing the effects), then this indicated a moderation effect. The purpose of using SEM to analyze moderation effects, rather than using regression techniques, was because it has a much higher power due to its ability to control for measurement error (Steinmetz, Davidov, & Schmidt, 2011).
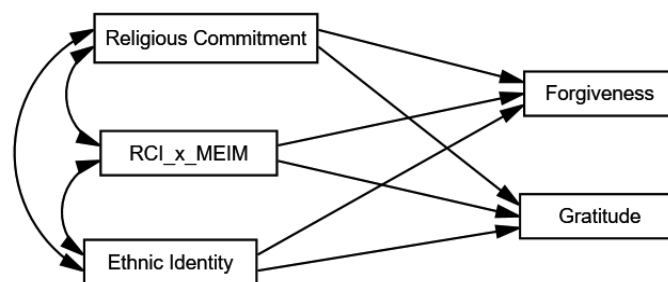
Figure 1. Moderation structural equation model.

And the fourth research hypothesis investigated whether forgiveness and gratitude mediated the relationship between religious commitment and well-being. Mediation effects were analyzed via SEM using Amos statistical software. Religious commitment was included in the SEM model (see Figure 2) as an observed variable predicting the study's five DVs (depression, anxiety, stress, self-esteem, and satisfaction with life). To determine mediating effects, direct effects between religious commitment and the DVs were calculated pre- and post-inclusion of the mediating independent variables (forgiveness and gratitude), and bootstrapping methods were used to estimate the significance of the indirect effects. If the standardized direct effects were significant pre-inclusion and non-significant post-inclusion, this indicated a full mediating effect if bootstrapping yielded significant indirect effects. If the standardized direct effects were significant pre-inclusion and still significant post-inclusion, this indicated a partial mediating effect if the post-inclusion standard regression weight changed, and if bootstrapping yielded significant indirect effects. For a primer on the differences between moderation and mediation analyses, refer to Frazier, Tix, and Barron (2004).
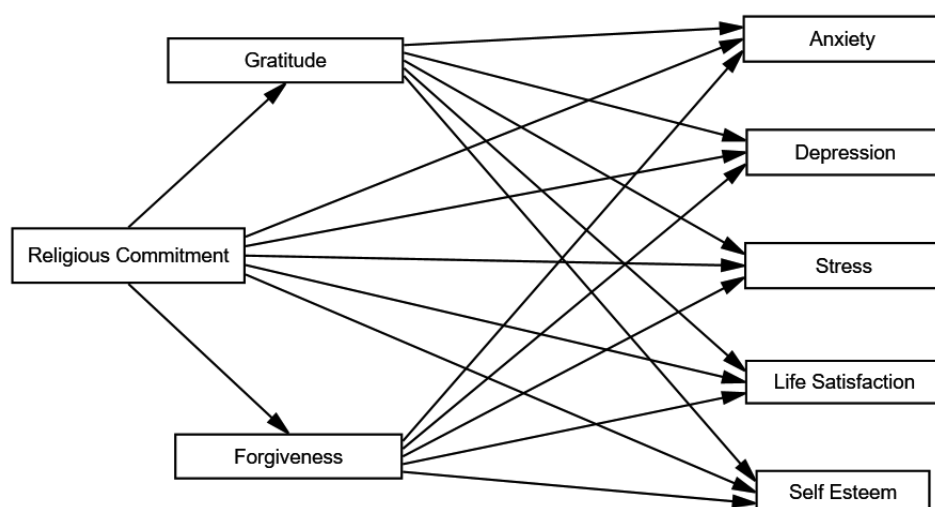
Figure 2. Mediation structural equation model.

Results

In what follows, the results of the data analyses are provided. Snowball sampling yielded a sample size of 924 participants. However, respondents who failed all three validity check items throughout the survey (e.g., "Please click 'Strongly Agree' for this question. This is a validity question check ensuring that you are answering the questions to the best of your ability and in a consistent manner") or missed over 5% of the items, were removed from the data set. The data from participants who missed less than 5% of items were kept because this is considered inconsequential (Schafer, 1999). Data from 627 participants remained after data cleaning. To account for missing data from the remaining 627 participants (those participants who missed less than 5% of the items), missing values at the item level were handled in SPSS using the multiple imputation method.

Prior to addressing the research hypotheses, preliminary analyses were conducted to determine whether the data meets statistical assumptions for the use of Pearson correlation and SEM statistical analyses. First, analyzing a scatterplot of the data indicated an absence of outliers, in that the data points were clustered close together. Moreover, a linear trend in the data was observed, as well as homoscedasticity. The assumption of normality was tested by generating a table of descriptive statistics via SPSS, which included means, standard deviations, skewness, and kurtosis for all scales (see Table 1). Results indicate that the data is normally distributed.

Table 1

Means and Standard Deviations of Study Variables

Measure	*M*	*SD*	Skewness	Kurtosis
RCI	4.15	.85	-1.46	2.14
MEIM	4.14	.74	-1.04	1.39
GQ	6.27	.77	-1.39	1.98
TFS	3.61	.60	-.12	.38
RSE	3.16	.48	-.11	-.60
SWLS	4.99	1.23	-.66	.10
DASSA	1.69	.63	1.24	1.37
DASSD	1.66	.61	1.20	1.22
DASSS	1.88	.60	.73	.72

RCI = Religious Commitment Inventory; MEIM = Multicultural Ethnic Identity Measure; GQ = Gratitude Questionnaire; TFS = Trait Forgiveness Scale; RSE = Rosenberg Self-Esteem Scale; SWLS = Satisfaction with Life Scale; DASSA = Anxiety Subscale; DASSD = Depression Subscale; DASSS = Stress Subscale

Next, three independent samples T-Test were conducted to determine mean differences in study variables in terms of gender (Table 2), age (Table 3), and educational background (Table 4). Results indicated that Polynesian American males' scores on the DASSD and DASSA were statistically significantly higher, and their scores on the RSE and GQ were statistically significantly lower, than those scores reported by Polynesian American females. Next, a dichotomous age variable was created, with 29 years acting as the cutoff point between younger and older participants because it was the mean age of the dataset. Results of an independent T-Test indicated that Polynesian Americans 29 years old or younger (*N* = 417) reported scores on the DASSD, DASSA, DASSS that were statistically significantly higher, and scores on the GQ, TFS, and RSE that were statistically significantly lower, than scores reported by participants over 29 years old (*N* = 207). And regarding educational background, Polynesian Americans with less than a 2-year college degree (*N* = 335) reported scores on the RCI, GQ, SWLS, and RSE that were statistically significantly lower than scores reported by Polynesian Americans with a 2-year college degree or higher (*N* = 291).

Table 2

Gender Mean Differences Among Study Variables

Measure		M	SD	t	p
GQ	Male	6.06	.89	-5.19	< .001
	Female	6.40	.64		
RSE	Male	3.10	.50	-2.32	< .05
	Female	3.19	.47		
DASSD	Male	1.76	.69	3.14	< .01
	Female	1.60	.55		
DASSA	Male	1.78	.69	2.83	< .01
	Female	1.63	.57		

GQ = Gratitude Questionnaire; RSE = Rosenberg Self-Esteem Scale; DASSD = Depression Subscale; DASSA = Anxiety Subscale

Table 3

Age Mean Differences Among Study Variables

Measure		M	SD	t	p
GQ	Age <= 29	6.19	.82	-3.77	< .001
	Age > 29	6.43	.62		
TFS	Age <= 29	3.57	.59	-2.49	< .05
	Age > 29	3.70	.62		
RSE	Age <= 29	3.07	.47	-6.80	< .001
	Age > 29	3.34	.46		
DASSD	Age <= 29	1.74	.64	4.57	< .001
	Age > 29	1.52	.51		
DASSA	Age <= 29	1.76	.66	4.19	< .001
	Age > 29	1.55	.54		
DASSS	Age <= 29	1.95	.61	3.84	< .001
	Age > 29	1.75	.57		

GQ = Gratitude Questionnaire; TFS = Trait Forgivingness Scale; RSE = Rosenberg Self-Esteem Scale; DASSD = Depression Subscale; DASSA = Anxiety Subscale; DASSS = Stress Subscale

Table 4

Education Mean Differences Among Study Variables

Measure		M	SD	t	p
RCI	Edu < 2-year degree	4.07	.85	-2.50	< .05
	Edu >= 2-year degree	4.24	.84		
GQ	Edu < 2-year degree	6.20	.79	-2.23	< .05
	Edu >= 2-year degree	6.34	.74		
SWLS	Edu < 2-year degree	4.77	1.26	-4.98	< .001
	Edu >= 2-year degree	5.25	1.14		
RSE	Edu < 2-year degree	3.09	.46	-3.86	< .001
	Edu >= 2-year degree	3.24	.50		

Edu = Educational Background; RCIINTER = Interpersonal Religious Commitment Subscale; RCIINTRA = Intrapersonal Religious Commitment Subscale; GQ = Gratitude Questionnaire; SWLS = Satisfaction with Life Scale; RSE = Rosenberg Self-Esteem Scale

A one-way ANOVA was conducted to determine mean differences in study variables among Polynesian American subgroups. The F statistic for the DASSD ($F(6, 620) = 4.11$), DASSA ($F(6, 620) = 4.32$), RSE ($F(6, 620) = 3.81$), and GQ ($F(6, 620) = 5.67$) scales were significant at a .001 alpha level and the RCI was significant at a .05 alpha level, indicating that there were significant between-group differences among these variables. A Tukey HSD post-hoc analysis was conducted to determine which pairwise comparisons between Polynesian American subgroups were statistically significant. Much of the statistically significant pairwise comparisons were between Polynesian American subgroups that were non-equivalent in terms of sample size. One pairwise comparison is noteworthy to mention, as sample sizes were close to equivalence, which is the statistically significant difference between Tongans ($M = 4.24$, $SD = .89$) and Native Hawaiians ($M = 3.83$, $SD = 1.22$) in terms of RCI ($p = .04$).

Table 5 summarizes the Pearson bivariate correlations between variables. The first hypothesis predicted that there would be significant positive correlations among all independent variables (religious commitment, ethnic identity, forgiveness, and gratitude). The results supported this hypothesis, in that there were significant positive correlations between RCI,

MEIM, TFS, and GQ. The effect sizes of these correlations were small to moderate (Cohen, 1992). The second hypothesis predicted that all independent variables would significantly predict all well-being variables, with significant positive correlations with self-esteem and satisfaction with life, and significant negative correlations with depression, anxiety, and stress. The results partially supported this hypothesis. Whereas the TFS and GQ correlated significantly with all well-being scales (RSE, SWLS, DASSD, DASSA, DASSS) in the hypothesized directions, results were different among the RCI and MEIM scales. First, significant positive correlations were indicated among RCI, RSE, and SWLS, but no significant correlations were found between the RCI and the DASSD, DASSA, and DASSS. Another bivariate correlation was computed to explore whether there was a significant correlation between the full scale DASS and the RCI, but it was also not significantly correlated with RCI. Moreover, the MEIM was significantly correlated with RSE, SWLS, DASSD, and DASSS well-being variables in the hypothesized directions, but was not significantly correlated with DASSA. Again, the effect sizes for these correlations were small to moderate (Cohen, 1992).

Table 5

Pearson Bivariate Correlations of the Study Variables

Measure	1	2	3	4	5	6	7	8	9
1. RCI	—								
2. MEIM	.22**								
3. TFS	.22**	.15**							
4. GQ	.25**	.22**	.30**						
5. RSE	.11**	.23**	.34**	.43**					
6. SWLS	.33**	.11**	.14**	.23**	.30**				
7. DASSD	-.04	-.16**	-.34**	-.44**	-.63**	-.18**			
8. DASSA	.00	-.06	-.27**	-.36**	-.53**	-.12**	.80**		
9. DASSS	.02	-.10*	-.39**	-.33**	-.57**	-.13**	.81**	.80**	—

RCI = Religious Commitment Inventory; MEIM = Multicultural Ethnic Identity Measure; TFS = Trait Forgiveness Scale; GQ = Gratitude Questionnaire; RSE = Rosenberg Self-Esteem Scale; SWLS = Satisfaction with Life Scale; DASS = Depression Anxiety Stress Scale; DASSA = Anxiety Subscale; DASSD = Depression Subscale; DASSS = Stress Subscale
* $p < .05$. ** $p < .01$.

The third hypothesis predicted that ethnic identity would significantly moderate the relationship between religious commitment, forgiveness, and gratitude. However, the analysis did not support this hypothesis because the interaction term (RCI_x_MEIM) was nonsignificant for forgiveness and gratitude. The analysis did show that the direct effects were significant, with religious commitment significantly predicting forgiveness (β = .20, SE = .04) and gratitude (β = .21, SE = .04) at a .001 alpha level, and ethnic identity significantly predicting forgiveness (β = .10, SE = .04) and gratitude (β = .18, SE = .04) at a .01 alpha level. Moreover, model fit indices indicated that the model was not a good fitting model, even when interaction terms were excluded (χ^2 = 38.77, df = 1, p < .001; TLI = -.39; CFI = .77; RMSEA = .25).

And the fourth hypothesis predicted that forgiveness and gratitude would have a mediating effect between religious commitment and the study's DVs. Because the depression, anxiety, and stress variables were not significantly correlated with religious commitment, they were excluded from this analysis. In testing the fourth hypothesis, the direct effects between religious commitment, satisfaction with life, and self-esteem were computed with the mediating variables (forgiveness and gratitude) excluded from the model. This analysis indicated statistically significant direct effects between religious commitment with satisfaction with life (β = .32, p < .01) and self-esteem (β = .11, p < .01). Mediating variables were then included in the SEM model. To test for the mediating effects of each variable, the direct and indirect effects of the model were analyzed with each mediating variable separately (i.e., the indirect effect from religious commitment to forgiveness was excluded when analyzing model direct and indirect effects when gratitude was included in the model). Tables 6 and 7 summarizes the results of these analyses. The results indicated that forgiveness and gratitude fully mediated the relationship between religious commitment and self-esteem because the direct effects between

these variables became statistically non-significant in the presence of both mediating variables. Moreover, the bootstrap estimated indirect effects for forgiveness and gratitude were statistically significant at a .001 alpha level. Gratitude partially mediated the relationship between religious commitment and satisfaction with life because although direct effects between these variables were statistically significant before and after gratitude was included in the SEM model, the direct effect between these variables decreased when gratitude was included, and the bootstrap estimated indirect effect was statistically significant. Lastly, forgiveness did not mediate, nor partially mediate, between religious commitment and satisfaction with life because the direct effect was still statistically significant when forgiveness was included as a mediator and the bootstrap estimated indirect effect was non-significant.

Table 6

Bootstrap Mediation Analysis with Forgiveness as Mediator

Relationship	β	SE	Boot IE	Boot SE	Boot Bias-corrected 95% CI
RCI → RSE	.04	.03	.05***	.01	[.02, .05]

***$p < .001$; IE = Indirect Effect; CI = Confidence Interval

Table 7

Bootstrap Mediation Analysis with Gratitude as Mediator

Relationship	β	SE	Boot IE	Boot SE	Boot Bias-corrected 95% CI
RCI → SWLS	.28**	.04	.04***	.01	[.02, .07]
RCI → RSE	.004	.04	.11***	.02	[.07, .15]

**$p < .01$; ***$p < .001$; IE = Indirect Effect; CI = Confidence Interval

Discussion

Preliminary Findings

Several findings during the preliminary phase of the analyses seemed unique to Polynesian Americans. First, on average, this study's sample of Polynesian Americans tended to answer each question of the GQ-6 with a 6 ("agree") on a 7-point Likert scale. This may support

the notion that gratitude is an important trait among Polynesian Americans, possibly because the cultivation of the trait tends to lead to healthier relationships with others (e.g., Bono & McCullough, 2006). In a culture that is collectivistic and relational in nature, this is an essential goal (Allen & Heppner, 2011).

Significant mean differences according to gender showed that the female participants in the sample tended to be more grateful, have better self-esteem, less depression, and less anxiety than the male participants, which is contrary to previous research that has shown males reporting higher self-esteem than females (Kling, Hyde, Showers, & Buswell, 1999) and no significant differences in levels of depression and anxiety (Lovibond & Lovibond, 1995). Research has already shown that male Polynesian Americans are less inclined to seek professional help for their concerns (Allen, Kim, Smith, & Hafoka, 2016). Therefore, male Polynesian Americans who do not feel safe about talking about their personal and familial problems and concerns may be inclined to use more private, internal ways of coping with distress (i.e., avoidance and detachment from problems or concerns), which research has shown to be negatively associated with well-being (Allen & Smith, 2015).

Primary Findings

A main purpose of the present study was to determine whether forgiveness and gratitude mediated the relationship between religious commitment and well-being, in order to understand the specific factors of religiosity that yields healthy benefits. Statistical analyses of the study's Polynesian American sample showed that forgiveness and gratitude fully mediated the relationship between religious commitment and self-esteem. In other words, this demonstrates that forgiveness or gratitude accounts for a significantly large portion of the variance in the relationship between religious commitment and self-esteem. Moreover, gratitude was shown to

partially mediate between religious commitment and satisfaction with life, where increases in satisfaction with life is explained in part by the participant's religious commitment and by their self-reported gratitude scores.

It is noteworthy that forgiveness did not significantly mediate between religious commitment and satisfaction with life, as this is contrary to previous research findings (Alaedein-Zawawi, 2015; Toussaint et al., 2012). However, it is important to note that this study investigated trait forgiveness, and in the psychological literature, both trait and state forgiveness are investigated. According to McCullough and colleagues (1998), state forgiveness is defined as a set of motivational changes, including decreases in the motivation to retaliate against an offender and uphold separation from an offender. The authors theorize that these changes are motivated by a desire to heal damaged relationships. Though trait forgiveness has yielded statistically insignificant results in this study, it may be worth exploring state forgiveness among a Polynesian sample, as it stands to reason that a collectivistically-oriented culture will be more inclined towards healing interpersonal offenses, and that more religiously committed individuals benefit from religious instruction that emphasizes prosocial living. One well studied state forgiveness measure is the Transgression Related Interpersonal Motivations Inventory (McCullough et al., 1998), which may be worth using in a future study.

Also contrary to previous research was finding that religious commitment did not significantly correlate with, nor predict, depression, anxiety, or stress. Generally, as is mentioned in the literature review, research indicates an inverse relationship where higher religious commitment is related with lower psychological distress (e.g., Smith et al., 2003). These findings also seem to hold true among white and non-white populations (e.g., Jang & Johnson, 2004). Some studies also indicate a direct relationship, such as a study by Exline, Yali, and Sanderson

(2000) which showed that religiosity can be a source of "psychological strain"—interpersonal discord, guilt/shame, and feeling alienated from God—which is subsequently associated with increased depression and suicidality. A systematic review of the literature did not reveal studies indicating a non-significant relationship between religious commitment and psychological well-being. However, this lack of research showing a non-significant relationship could be a result of publication bias (e.g., Easterbrook, Gopalan, Berlin, & Matthews, 1991). Also, this result may shed some light on the uniqueness of the Polynesian American population and support the notion that some empirically supported psychological phenomena may not be generalizable to Polynesian Americans specifically, and underrepresented populations generally.

Study Limitations

Regarding limitations to this study, 93% of the participants were LDS, which may not be an accurate representation of the religious affiliations and beliefs of all Polynesians. As such, results of this study are likely not generalizable to the general population. Moreover, this restrictiveness makes it difficult to know whether the present study's effects are a result of the participant's ethnicity or their religious affiliation. Therefore, additional research is needed among a more religiously diverse Polynesian American sample, in order to determine if this study's unique findings are a result of a specific religious affiliation or their ethnicity.

Also, nearly 60% of the sample were of Samoan or Tongan descent, which is not representative of Polynesians as a whole. More research needs to be conducted among a more diverse sample that includes relatively equivalent representation from other major Polynesian races including Native Hawaiians, Maori, and Tahitian. The study's implementation of snowball sampling to recruit participants, although culturally appropriate, may produce inaccurate results due to non-randomness and selection biases. Data collection through survey distribution, either

in person or online, represents another limitation, as there is little control in assuring accurate

and honest responding to survey items. And because the instruments used in the study were not

normed among a Polynesian population, the reliability and validity of scores are likely affected.

Lastly, the GQ-6 reliability estimate derived from this study's sample was moderate at

best (.67). This may be a result of the lack of variability in the data, in that several participants

answered the questionnaire in a similar fashion, which may also be indicative of a ceiling effect.

Therefore, caution must be taken when interpreting statistical analyses that include this measure,

as the size of the estimate limits the generalizability and trustworthiness of data. The size of the

reliability estimate also demonstrates that it may not be appropriate to use the measure among a

Polynesian American population, possibly because the content and/or context of the questions

are not well-understood.

Clinical Research Implications

Although much more research is recommended to address the aforementioned

limitations, this study provides important considerations for clinical research. First, future

research can focus on investigating the effectiveness of specific interventions, including

spiritual/religious psychotherapy interventions, that lead to the greatest enhancements to well-

being among Polynesian individuals. Several research studies have been published specifically

on interventions that enhance forgiveness and gratitude, which may be good articles to refer to

when structuring the study (e.g., Emmons & McCullough, 2003; Shapiro, Schwartz, & Santerre,

2002; Worthington, Sandage, & Berry, 2000). Second, this study supports the need to be

cautious when interpreting results of a study that did not include an appropriate sampling of

several ethnically diverse groups, including Polynesian Americans. As was discussed above, this

study presents two findings that are contrary to a plethora of research articles, some which

included a diverse sampling of several ethnic/racial groups, and all of whom did not include a specific sampling of Polynesian/Pacific Islander individuals. And lastly, this study calls for a need to validate research instruments among a Polynesian American population in order to determine whether the demonstrated psychometric properties show reliable and valid use of the instruments among this specific population. If not, it is recommended that measures be taken to change and edit instruments, or separate instruments be created for specific populations that demonstrate unique psychometric properties.

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APPENDIX A

Review of the Literature

Within the United States, there has existed a considerable schism between religion and mental healthcare for nearly 75 years (Richards & Bergin, 2005). This separation, spearheaded by Sigmund Freud and his contemporaries, and perpetuated by many modern psychologists such as Albert Ellis, was based on the premise that religion is equivalent to irrational thinking, and that strong adherence to the same is a cause of significant emotional disturbance (Richards & Bergin, 2005). This belief endured for decades, despite being unfounded in adequate scientific investigation. It's puzzling that religion remained unstudied for so long, especially considering that most of the American population were, and are now, affiliated with a formal religion, believe in God or a universal spirit, and consider themselves moderately to very religious (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000; Newport, 2013; Smith & Cooperman, 2015). This popular view quickly changed in the 1980s as studies, based on sound empirical practices, began to support the health-promoting benefits of religious beliefs. Since then, hundreds of studies have investigated the effects of religion on health (Richards & Bergin, 2005), with many comprehensive reviews (e.g., Koenig, 2012; Koenig, McCullough, & Larson, 2001; Moreira-Almeida, Neto, & Koenig, 2006) and meta-analyses (e.g., Bergin, 1983; McCullough et al., 2000; Smith, McCullough, & Poll, 2003) offering stronger support for the positive, rather than negative, effects of religion on an individual's physical health and well-being.

Religiosity and Well-Being

Regarding physical health, McCullough and colleagues (2000) conducted a meta-analysis on data from 42 independent samples (nearly 126,000 people) and found that religious involvement was significantly associated with lower mortality rates. Specifically, they performed

a log odds ratio on the data and found that the odds of survival of people with a higher score on various measures of religious involvement were 129% of the odds of survival for people who scored lowered on the same measures. Although the odds ratio of this size is considered a small effect, the authors argue that an effect of any significant size is important given the nature of the criterion variable (mortality). In a meta-analysis conducted by Bergin (1983), most studies indicated a positive relationship between religiosity and improved mental health, with much fewer (23% of studies) indicating a negative relationship. Smith, McCullough, and Poll (2003) would support these findings with a study in which they investigated the effects of religiousness on depressive symptomology across 147 studies. They observed a negative correlation between these variables (random effects weighted average effect size of -.096), otherwise meaning that across these studies, religiousness generally led to a significant and reliable decrease in a variety of depressive symptomology. Also, this correlation continued to be "substantial" across genders, ethnicity (African Americans, European Americans, and Northern Europeans), and age. Moreover, religiousness had a stronger buffering effect on depressive symptoms in individuals who were undergoing significant amounts of stress due to recent events in their lives. As many more studies mounted in support of the health and well-being benefits of religion, scholars became increasingly more interested in investigating other aspects that contribute to a life of satisfaction and happiness.

Positive Psychology and Well-Being

Empirical research on religion supported and stimulated research in positive psychology (and vice versa; Richards & Bergin, 2005). *Positive psychology* is a psychological sub-discipline that seeks to understand the psychological phenomena that makes life worth living and arose in response to psychology's historic emphasis on human suffering and illness (Park, Peterson, &

Seligman, 2004). The most central concern of this discipline is the understanding of positive experiences, such as life satisfaction and positive traits. Positive traits, or "human character strengths" may be defined as "disposition[s] to act, desire, and feel that involves the exercise of judgment and leads to a recognizable human excellence or instance of human flourishing" (p. 604, Park et al., 2004). Park et al. (2004) propose criteria for differentiating positive traits from other individual differences (e.g., abilities and talents). For example, they assume that positive traits are "traitlike," in that they are "individual difference[s] with demonstrable generality and stability" (p. 605) and include obvious negative opposites. They also investigated the 24 positive traits included in The Values in Action Inventory of Strengths (VIA–IS) to determine whether they were associated with enhanced satisfaction with life and found that most of the traits were positively associated with satisfaction with life, and that the traits of hope, zest, gratitude, love, and curiosity had the most substantial associations. Another noteworthy finding was that they found no evidence that having too much of a specific trait was associated with lower satisfaction with life. Recently, the positive traits of forgiveness and gratitude have been receiving relatively more attention in psychological literature than other traits.

Forgiveness and Gratitude

Research on well-being and forgiveness show that psychotherapies that incorporate forgiveness interventions lead to improvements in many indicators of well-being (McCullough, 2000). Bono and McCullough (2006) indicated that forgiveness is associated with improved relational well-being, in that partners in romantic relationships who report forgiving each other often also report better relationship quality. Forgiveness has also been associated with increased optimistic thinking, decreased hopelessness, increased self-efficacy, greater sense of self-acceptance, and less anxiety and depressive symptoms (Bono & McCullough, 2006;

McCullough, 2000). Research on gratitude and well-being indicates that the construct may buffer against depression, secure supportive social relationships, improve self-esteem, increase life satisfaction, increase optimism and hope, and decrease the intensity of various symptoms of mental illness (Bono & McCullough, 2006; Wood, Froh, & Geraghty, 2010). Some research also compares the well-being benefits of forgiveness and gratitude and found that forgiveness may exhibit greater improvements than gratitude (Breen, Kashdan, Lenser, & Fincham, 2010; Toussaint & Friedman, 2009). To understand why forgiveness and gratitude may be associated with improved well-being, Toussaint and Friedman (2009) conducted mediation analyses, in which they found that affects and beliefs "largely" mediated the association fully. In other words, these constructs may be beneficial to one's well-being because they promote positive feelings, emotions, and beliefs about self and others.

Research also shows that forgiveness and gratitude are related to religiosity (Alaedein-Zawawi, 2015; Krause, 2009; Mahoney, Rye, & Pargament, 2005; McCullough, Emmons, & Tsang, 2002; Ng & Chan, 2015). Generally, this research shows that higher religiosity is significantly related to higher dispositions towards forgiveness and gratitude. Some researchers proposed conceptual frameworks to explain the associations between forgiveness, gratitude, and religiosity.

Worthington, Berry, and Parrott (2001) suggests that religiosity is directly and indirectly related to forgiveness. They say that religiosity is directly related to forgiveness because religious beliefs, especially those that are valued by an individual, often shapes their personality, and leads them to behave and think in accordance with virtues endorsed by their beliefs. Forgiveness is a core virtue of Christianity, and operates at two levels: one, being the reception of forgiveness from God, and two, forgiveness at the interpersonal level, which is considered a

sin that members will seek to develop forgiving dispositions, and encourage their friends and family to do the same. Forgiveness is also said to be indirectly related to religiosity, because many cultural norms and beliefs may be heavily influenced by religious beliefs. Even individuals who are not highly religious may develop personal characteristics and virtues associated with those endorsed by organized religions because these are consistent with their cultural, ethnic, and communal belief systems.

McCullough and colleagues (2002) found that gratitude correlated significantly with nearly all their measures of religiosity including frequency of prayer, church attendance, and scripture reading. To provide conceptual support for these findings, the authors offer three compelling explanations. First, world religions often promote gratitude as a desirable, even God-like, trait, causing religious and spiritual patrons to adopt a grateful outlook. Second, even in instances when one cannot attribute a positive outcome to another individual (e.g., weather, physical health), religious and spiritual individuals are often inclined to attribute these positive outcomes to God's intervention. And third, religious and spiritual individuals are inclined to attribute positive occurrences in their lives to God's intervention in their lives, but not negative ones.

Some research has investigated the mediating effects of forgiveness and gratitude on the relationship between religiosity and well-being. Toussaint, Marschall, and Williams (2012) conducted a longitudinal study, on a nationally representative sample of adults in the United States, in which participants were interviewed and completed measures regarding depression, religiousness/spirituality, and forgiveness, and were re-interviewed and re-administered the measures six months later. Their analysis showed that there was no direct effect between religiousness/spirituality and depression, but that religiousness/spirituality were indirectly

associated with depression through forgiveness. Interestingly, this indirect effect only significantly operated through interpersonal forgiveness and not through self-forgiveness. Alaedein-Zawawi (2015) investigated the mediating effect of trait forgiveness on religious commitment and two measures of well-being, satisfaction with life and depression, in a sample of self-identified Muslims living in Zarqa-Jordan. He found that trait forgiveness fully mediated the relationship between religious commitment and both measures of well-being. And Van Cappellen, Toth-Gauthier, Saroglou, and Fredrickson (2016), sought to determine why religious church attendance is associated with better well-being, by investigating the mediating effects of the cognitive, social, and emotion aspects of attendance. Members belonging to 20 different Catholic parishes in Belgium were asked to complete a questionnaire which included questions regarding religiosity, spirituality, perceptions of the cognitive, social, and emotional aspects of church attendance, and well-being. In their mediation analyses, positive emotions such as awe, gratitude, love, and peace, were the only significant mediators of the association between religious church attendance and well-being.

Research on forgiveness and gratitude also indicates that these constructs are empirically and conceptually linked in many ways (Toussaint & Friedman, 2009). For example, they are said to be prosocial in nature, in that they both "orient people toward sensitivity and concern for others" (p.114; McCullough et al., 2002). An individual with a forgiving disposition is prone to prosocial emotions and behaviors in response to a perceived harm. Similarly, individuals with a grateful disposition are also prone to prosocial emotions and behaviors, but in response to a perceived help (Bono & McCullough, 2006). In both instances, a dispositionally grateful and forgiving individual may be motivated to act pro-socially due to related tendencies towards interpersonal empathy and altruistic behavior, in that individuals prone to these traits may feel

motivated to contribute to another's welfare and well-being. Because of these pro-social behaviors, both traits promote and maintain healthier, closer, and more satisfying social relationships, and are related to many of the same well-being variables (Bono & McCullough, 2006; McCullough, 2000; Toussaint & Friedman, 2009). Interestingly, despite the theoretical relatedness of these constructs, few scholars have empirically investigated these constructs in combination, analyzing their association with each other and well-being variables (Toussaint & Friedman, 2009).

Research literature on religiosity, forgiveness, gratitude, and well-being were reviewed briefly, and is not comprehensive, as a plethora of research has been published on each variable individually and in combination. However, there are areas of further investigation and improvement which this study seeks to address. Before describing these, and the purpose of this study, it is important to understand how each of the study's variables are operationalized, as well as other popular and competing conceptualizations of each.

Religious Commitment

During the last decade, there has been a great deal of debate and discussion about the definitions of religiosity and spirituality (Richards & Bergin, 2005). Traditionally, religiosity and spirituality were undistinguished, and used interchangeably, but modern trends shifted to a view of religiosity and spirituality as "narrow band constructs that are polarized from each other" (Zinnbauer, Pargament, & Scott, 1999, p. 899). Modern conceptualizations of religiosity and spirituality may include the following differentiations: 1) religiosity as external and institutional, and spirituality as personal and relational, 2) Substantive religiosity and functional spirituality, and 3) religiosity viewed as negative and spirituality viewed as positive (Zinnbauer et al., 1999). Some have argued against the polarization of religiosity and spirituality, explaining that doing so

oversimplifies the constructs, vehemently pointing out that there is more overlap and "many shared meanings and characteristics" between the two (Richards & Bergin, 2005, p. 21). Given the ongoing debate and controversy surrounding these two terms, it's important to clarify which of the two constructs this present study is focusing on. To bring this study in accordance with current research among Polynesian Americans (Allen & Heppner, 2011; Allen & Smith, 2015), the present study focuses on the construct of religiosity, conceptualized using what Worthington et al. (2003) calls *religious commitment.*

Worthington et al. (2003) defined religious commitment as "the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living" (p. 85). Measures of religious commitment provide researchers with an idea of the centrality of religion in an individual's life (Worthington, 1988). Worthington (1988) also said that individuals who are high in religious commitment, or scores at least one standard deviation above the mean, will frequently interpret issues in life as religious, whereas those low in religious commitment, those who score at least one standard deviation below the mean, will rarely think about or use religion in their everyday life. Although religion does not play a prominent role in the life of an individual who is not highly religious, it's important to note that this does not necessarily assume that they do not believe religious teachings and doctrines. Rather, individuals who are low in religious commitment may hold religious beliefs, but do not act upon these beliefs because they do not place a high value on them (Worthington et al., 2001). Worthington (1988) also distinguishes between religious commitment that is manifested publicly (interpersonally) or privately (intrapersonally). Publicly, an individual may demonstrate their religious commitment through observable religious behavior, such as attending church, reading sacred religious texts, or praying. And privately, an individual's religious commitment may be manifested through the

way they construct their self-schema (Markus, 1983). In other words, highly religiously committed individuals are thought to relate and view themselves, others, and the world according to their religious beliefs.

Forgiveness

Defining forgiveness proves difficult because there are many different perspectives (Berry, Worthington, O'Connor, Parrott, & Wade, 2005; Toussaint & Friedman, 2009). One reason for this multiplicity, is because most researchers focus on single dimensions of forgiveness. This poses a problem because most researchers also agree that forgiveness is a complex, multi-dimensional construct that involves cognitive, affective, behavioral, motivational, decisional, and interpersonal aspects (Tangney, Boone, & Dearing, 2005; Worthington & Scherer, 2004). However, there exists much disagreement regarding which dimensions are the most important (Worthington & Scherer, 2004). In what follows, a brief review of a few conceptualizations of forgiveness are provided, as well as an explanation of the dimension of forgiveness this study ascribes to.

Enright (1996) defines self-forgiveness as "a willingness to abandon self-resentment in the face of one's own acknowledged objective wrong, while fostering compassion, generosity, and love toward oneself" (p. 116). Enright notes that the self-forgiver has a right to self-resentment due to a real, objective offense towards one's self or others, but nevertheless, gives it up. Also, self-forgiveness does not necessarily entail unconditionally accepting, condoning, or excusing all of one's behaviors as morally good, but rather, refers to "[practicing] a sense of inherent self-worth" (p. 117) and self-respect, especially in the face of serious transgression towards self or others. In respecting one's self, the self-forgiver truly cares about himself, which care is centered in love rather than an excessive self-focus due to narcissism and vanity (Enright,

1996). Enright further says that the self-forgiver can see himself as an integral member of the human community but does not condone his wrong. Therefore, the self-forgiver allows self-reconciliation, in that he acknowledges the wrongdoing, but trusts that he will put forth a sincere effort to change in the future. According to Tangney et al. (2005) self-forgiveness may also be viewed as a method used to resolve one's feelings of shame and guilt that are often the result of having "violated important personal, societal, and moral standards" (p. 143). This resolution is usually conditional upon the reconciliation and reparation of the objective wrong committed.

Interpersonal forgiveness is said to involve "the willingness to abandon one's right to resentment, condemnation, and subtle revenge toward an offender who acts unjustly, while fostering the undeserved qualities of compassion, generosity, and even love toward him or her" (Enright, 1996, p. 108). Much research has been conducted on this dimension of forgiveness (Berry et al., 2005). Per Berry et al. (2005), most researchers understand interpersonal forgiveness as either "offense-specific," the understanding of forgiveness towards a "specific person for a single transgression" (p. 184), or "dyadic," the understanding of forgiveness towards a person for a history of transgressions.

Hall and Fincham (2005) discuss at least three ways in which interpersonal forgiveness may differ from self-forgiveness. First, whereas self-forgiveness is thought to be *conditional*, in that it is contingent upon reconciliation, and the resolve that one will not repeat the offense, true interpersonal forgiveness is *unconditional,* and does not hinge on the offender's future behavior. Second, interpersonal forgiveness does not require reconciliation with the offender. And third, Hall and Fincham propose that the physical and psychological consequences of failing to forgive another may be less severe than failing to forgive one's self—"whereas one can avoid an unforgiven perpetrator, one cannot escape an unforgiven self" (p. 144).

McCullough and colleagues (1998) have conducted extensive research on interpersonal forgiving and have proposed the construct to be a two-component motivational system. They theorize that interpersonal interactions within close relationships generally consist of two negative affective states that correspond with two responses to interpersonal offense: 1) the perception of hurt, which corresponds with the motivation to avoid the offender, and 2) feelings of righteous indignation which correspond with a motivation to seek revenge. Therefore, when an individual indicates that he or she has forgiven another, their perceptions of the offense no longer elicits the motivations to avoid or to seek revenge on the offender (McCullough et al., 1998).

Worthington and Scherer (2004) proposed forgiveness as an emotion-focused coping strategy that reduces stress of unforgiveness. They identify two types of forgiveness, decisional and emotional. *Decisional forgiveness* is said to be the decision that one will behave towards the offender in a way similar to how one acted before the offense. In that it is solely a behavioral decision to act civilly towards the offender, Worthington and Scherer note that it does not necessarily remove the negative emotions related to unforgiveness. Therefore, one may still feel "cognitively oriented toward angry, anxious, or depressive rumination, and motivationally oriented toward revenge or avoidance" (p. 386). Decisional forgiveness may trigger *emotional forgiveness*, which is the type of forgiveness that leads to the reduction in negative emotions, motivations, and ruminations regarding the offense by replacing them with positive emotions such as "empathy, sympathy, compassion, romantic love, and altruistic love" (p. 387). Worthington and Scherer further theorize that when an individual is offended, they experience an "injustice gap," in which there is a "difference between the way one would prefer a transgression to be fully resolved and the way they perceive the situation currently" (p. 386). The larger that

this gap is perceived to be, the harder it is to forgive the offender. If an individual does not endeavor to reduce this gap, the authors believe that they will continue to struggle with the stress of unforgiveness, which may significantly affect health, especially cardiovascular health.

Because this study focuses on forgiveness as a positive trait, the conceptualization offered by Berry et al. (2005) was found to be most appropriate for our investigation. The focus of their research is the less studied conceptualization of forgiveness as "dispositional," or "forgiveness as an enduring personality trait" (p. 184). To distinguish this type of forgiveness from other conceptualizations, it is often termed "forgivingness" (Berry et al., 2005; Roberts, 1995). It is precisely this conceptualization of forgiveness that is promoted in many religious doctrines, and per some researchers, also responsible for improvements in physical health and well-being (Berry et al., 2005).

Gratitude

Gratitude is equally difficult to define due to multiple existing definitions. Gratitude is said to possibly exist as a trait, an enduring climate or mood, and a feeling state or emotion (McCullough et al., 2002; Rosenberg, 1998; Watkins, Woodward, Stone, & Kolts, 2003). As a trait, gratitude is a stable, enduring predisposition to respond to events with certain types of emotions. As a mood, gratitude fluctuates throughout the day. And as an emotion, gratitude is a brief psychophysiological response that results from periodic, meaningful life experiences (Rosenberg, 1998). Most research seems to focus on gratitude as a trait, but there is disagreement regarding its conceptualization and measurement. In what follows, a brief review of studies that show differences in the conceptualization and measurement of trait gratitude are offered.

McCullough and colleagues (2002) define trait gratitude as a "generalized tendency to recognize and respond with grateful emotion to the roles of other people's benevolence in the

positive experiences and outcomes that one obtains" (p. 112). The authors suggest that, as an affective trait, gratitude lowers the threshold for recognizing and responding with gratitude to the kind and generous acts of other people. Thus, gratitude may cause several "discrete emotional experiences" (p. 113). The authors use the term "facets" to refer to these experiences, and are called intensity, frequency, span, and density. *Intensity* refers to a grateful person's disposition to feel more intense grateful emotions in response to a certain life event. *Frequency* refers to a grateful person's tendency to report feeling grateful many times a day, with grateful emotions being elicited by even the smallest acts of generosity and kindness. *Span* refers to a grateful person's ability to feel grateful for many life circumstances at a given time, which may include gratitude for one's family, career, health, home, and life. And *density* refers to a grateful person's tendency to feel grateful for the contributions of many people for a single outcome. The authors also suggest that due to a grateful person's tendency to attribute their happiness to external sources, they may be less likely to recognize and appreciate their own efforts. At the same time, they note that such may not be the case; maybe grateful people recognize their own efforts in receiving a positive outcome but are also prone to recognize the contributions of others. Lastly, authors suspect that grateful people experience more positive emotions, such as boosts to self-esteem, self-value, and perceived social support as a result of being the beneficiary of another's kindness, appreciate what they have and avoid taking things for granted, and experience other traits, especially those that are positive, prosocial, and religious/spiritual in nature.

The understanding of trait gratitude proposed by Watkins et al. (2003) is nearly identical to what is proposed by McCullough and colleagues (2002). The only notable difference is the way in which gratitude is measured. McCullough and colleague's Gratitude Questionnaire (GQ-6) is based on a single-factor model of gratitude that assesses "experiences and expressions of

gratefulness and appreciation in daily life, as well as feelings about receiving from others" (p. 115). In contrast, Watkins et al.'s Gratitude, Resentment, and Appreciation Test (GRAT) is based on a three-factor model: 1) grateful people have a sense of abundance about life, in that they are grateful for what they have, and do not feel deprived, 2) grateful people appreciate the simple pleasures of life, and 3) grateful people recognize the importance of experiencing and expressing gratitude for the contributions and generosity of others. The GRAT seems to encompass the GQ-6, in that it includes the factor it measures (appreciation towards others), in addition to two more factors (sense of abundance and simple appreciation).

Adler and Fagley (2005) approached the conceptualization of trait gratitude quite differently, in that they viewed it as a component of appreciation rather than two different constructs. Appreciation is defined as "acknowledging the value and meaning of something–an event, a person, a behavior, an object–and feeling a positive emotional connection to it" (p. 81). As a component of appreciation, gratitude refers to the acknowledgement of a benefit received from another, whether a person, deity, or material/spiritual entity, and feeling thankful for their efforts and sacrifices asserted on your behalf. They also propose other components of appreciation, such as awe, ritual, present moment, self/social comparison, loss/adversity, interpersonal, and "have" focus. Adler and Fagley created a scale that gages an individual's disposition for appreciation by measuring the construct according to its 8 components.

McCullough, Kilpatrick, Emmons, and Larson (2001) also offer a different conceptualization of trait gratitude, viewing the construct as a moral affect, in that it is a natural response to, and motivator of, moral behavior. Being the beneficiary of the moral behavior of another is suggested to motivate the beneficiary to act in ways that are moral and promote well-

being. Moreover, when a beneficiary expresses their gratitude to the "benefactor," this reinforces the benefactor to act in more prosocial and moral ways in the future.

In the preceding paragraphs, the attempt was made to provide different theoretical conceptualizations, and methods of measurement, of gratitude. This is in no way an exhaustive review, as researchers and scholars have theorized about gratitude for more than 200 years (McCullough et al., 2001). For this study, we use the definition provided by McCullough, and colleagues (2002) because their conceptualization explicitly focuses on gratitude as a unique, positive trait, is regarded as the most popular in the literature (Wood et al., 2010), and is useful for practical reasons, in that their measure of gratitude (GQ-6) has adequate psychometric properties while also being brief (six items).

Ethnic Identity

Tajfel (1981) defined ethnic identity as "that part of an individual's self-concept which derives from knowledge of membership of a social group together with the value and emotional significance attached to that membership" (p. 255). Building upon the pioneering work of Tajfel and colleagues, much research has identified major components of ethnic identity.

Ashmore et al. (2004) provides a comprehensive framework for understanding ethnic identity. Among others, Ashmore and colleagues suggest that self-categorization, attachment, and importance are major components of ethnic identity. *Self-categorization* is considered one of the more basic aspects of ethnic identity, in which an individual self-identifies themselves as a member of a group. Because the labels that individuals use are influenced by how they want to be viewed by others, self-applied labels often vary by context. *Attachment* is the aspect of ethnic identity that identifies an individual's personal investment, felt affiliation, and emotional

involvement within a group. Lastly ethnic identity includes the *importance* of an individual's ethnicity to their sense of self and social identity.

Exploration and ethnic behaviors have also been identified as important aspects (Phinney, 1992 & 2006). *Exploration* involves the extent to which an individual actively seeks information and experiences relevant to their ethnicity. *Ethnic behaviors* identity the extent to which an individual engages in behaviors characteristic of their ethnic group including speaking the language, eating the food, and associating with other members of the group.

Well-Being

Since the inception of the study and practice of psychology, research has focused primarily on human suffering, negative psychological states, and unhappiness (Diener, Suh, Lucas, & Smith, 1999; Ryff, 1989). Although this focus has revealed much about this topic, it has also proved problematic because relatively little was understood about what makes people happy. Research on well-being grew in response to this neglect. Historically, well-being research has focused on determining the key features of well-being. For example, Bradburn (1969) possibly conducted one of the very first studies that investigated the structure of well-being. Although this was not his study's primary intent, he found that positive (e.g., joy, affection, elation) and negative (e.g., sadness, stress, depression) affective states were two distinct aspects of well-being, and that the balance between these was a defining characteristic of happiness (per the Greek *eudemonia*). Bradburn's conception of well-being (happiness) continues to be a prevailing structure of well-being. Another prevailing conceptualization of well-being is to emphasize global life satisfaction as a key indicator (Ryff & Keyes, 1995). Both formulations are said to complement each other, in that happiness is said to be the affective component of well-being, and life satisfaction the cognitive component. Diener et al. (1999) will agree that both are

essential, but also add domain satisfactions (satisfaction with self, family, work, etc.) as another important component of well-being. For the purposes of this study, essential aspects of well-being are investigated as outcome variables of forgiveness, gratitude, religious commitment, and ethnic identity. Well-being variables include negative affective states (depression, anxiety, stress), domain satisfaction (self-esteem), and life satisfaction.

Purpose of This Study

As was mentioned previously, although there's a plethora of religious and positive psychological research on this study's variables of interest, there are many areas that require further investigation within the religious and positive psychological literature. One area that merits further investigation is why religion positively, and negatively, effects well-being (McCullough et al., 2001; Richards & Bergin, 2005). Research in this area is sparse, with only a few indicating mediating effects (Alaedein-Zawawi, 2015; Toussaint et al., 2012; Van Cappellen et al., 2016). Thus, this study seeks to expand research on mediating variables by examining whether forgiveness and gratitude mediate the relationship between religiosity and several variables of well-being.

Moreover, psychological research is replete with studies regarding the extent to which trait forgiveness and trait gratitude individually relate with religiosity and well-being, however, there is virtually no research investigating forgiveness and gratitude together, despite the conceptual and empirical relatedness of both constructs. This is important to investigate to determine which positive trait, forgiveness or gratitude, relates better with religious variables, and to determine which positive trait, if any, better explains the relationship between religion and well-being, or if both explain the relationship equally. Another area of investigation that has not received attention in the religious or positive psychological research is determining whether

ethnic identity explains the relationship between religious commitment and the traits of forgiveness and gratitude. In other words, that religious commitment relates to, and predicts changes in, trait forgiveness and gratitude because religious values and beliefs are already an important part of their Polynesian culture and identity. There is also a greater need to investigate phenomena among a more culturally diverse population, as most research within fields of religious and positive psychology have been conducted among European/White populations. This study seeks to understand a population who is underrepresented in all areas of psychological research: Polynesian Americans.

Polynesian Americans

Polynesian Americans are a U.S. population of persons who originate from a group of islands, known as *Polynesia*, located in the northern, central, and southern areas of the Pacific Ocean. This island group includes Hawai'i, the Kingdom of Tonga, Samoa, Tahiti, Cook Islands, New Zealand, Fiji, French Polynesia, Easter Island, and the Marquesas. Since the early 1960s, there has been a considerable increase in Polynesians (specifically Tongans and Samoans) immigrating to the U.S. (Allen & Heppner, 2011).

According to a census report written by Hixson, Hepler, and Kim (2012), Polynesians were lumped under the broader "Asian, and Native Hawaiian or Other Pacific Islander" category since the 1997 census. Beginning with the 2000 U.S. census, and in recognition of considerable cultural differences, the "Native Hawaiian and Other Pacific Islander Population" was classified separately from the Asian population. The "Native Hawaiian or Other Pacific Islander" census classification includes any "person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands" (Hixson et al., 2012, p. 2). Although separated from the Asian population, this continues to be a problematic umbrella term because the Pacific Islands,

otherwise known as *Oceania*, is a region of the world that encompasses all islands in the Pacific Ocean, categorized into three subregions: Polynesia, Micronesia, and Melanesia. Islands within subregions are culturally, historically, and linguistically similar, but there are considerable differences between subregions. In this study, the focus is to understand the people in the U.S. who originated from Polynesia—one of three subregions in the Pacific Islands.

Census reports indicate that, between 2000 and 2010, The Native Hawaiian and Pacific Islander population was one of the fasting growing race groups (Hixson et al., 2012). According to the same report, the Native Hawaiian and Other Pacific Islander alone population increased "more than three times faster than the total U.S. population, growing by 35 percent" (Hixson et al., 2012, p. 4). Most of this population are of Polynesian descent (rather than Micronesian or Melanesian descent), with the greatest numbers of people reporting Native Hawaiian (156,146) or Samoan (109,637) Polynesian races. Moreover, the greater majority (more than three-fourths) of the population resides in the Western United States, especially Hawaii, California, Washington, and Utah.

Despite Polynesians having resided in the U.S. for decades, being one of the fasting growing U.S. populations, and being a unique ethnic minority group, there is very little research on them, especially among religious and positive psychological research. There is some research on the physical health and well-being of Native Hawaiians living in the U.S. (e.g., Carlton et al., 2006; Grandinetti et al., 2000; McCubbin, 2007), and Polynesians living internationally (e.g., Anderson et al., 2006; Moore, Leslie, & Lavis, 2005; Thomas, 2002); however, psychological research on other Polynesian races (e.g., Samoans, Tongans, Tahitians) living within the U.S. context are considerably sparser.

Two studies published within the last 5 years are the only peer-reviewed journal articles that provide an understanding of the broader Polynesian American population related to religiosity. In these studies, the authors investigated religiosity and well-being variables among a large sample that included Native Hawaiian, Samoan, Tongan, Fijian, Tahitian, and other Polynesian participants (Allen & Heppner, 2011; Allen & Smith, 2015). Allen and Heppner (2011) found that Polynesian Americans who were more religiously committed were more self-accepting and felt as though they had greater purpose in life. And Allen and Smith (2015) investigated collectivistic coping strategies among Polynesian Americans, and specifically wanted to determine which coping strategy was most import and useful in dealing with distressing life events. They found that Polynesian Americans were most likely to use religious/spiritual coping strategies when faced with distressing life events as opposed to other strategies (e.g., acceptance, reframing, private emotional outlets).

Religion and spirituality have long been an integral part of Polynesian culture. Per the beliefs of many Polynesian cultures, health is maintained through social and spiritual harmony (Capstick, Norris, Sopoaga, & Tobata, 2009). In contrast, physical and mental illness is said to be the result of disharmony, disconnect, or transgression that are social or spiritual in nature. Common among many Polynesian cultures is the belief that their failures to resolve social and spiritual conflicts engender consequences that may affect the individual, their family, an innocent third party, and ancestral spirits. For this reason, discord is often dealt with swiftly to maintain social and familial harmony. When family and social discord and conflict is left unresolved, cultural narratives indicate that it is commonplace for ancestral spirits to cause mental and physical illness to motivate conflict resolution (Capstick et al., 2009).

Polynesians also share the common belief that self is relational, in that self has no meaning independent of their social relationships, their land, their Gods, and their ancestral spirits (Capstick et al., 2009; Tamasese, Peteru, Waldegrave, & Bush, 2005). As such, proper, respectful, and prosocial behavior is vital to the Polynesian way of life.

Research by McCubbin and Marsella (2009) further illustrates the important of spirituality, and the concept of the relational-self among Polynesians. They indicate that the Native Hawaiian concept of self and health (mental and physical) is viewed holistically. Self is conceptualized as including three key aspects: *'aina* (nature, land), *kanaka* (humankind), and *ke akua* (gods). As such, there is no concept of individual worth or success, because what matters is the individual's relationship with these key aspects. Moreover, Native Hawaiian health and well-being requires that there is *lokahi*, or harmony, among these aspects. Thus, Native Hawaiians strive to maintain balance among mind, body, spirit, and land.

Native Hawaiians are also said to believe in a spiritual force, referred to as *mana*, that is found in all living and non-living things (McCubbin & Marsella, 2009). This force makes lokahi possible, as it is the unifying force that holds together one's family, the land, the spirits (including ancestral spirits), and the gods. Disruptions in this force leads to disharmony and eventually, poor family well-being and mental and physical ailments. Social or spiritual offensives disrupt lokahi, including offending spirits or ancestors, stealing, breaking promises, being too noisy, and bearing a grudge. Resolving social and spiritual offensives can restore lokahi and is primarily done through an engagement in spiritual rituals, prosocial behavior, and conflict resolution processes. Through a process called *Ho'oponopono*, familial and communal conflicts are resolved through prayer, forgiveness, and *aloha* (love). The resolution of the conflict brings about a restoration of lokahi, and in turn, one's health and well-being (Shook &

Kwan, 1987). Qualitative research among Samoans also indicate similar beliefs about a self that only has meaning through relationships with others, the land, and the spirit world, the importance of spirituality, and the sacredness and importance of social relationships (Tamasese et al., 2005)

In sum, although research is sparse, available research on Polynesians seem to indicate that spirituality is an important part of their ethnic identity, and that prosocial traits, such as forgiveness and gratitude, may facilitate harmony and unity among social relationships, which are thought to be vital for the maintenance of mental and physical health.

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APPENDIX B

Instruments

Religious Commitment Inventory (RCI–10)

Please read each statement and rate how true of you it describes (1=not at all true of me,

2=somewhat true about me, 3=moderately true of me, 4=mostly true of me, 5=totally true of me)

1. I often read books and magazines about my faith.

2. I make financial contributions to my religious organization.

3. I spend time trying to grow in understanding of my faith.

4. Religion is especially important to me because it answers many questions about the meaning of life.

5. I enjoy spending time with others of my religious affiliation.

6. Religious beliefs influence all my dealings in life.

7. It is important to me to spend periods of time in private religious thought and reflection.

8. I enjoy working in the activities of my religious organization.

9. I keep well informed about my local religious group and have some influence in its decisions.

Trait Forgivingness Scale (TFS)

Indicate the degree to which you agree or disagree with each statement below by using the following scale (1=strongly disagree, 2=mildly disagree, 3=agree and disagree equally, 4=mildly agree, 5=strongly agree).

1. People close to me probably think I hold a grudge too long.

2. I can forgive a friend for almost anything.

3. If someone treats me badly, I treat him or her the same.

4. I try to forgive others even when they don't feel guilty for what they did.

5. I can usually forgive and forget an insult.

6. I feel bitter about many of my relationships.

7. Even after I forgive someone, things often come back to me that I resent.

8. There are some things for which I could never forgive even a loved one.

9. I have always forgiven those who have hurt me.

10. I am a forgiving person.

Gratitude Questionnaire (GQ–6)

Using the scale below as a guide, please read each statement and indicate how much you agree with each (1-strongly disagree, 2=disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=agree, 7=strongly agree).

1. I have so much in life to be thankful for.

2. If I had to list everything that I felt grateful for, it would be a very long list.

3. When I look at the world, I don't see much to be grateful for.

4. I am grateful to a wide variety of people.

5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.

6. Long amounts of time can go by before I feel grateful to something or someone.

Rosenberg Self Esteem Scale (RSE)

Please read each statement and indicate how much each describes you based on the following

scale (1=strongly disagree, 2=disagree somewhat, 3=agree somewhat, 4=strongly agree)

1. On the whole, I am satisfied with myself.

2. At times, I think I am no good at all.

3. I feel that I have a number of good qualities.

4. I am able to do things as well as most other people.

5. I feel I do not have much to be proud of.

6. I certainly feel useless, at times.

7. I feel that I'm a person of worth, at least on an equal plane with others.

8. I wish I could have more respect for myself.

9. All in all, I am inclined to feel that I am a failure.

10. I take a positive attitude toward myself.

Multigroup Ethnic Identity Measure–Revised (MEIM–R)

(5-point Likert Scale from strongly disagree (1) to strongly agree (5), with 3 being neutral)

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2. I have a strong sense of belonging to my own ethnic group.

3. I understand pretty well what my ethnic group membership means to me.

4. I have often done things that will help me understand my ethnic group better.

5. I have often talked to other people in order to learn more about my ethnic group.

6. I feel a strong attachment towards my own ethnic group.

Satisfaction with Life Scale (SWLS)

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is: 1=strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, 7 = strongly agree.

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

2. The conditions of my life are excellent.

3. I am satisfied with my life.

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

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

Depression Anxiety Stress Scale (DASS–21)

Please indicate how much the statements below applied to you over the past week (0=did not apply to me at all, 1=applied to me to some degree, or some of the time, 2=applied to me to a considerable degree, or a good part of the time, 3=applied to me very much, or most of the time)

1. I found it hard to wind down.

2. I was aware of dryness of my mouth.

3. I couldn't seem to experience any positive feeling at all.

4. I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion).

5. I found it difficult to work up the initiative to do things.

6. I tended to over-react to situations.

7. I experienced trembling (e.g., in the hands).

8. I felt that I was using a lot of nervous energy.

9. I was worried about situations in which I might panic and make a fool of myself.

10. I felt that I had nothing to look forward to.

11. I found myself getting agitated.

12. I found it difficult to relax.

13. I felt down-hearted and blue.

14. I was intolerant of anything that kept me from getting on with what I was doing.

15. I felt I was close to panic.

16. I was unable to become enthusiastic about anything.

17. I felt I wasn't worth much as a person.

18. I felt that I was rather touchy.

19. I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart mission a beat)

20. I felt scared without any good reason.

21. I felt that life was meaningless.