



Georgia Southern University
Digital Commons@Georgia Southern

Honors College Theses

4-20-2015

The Benefits of Religious Fundamentalism

Natasha M. LaBalle
Georgia Southern University

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/honors-theses>

 Part of the Psychology Commons

Recommended Citation

LaBalle, Natasha M., "The Benefits of Religious Fundamentalism" (2015). *Honors College Theses*. 82.
<https://digitalcommons.georgiasouthern.edu/honors-theses/82>

This thesis (open access) is brought to you for free and open access by Digital Commons@Georgia Southern. It has been accepted for inclusion in Honors College Theses by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

-The Benefits of Religious Fundamentalism

An Honors Thesis submitted in partial fulfillment of the requirements for Honors in the

Department of Psychology

By

Natasha M. LaBalle

Under the mentorship of *Dr. Michael E. Nielsen*

ABSTRACT

The purpose of this study was to experimentally analyze the benefits of religious fundamentalism. We hypothesized that there would be a significant difference between conditions for our dependent variables: hope, spiritual well-being, spiritual anxiety, and self-concept. We tested our hypotheses using a sample of undergraduate psychology students ($N = 83$) who each completed a religious fundamentalism measure and then several measures of relevant dependent variables. We found that those in the experimental condition had lower average scores of religious doubt than those in the control condition and higher average scores of spiritual well-being. Our results were partially consistent with existing theory about the potential benefits of religious fundamentalism, though further study is required to refine our understanding of these benefits given that this is an under-researched area of the psychology of religion.

Thesis Mentor: _____

Dr. Michael Nielsen

Honors Director: _____

Dr. Steven Engel

April 2015

Department of Psychology

University Honors Program

Georgia Southern University

ACKNOWLEDGEMENTS

I would like to thank the faculty and staff from the Department of Psychology, but especially Dr. Michael Nielsen. Dr. Nielsen has been the best mentor. He has not only been an academic resource for me during this process but a source of encouragement, too. It is because of him that I was able to take this research project from being a really good idea to a completed honors thesis. Thank you, Dr. Nielsen!

I would like to thank the faculty and staff from the University Honors Program. Whether it was providing me with answers to my questions about honors requirements or providing me with free food during finals week, the honors program has constantly provided for me throughout my four years here at Georgia Southern University. The Honors Program has made me challenge myself personally and academically and consequently I have become a better student and a better person.

I would like to thank my loved ones for their unconditional love and their support of me during my four years at university. Thank you to my brother Morgan, my mom Roberta, and my dad Carsten. I love you!

The Benefits of Religious Fundamentalism

While there has been a lot research conducted to analyze religious fundamentalism, it is mostly research that is specific to the relationships between religious fundamentalism, authoritarianism, and prejudice (Altemeyer, 2003; Altemeyer & Hunsberger, 1992; Hood, Hill, & Spilka, 2009). These findings, while important, have come to predominate our understanding of religious fundamentalism. We are therefore at a disadvantage in that we do not completely understand this religious phenomenon. It may be partially because of this research deficit that many people, including academics and researchers, conceptualize of religious fundamentalism and those who personally adhere to a fundamentalist understanding of their own religion as being a hateful, violent antithesis to modernity (Harding, 1991). The twenty-first century has already given rise to several religiously-motivated terrorist attacks and, subsequently, renewed religious and political conservatism in the United States (Antoun, 2008). However, despite the implications that religious fundamentalism is maladaptive, if not for the fundamentalist individuals themselves then for modern society, the ideology continues to an indisputably relevant subject. Recent studies have found that membership in strict churches is increasing (Iannaccone, 1994), indicating that there is something that is being gained by attending conservative religious services. The proposed study is an exploratory analysis into the possible benefits of religious fundamentalism. We hypothesize that hope, spiritual well-being, spiritual anxiety, and self-perception are relevant variables for the purposes of this study.

As this study pertains to a subtopic within the subject of religious fundamentalism that has not received as much research emphasis, the current study is an exploratory

attempt to empirically validate the idea that there are some benefits to having a fundamentalist religious ideology. While previous research studies have investigated the benefits of religion itself, there have not been many studies, if any, that have attempted to determine whether these benefits are conferred to religious fundamentalists. The questions that we are attempting to answer with this research study are benefits, if any, result from people having a fundamentalist religious ideology. Specifically, the proposed research project will analyze how religious fundamentalism affects participant's hope, self-perception, their spiritual well-being, and their spiritual anxiety. Previous research studies have been conducted that have established positive correlations between religious fundamentalism and optimism and negative correlations between religious fundamentalism, religious doubt, and existential anxiety. The proposed study will attempt to replicate these findings and extend upon previous literature by validating them using experimental methodology rather than merely correlational methodology. Given previous literature on how religious fundamentalists view the world and process life events, we also hypothesize that religious fundamentalism will have an effect on self-perception or self-concept, though there are no previous studies that we could find that have attempted to answer these questions using experimental methodology. The proposed study attempts to synthesize what is already known about religion and religious fundamentalism while also testing variables that have been studied from a psychological perspective (i.e. self-concept) but that have not been studied in conjunction with a study that investigates religious fundamentalism.

Hope

Sethi and Seligman (1993) conducted a research project in which they analyzed the potential relationships between religious orientation, optimism, and pessimism. Their sample included religious fundamentalists, religious moderates, and religious liberals. They found that rates of suicide were lower in the fundamentalist group and that these participants also significantly differed from the other participants in their scores of optimism. However, the possibility that egoism was a confounding variable because of how optimism scores were computed (Kroll, 1994) prompted Sethi and Seligman to instead compute a hopefulness and hopelessness score, using their original data. The results were the same even when they measured hope as opposed to optimism. However, we propose to only measure hope for this study because of the findings of the second study (Sethi & Seligman, 1994) and the dispute over the computation of an optimism score (Kroll, 1994).

Spiritual Well-being

There have been many studies that have analyzed the relationships between religion and people's psychological, spiritual, and physical well-being (Green & Elliott, 2009; Pargament, 2002; Genia, 1996; Ness & Winthrop, 1980). The strength of a person's religious identification and their religious orientation were both found to be significant predictor's of his or her physical health and psychological well-being (Green & Elliott, 2009), which is important given that religious fundamentalists identify more strongly with their ideology (Pargament, 2002; Shaffer & Hastings, 2007). While religious fundamentalism has been demonstrated to be negatively correlated with physical health, it has also been found to be positively correlated with measures of psychological health,

specifically happiness (Green & Elliott, 2009). Religious orientation has also been shown to be predictive of psychological and spiritual well-being (Genia, 1996). An extrinsic religious orientation was correlated with higher psychological distress but also higher physiological well-being, while an intrinsic religious orientation was the most significant predictive correlation of spiritual well-being. An intrinsic religious orientation has also a significant predictor of lower depression. For our purposes, these findings are important because intrinsic religious orientations have been found to be correlated with religious fundamentalism (Genia, 1996). Genia (1996) also found that a quest religious orientation, usually negatively correlated with fundamentalism, was significantly positively correlated with psychological distress while being significantly negatively correlated with social desirability. For the same study, there were significant, positive correlations between religious fundamentalism, spiritual well-being, and religious well-being, and worship attendance (Genia, 1996). Ness and Winthrop (1980) conducted an ethnographic study of a Pentecostal church to assess the emotional effects participation in the religious activities and behaviors sanctioned by the church would have on its congregants. The study itself is consistent with the previous literature that they reference in their article that suggests that consistent participation in religious activities, involvement with a religious community, and the support of a religious congregation are beneficial to individual's well-being. Religion has its benefits and its detriments (Pargament, 2002) and reviewing previous research there is no reason to conclude that fundamentalist religion is exempt from these findings. Rather, the studies that we have referenced here have demonstrated that religious fundamentalism is positively correlated with some aspects of well-being, like spiritual well-being and happiness, while being negatively correlated with aspects of

well-being like physical health. Our proposed study would assess the same, or similar, benefits that have been found to be associated with religion generally and other religious orientations could potentially be associated with religious fundamentalism. The specific benefits that are going to be assessed and our hypotheses about the relationship between fundamentalism and these benefits are derived from this previous research.

Spiritual Anxiety

Though previous studies (Green & Elliott, 2009; Genia, 1996) indicate that religious fundamentalism is positively correlated with spiritual well-being, these findings have not been experimentally tested. However, there is significant research that indicates that religious fundamentalism is linked to both increased spiritual well-being and decreased spiritual anxiety. Green and Elliott (2009) speculated that the strict worldview of religious fundamentalists reduces their uncertainty and provides them with a stable, optimistic framework that helps them to understand and cope with life's difficulties. Those who are more fundamentalist in their understanding of their own religion, because of the very nature of fundamentalism, are also provided with an unambiguous morality and definitive answers to existential questions (Pargament, 2002). These findings are also consistent with the findings that religious fundamentalism is an effective strategy that is used to manage the existential anxiety that is caused by our knowledge of our own inevitable death (Friedman & Rholes, 2007; Friedman & Rholes, 2008; Friedman, 2008; Arndt, Greenberg, Pyszczynski, & Solomon, 1997). Friedman and Rholes (2007) studied whether religious fundamentalism was a viable anxiety buffer, which is a psychological structure or ideology that is used as a defense against existential angst. While they found that challenging fundamentalists beliefs resulted in an increased death awareness, they

also had findings that were unique to a specific subset of their experimental condition. Their participants not only had their ideologies challenged and were then asked to complete a word-stem task to assess the accessibility of death-related cognition, or thoughts about their own death or other existential concerns, but they were also asked before and after the experimental task about their own personal belief in the infallibility of the Bible. Those participants who did not change their answers about the infallibility of the Bible did not experience the same increase in death awareness as other participants, suggesting that the unambiguous nature of fundamentalist beliefs and the conviction with which a person believes them both contribute to fundamentalism being a successful anxiety buffer. We therefore conclude that it is worthwhile to analyze both existential well-being and existential anxiety as it relates to religious fundamentalism.

Religious doubt has also been studied as it relates to religious fundamentalism (Hunsberger, Alisat, Pancer, & Pratt, 1996). The study conducted by Hunsberger et al. found that those low in religious fundamentalism self-reported more doubts about the subject of religion and seemed to have more doubt overall. Those high in religious fundamentalism self-reported no doubts about their religion, but instead reported some doubts about how the church to which they belonged operated or concerns that the church and those in it were not living in accordance with their religious standards; these people had doubts about specific issues within religion rather than religion itself. As a previous study (Hunsberger, Pratt, & Pancer, 1994) assessed the complexity of people's religious thoughts, a measure of cognitive complexity was also included in this study. These research studies (Hunsberger, Alisat, Pancer, & Pratt, 1996; Hunsberger, Pratt, & Pancer, 1994) found that religious fundamentalists experience reduced cognitive

complexity about religious and existential subjects only, which is consistent with the findings that reduced cognitive complexity and reduced integration of contradictory thoughts might be a means by which fundamentalist ideologies are maintained despite contrary evidence (Saroglou, 2002).

Self-Concept

Though it has been hypothesized that religious fundamentalism is likely correlated with low self-esteem because of the emphasis on sin and guilt that is prominent in fundamentalist understandings of Christianity (Hood, 1992), other research disagrees with this hypothesis. The current study proposes to measure self-concept by operationally defining it as participant's self-liking, which is a measure of self-esteem, and their self-competence, which is a measure of whether they perceive themselves to be capable of contending with life's difficulties. Those high in religious fundamentalism have an attributional style that is usually predicated on the belief in a loving, intervening God and they are therefore more likely to make attributions to a higher power than non-Christians (Galen & Miller, 2011). Similarly, Galen and Miller (2011) reference the findings that religious fundamentalists also usually maintain the belief in a just world and the tendency to attribute personal blame to others, even if they are not responsible, to maintain this belief that everything is being just and predetermined. We therefore hypothesize, though it has not been experimentally tested, that religious fundamentalists are likely to view themselves as more capable because of this attributional style. Religious fundamentalism is also predicated on the belief that there is a fundamentally true, (usually) textually-based religion and therefore religious fundamentalists perceive themselves as living in a way that is ordained by God (Pargament, 2002) or otherwise congruent with their belief

system. Likewise, it seems that if one adhered to the idea that there is a loving God that is approving of the way you are living your life and that responsibility for life's difficulties was relegated to this God, one would overall feel better about oneself (Pargament, 2002; Galen & Miller, 2011; Kay & Eibach, 2013) and one's ability to successfully navigate life's difficulties. These findings also suggest that the fundamentalist locus of control and attributional style would also alleviate non-secular anxieties, which relates back to the inclusion of measures of spiritual well-being and spiritual anxiety.

Hypotheses

The current project is an attempt to synthesize previous findings about religious fundamentalism and to subsequently further the insight that we have about this subject and its associated variables. If we do successfully manipulate participant's religious ideology, we propose the following research hypotheses. We expect that the participants in the experimental condition will have higher scores on the measurement of hope than those participants in the control condition. We hypothesize that the experimental group will have higher scores on the measurements of spiritual well-being (which is comprised of existential well-being and religious well-being) than the control group. Furthermore, we hypothesize that the experimental group will have lower average scores on the measurements of spiritual anxiety (which is comprised of existential anxiety and religious doubt) than the control group. We hypothesize that there will be a significant difference between the mean scores of the experimental group and the mean scores of the control group on our measure of self-concept, but we have no hypotheses about the direction of this relationship given that self-concept and religious fundamentalism has not been researched in previous literature.

Method

Participants

Eighty-three students from undergraduate psychology courses at Georgia Southern University participated in this study to complete a course requirement. These participants were recruited online from the undergraduate subject pool using the SONA system. Of these participants, 67.50% were white, 65.10% were female, and the mean age was 19.95 years ($SD = 3.59$ years). No one will be excluded from participation in this research study on the basis of demographics because the research hypotheses are not relevant to a specific subset of the population. The religious identification of the participants was 74.70% Christian and 25.30% non-Christian. The political identification of the participants was 41.00% Republican, 24.10% Democrat, 34.90% and Other.

Design

The current study used experimental methodology so as to assess what, if any, potential benefits result from being high in religious fundamentalism. The purpose of this research is to contribute something new to the existing literature on the psychology of religion. The methodological design for this study was derived from the work of a social psychologist and his colleagues (Motyl et al., 2014) in which the researchers manipulated the participant's perceived personal and community ideology as it related to their political ideology. The manipulation of the participant's ideologies was accomplished by means of using two seven-item questionnaires, one which advocated an extremely conservative position and one that advocated an extremely liberal position. An example question from the extremely conservative questionnaire would be "Women should *never* have the right to an abortion" versus an example question from the extremely liberal questionnaire

which would be “Women should *always* have the right to an abortion” (Motyl et al., 2014). For the current study, we devised a measure of religious fundamentalism that serves the same purpose that the extremely liberal and extremely conservative measures served in the original study by Motyl and his colleagues.

Measures

Religious Fundamentalism. The measures of religious fundamentalism proposed for this study constitutes the experimental manipulation. Those participants who are randomly assigned to the experimental condition will complete a modified version of the Revised Religious Fundamentalism Scale as refined by Altemeyer and Hunsberger (2004). The original Revised Religious Fundamentalism Scale consists of 12 questions that are answered on a six-point Likert-type scale (1=very strongly disagree, 6=very strongly agree). For the purposes of this study, however, we have eliminated two of the questions from the original Revised Religious Fundamentalism scale that explicitly referenced Satan because we wanted to be able to use the measure with different religious populations. The participants in the control condition will complete an unmodified Religious Fundamentalism scale that is not meant to manipulate the participant’s perception of his or her own religious point of view. The unmodified Religious Fundamentalism scale contains 10 questions which are answered on a six-point Likert-type scale (1=very strongly disagree, 6=very strongly agree). An example question from the unmodified Revised Religious Fundamentalism Scale is “God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.” By contrast, the participants who are assigned to the experimental condition will complete a modified version of the Revised Religious Fundamentalism scale. The scale

contains 10 questions which are answered on a six-point scale (1=very strongly disagree, 6=very strongly agree). However, the questions have been reworded so that the questions advocate a more relativist religious point of view and/or that negates the content of the original Revised Religious Fundamentalism Scale. For example, a question from the modified Revised Religious Fundamentalism Scale is “God has given humanity an incomplete guide to happiness and salvation which does not have to be followed in its entirety.” These questions are worded in such a way that they are intentionally vague or inclusive of a variety of religious understandings. If our manipulation is successful, these questions will prompt a shift in religious point of view towards the fundamentalist. The original Revised Religious Fundamentalism Scale has empirical validity that matches or exceeds the validity of the twenty-item Religious Fundamentalism Scale and the alpha coefficients for the revised scale have been approximately .91 (Altemeyer & Hunsberger, 2004). For the current study, the alpha coefficient for the unmodified religious fundamentalism scale was .94 and the alpha coefficient for the modified religious fundamentalism scale developed for the study was .87.

Hope. The Adult Hope Scale was developed and validated by C.R Snyder and colleagues C. R. (Snyder et al., 1991). The scale is composed of twelve questions. These questions are answered on a six-point scale (1 = very strongly disagree, 6 = very strongly agree). An example question from the Adult Hope Scale is “I meet the goals that I set for myself.” The alpha coefficients for the Adult Hope Scale ranged from .74 to .84 during development and validation (Snyder et al., 1991). For the current study, the alpha coefficient was initially .66 though the alpha coefficient became .75 upon the removal of question seven. Question seven is “I worry about my health” and it is reverse scored.

Subsequent data analyses were conducted with question seven and then again without question seven. There was no significant difference if question seven was omitted from statistical analyses. The AHS is comprised of two subscales: an agency subscale and a pathway subscale. The construct of agency is defined as goal-directed determination whereas the construct of pathways is defined as planning of ways to meet goals. The agency subscale includes questions 2, 9, 10, and 12 of the Adult Hope Scale. An example question from the agency subscale is “My past experiences have prepared me well for my future.” For the agency subscale, the alpha coefficient has ranged from .71 to .76 in previous studies (Snyder et al., 1991). For the current study, the alpha coefficient was .73. The pathways subscale includes questions 1, 4, 6, and 8 of the Adult Hope Scale. An example question from the pathways subscale is “I can think of many ways to get the things in life that are important to me.” For the pathways subscale, the alpha coefficient has ranged from .63 to .80 in previous studies (Snyder et al., 1991). For the current study, the alpha coefficient was .77.

Spiritual Well-Being. The spiritual well-being scale was developed by Paloutzian and Ellison (as cited in Genia, 1996). The scale is composed of twenty questions and two subscales with ten questions each. There is a religious well-being subscale, which assesses the degree to which a person has a satisfying relationship with God, and an existential well-being subscale, which assesses overall life satisfaction and meaningfulness without explicit reference to a deity. These questions are answered on a six-point scale (1= very strongly disagree, 6 = very strongly agree). An example question from the religious well-being subscale is “I believe that God is concerned about my problems” while an example question from the existential well-being subscale is “I

believe there is some real purpose for my life.” During their initial development and testing of the scale, Paloutzian & Ellison (as cited in Genia, 1996) found the measure has acceptable reliability and the alpha coefficients were approximately .80 in previously referenced research study and throughout the previous literature. For the current study, the alpha coefficient for the Spiritual Well-Being Scale was .94. For the current study, the alpha coefficient for the religious well-being subscale was .97 and the alpha coefficient for the existential well-being subscale was .78.

Spiritual Anxiety. As the spiritual well-being measure consists of subscales that measure both existential well-being and religious well-being, we decided to use two different measures that each assess an existential domain and a religious domain: the existential anxiety questionnaire and the religious doubt scale. As spiritual well-being has been operationally defined as consisting of both existential and religious components, we propose that our definition of spiritual anxiety must also include both existential and religious components. The Existential Anxiety Questionnaire was devised to empirically assessed Paul Tillich’s theorized construct of existential anxiety (Weems, Costa, Dehon, & Berman, 2004). The scale consists of thirteen questions with questions to measure each concept of that is theorized to pertain to a person’s anxiety. The concepts are death, fate, meaninglessness, emptiness, condemnation, and guilt. There are two questions meant to assess each concept with the exception of fate which has three questions that assess this construct. The questions are answered on a one to six (1= very strongly disagree, 6=very strongly agree) scale. An example question from the EAQ is “I often feel anxious because I am worried that life might have no meaning.” The alpha coefficient for the Existential Anxiety Questionnaire was .76 in previous studies (Weems et al., 2004). The measure

also had good internal validity and had convergent validity with existing measures of similar constructs (Weems et al., 2004). The alpha coefficient for the current study was .76.

The Religious Doubts scale was devised and used by Bob Altemeyer during his work with authoritarianism and fundamentalism (Altemeyer, 1988). The scale was originally developed to assess the doubts a person might have about the validity of traditional religious teachings. The scale consists of ten questions that were originally answered on a five-point scale. For the purposes of this study, the answering scale is on a one to six (1 = very dissimilar to my own doubts, 6 = very similar to my own doubts) basis so as to remove the middle option and prevent participants from giving neutral answers out of desirability. A sample question from this scale includes, “The feeling that religion didn’t really make people better; people who went to church were still unkind, cheated others, et cetera but pretended that they were better.” The reported Cronbach alpha for the scale was .84 and the responses on the scale intercorrelated with a significant correlation of .32 (Altemeyer, 1988). The alpha coefficient for the current study was .90.

Self-Perception. *The Self-Liking, Self-Competency (SLCS) scale* (Tafarodi & Swann as cited in Greenway, Milne, and Clarke, 2003) is a measure of self-loving, self-reported self-esteem, and self-competency, or self-perceived ability to successfully manage life stressors. The scale consists of sixteen questions that are answered on a six-point format (1 = strongly disagree and 6 = strongly agree). A sample question from the self-loving subscale includes, “I never doubt my personal worth.” A sample question from the self-competency subscale includes, “I am highly effective at the things I do.” The

reported Cronbach alphas for the scale were 0.89 for selfliking and 0.92 for self-competency and the reported test-retest reliabilities were 0.80 and 0.78 (Tafarodi & Swann, 1995). Tafarodi and Swann (1995) conducted a study with a series of three sub studies to validate their measure of selfliking and self-competence. The SLCS was negatively correlated with the Beck Depression Inventory, Selfliking was positively correlated with the SelfAppraisement Questionnaire (SAQ). Self-competency was positively correlated with the Parent Temperament Questionnaire (PTQ) (Tafarodi & Swann, 1995). The alpha coefficient for the current study was .90. For the current study, the alpha coefficient for the Self-Liking subscale was .91 and the alpha coefficient for the Self-Competence subscale was .76.

Demographics. The participants also completed a demographics questionnaire. The questionnaire asked for the participant to identify themselves by gender, race, age, religion, and political affiliation.

Procedure

The students who participated in the study were recruited via the SONA system. Students who have signed up for the study via either came to the computer lab in Brannen Hall or the computer lab in the Carroll Building on the day they selected and the time they selected. The participants were run in small groups of approximately five. Before anything else, participants were asked to read and complete an informed consent form that described the purpose, nature, risks, benefits, confidentiality, and ethical parameters of participating in this study. The participants were each asked if they have any questions about the study or the informed consent form so as to minimize risk to the participant.

The participants were reminded that they would not be penalized if they did not participate in the study before the study was administered to them.

Participants were randomly assigned to either the experimental condition or the control condition. Those in both the experimental and the control conditions were asked to complete several measures using the computer. Those in the experimental condition completed a modified Religious Fundamentalism scale that is meant to manipulate their perception of their ideology so that they will view themselves more fundamentalist. An example question from this scale is “No single book of religious teachings contains all the intrinsic, fundamental truths about life.” The question is worded in such a way that the average person will probably disagree with the open-endedness and religious vagueness of the question, thereby inducing a manipulation of ideology towards the fundamentalist. The Religious Fundamentalism scale is the only measure that differs between the experimental and control conditions as it constitutes the experimental manipulation of the study. Participants in both the experimental and the control conditions were then asked to complete the Adult Hope Scale, the Existential Anxiety Questionnaire, the Religious Doubts Scale, and the Self-Liking Self-Competency scale. After completion of the measures of the dependent variables, the participants completed a demographics questionnaire that asked them to identify themselves by gender, age, race, religious identification, and political identification. After completing the measures, the participants were debriefed and thanked for their participation in the study. If a participant choose to discontinue before the end of the study, which did not occur, they would have been debriefed thanked for their participation in the study. A participant’s name or any other identifying information was never be linked to their data on any of the

measures or questionnaires that the participant completed and only the primary investigator and her research mentor had access to the participant's data.

The participants were initially only informed of a vague description of the purposes of the study so as to prevent them from becoming knowledgeable about the research hypotheses that are being tested and the experimental manipulation that occurs in the experimental condition. The vagueness at the beginning of the study was necessary to prevent participants from responding to measures in a different way and also to ensure that the experimental manipulation was successful. We do not believe that providing a vague description of the study before debriefing caused any risk to the participants. The participants were each debriefed as to the explicit purpose and details of the study after completion of the measures or whenever the participant themselves decided to discontinue participation in the study. The experimenter answered any of the participant's questions and ensured that the participant was as mentally, physically, and emotionally fit when they left the computer lab as when they began the study. Participants were also be given contact information so that they can reach the Counseling Center, the primary investigator, the primary investigator's advisor, or the IRB with any questions or difficulties they may have as a result of the study.

Results

Preliminary analyses

The average scores for the unmodified religious fundamentalism measure ranged from 1.60 to 6.00 ($M = 3.61$, $SD = 1.21$). The average scores on the modified religious fundamentalism measure ranged from 2.00 to 6.00 ($M = 4.25$, $SD = 1.02$). The average scores for the Adult Hope Scale ranged from 3.45 to 5.82 ($M = 4.54$, $SD = .49$). The

averages scores for the agency subscale of the Adult Hope Scale ranged from 3.25 to 6.00 ($M = 4.95$, $SD = .58$) while the average scores for the pathways subscale of the Adult Hope Scale ranged from 3.50 to 6.00 ($M = 4.86$, $SD = .65$). The average scores for the Religious Doubts measure ranged from 1.00 to 5.80 ($M = 3.20$, $SD = 1.19$). The average scores for the Existential Anxiety measure ranged from 1.38 to 4.46 ($M = 3.04$, $SD = .67$). The scores for the Spiritual Well-Being scale ranged from 3.40 to 5.90 ($M = 4.80$, $SD = .60$). The average scores for the religious well-being subscale of the Spiritual Well-being Scale ranged from 1.10 to 6.00 ($M = 4.35$, $SD = 1.34$) while the average scores for the existential well-being subscale of the Spiritual Well-being Scale ranged from 3.40 to 5.90 ($M = 4.80$, $SD = .60$). The average scores for the Self-Liking Self-Competence scale ranged from 2.63 to 5.75 ($M = 4.20$, $SD = .71$). The average scores for the self-liking subscale of the SLCS ranged from 2.50 to 6.00 ($M = 4.37$, $SD = .95$) while the average scores for the self-competence subscale of the SLCS ranged from 2.50 to 5.88 ($M = 3.98$, $SD = .62$).

Primary analyses

Our primary analysis testing was accomplished by means of calculating a series of independent samples t-test using the participant's level of independent variable, whether experimental or control, as the grouping variable. We began by conducting an independent samples t-test to verify that our experimental manipulation had been successful and that there was a significant difference between the experimental and control groups in religious fundamentalism. The religious fundamentalism scores obtained from participants in the experimental condition ($M = 4.25$, $SD = 1.02$) were significantly higher than the scores obtained from participants in the control condition (M

= 3.61, $SD = 1.21$), $t(80) = -2.587$, $p < .05$. The effect size for this analysis ($d = .57$) was found to exceed Cohen's conventions for a medium effect size ($d = .50$). For our hypothesis, we predicted that participants in the experimental condition, if the experimental manipulation was successful, would have higher scores on the measures of hope and spiritual well-being. We predicted that participants in the experimental condition would have lower scores on the measures of religious doubts and existential anxiety. As there has not been any previous research as to whether a person's self-concept is in any way related to their levels of religious fundamentalism, we predicted that there would be a non-directional difference in the scores on the measure of selfliking and self-competence between participants in the experimental condition and the control condition. The results we obtained from statistical analysis of our data partially supported our hypotheses. There was not a significant difference between the average, overall hope scores obtained from participants in the experimental condition ($M = 4.49$, $SD = .56$) and participants in the control condition ($M = 4.59$, $SD = .39$), $t(71.93) = .89$, $p > .05$, degrees of freedom adjusted for heterogeneity of variance. Likewise, there was not a significant difference between the average scores between the experimental condition and the control condition for either of the subscales. There was not a significant difference between the average scores on the agency subscale obtained from the experimental group ($M = 4.94$, $SD = .63$) and the average scores obtained from the control group ($M = 4.95$, $SD = .51$), $t(78) = .08$, $p > .05$. There was also not a significant difference between the average scores on the pathways subscale obtained from the experimental group ($M = 4.85$, $SD = .71$) and the average scores obtained from the control group ($M = 4.87$, $SD = .59$), $t(78.63) = .095$, $p > .05$, degrees of freedom adjusted for heterogeneity of variance.

However, there was a significant difference between the spiritual well-being scores of participants in the experimental condition ($M = 4.83, SD = .87$) and the spiritual well-being scores of participants in the control condition ($M = 4.37, SD = .97$) such that spiritual well-being scores from the participants assigned to the experimental condition were significantly higher than the scores from the participants assigned to the control condition, $t(76) = -2.358, p < .05$. The existential well-being subscale scores from the experimental group ($M = 4.84, SD = .64$) were not significantly different from those of the control group ($M = 4.75, SD = .55$), $t(79) = -.61, p > .05$. However, the religious well-being subscale scores from the experimental group ($M = 4.67, SD = 1.11$) were significantly higher than the scores from the control group ($M = 3.98, SD = 1.49$), $t (63.8) = -2.305, p < .05$, degrees of freedom adjusted for heterogeneity of variance. There was not a significant difference between the existential anxiety scores obtained from participants in the experimental condition ($M = 2.99, SD = .69$) and participants in the control condition ($M = 3.10, SD = .64$), $t(73) = .73, p > .05$. There was a significant difference between the religious doubts scores obtained from participants in the experimental condition ($M = 2.84, SD = 1.11$) and participants in the control condition ($M = 3.59, SD = 1.16$) such that participants in the experimental condition scored lower on the measure of religious doubts than those in the control condition, $t(78) = 2.95, p < .05$. There was not a significant difference between the selfliking and self-competence scores obtained from participants in the experimental condition ($M = 4.24, SD = .77$) and participants in the control condition ($M = 4.15, SD = .65$), $t(75) = -.50, p > .05$. The scores from the selfliking subscale were not significantly different between the experimental group ($M = 4.41, SD = .95$) and the control group ($M = 4.32, SD = .96$), t

(78) = -.38, $p > .05$. The scores from the self-competence subscale were also not significantly different between the experimental group ($M = 3.99$, $SD = .72$) and the control group ($M = 3.96$, $SD = .50$), $t(78) = -.292$, $p > .05$.

Exploratory Analyses

Though some of our hypotheses were not supported by our results, exploratory correlational analyses were conducted so as to determine if there were worthwhile relationships between religious fundamentalism and other variables for which there were not significant results obtained from our primary analysis. Our exploratory analysis testing was accomplished by means of calculating a Pearson's r correlation between religious fundamentalism and our dependent variables. Consistent with our primary analyses, religious fundamentalism was significantly positively correlated with spiritual well-being, $r(77) = .77$, $p < .01$, and the religious well-being subscale, $r(77) = .81$, $p > .01$. Religious fundamentalism was also significantly negatively correlated with religious doubts, $r(79) = -.76$, $p > .01$, which is also consistent with the results obtained during our primary analyses. However, exploratory analysis showed that religious fundamentalism was also significantly positively correlated with existential well-being, $r(74) = .37$, $p < .01$, and it was significantly negatively correlated with existential anxiety, $r(74) = -.26$, $p < .05$. These exploratory analyses indicate that there are significant relationships between religious fundamentalism, existential anxiety, and existential well-being and that the direction of these relationships are what would be expected based on previous literature. However, it is unlikely that these relationships are causal, given that we did not obtain significant results for these variables during our primary analyses. Nonetheless, there is a

relationship between religious fundamentalism and existential anxiety and wellbeing that could be investigated in other research studies or by other researchers.

Discussion

As the negative effects of religious fundamentalism have already been assessed in previous research studies, the purpose of this research was to determine whether there were any positive effects that are related to religious fundamentalism. Our first hypothesis was that our experimental condition, those who would primed to be more fundamentalist, would score higher on measures of two different dependent variables: hope and spiritual well-being. Our results partially confirmed our hypothesis in so much as the experimental group scored higher on the measure of spiritual well-being than the control group but there was no significant difference between the hope scores. We also hypothesized that those in the experimental condition would score lower on measures of two different dependent variables: religious doubts and existential anxiety. Once again, our data partially supported our hypothesis. The religious doubts scores obtained from the experimental group were significantly lower than the scores obtained from the control group, but there was no significant difference between the groups for the existential anxiety scores. As there had been no previous research about self-concept and religious fundamentalism, we also hypothesized that there may be a non-directional difference between the groups for the measure of self-liking and self-competence. However, our data did not support this hypothesis. Our results are inconsistent with previous research that has found religious fundamentalism to related to hope (Sethi & Seligman, 1994) and decreased existential anxiety (Friedman & Rholes, 2007; Friedman & Rholes, 2008; Friedman, 2008; Arndt, Greenberg, Pyszczynski, & Solomon, 1997, but consistent with

research that has demonstrated a relationship between fundamentalism, spiritual well-being, (Genia, 1996), and reduced spiritual anxiety (Hunsberger, Alisat, Pancer, & Pratt, 1996). Overall, our findings contribute something new to the existing literature, some of our hypotheses were partially supported, and our results are at least moderately consistent with the limited amount of research that has been published about this subject.

Limitations

The major limitation of this study is sample size and the use of convenience sampling. We had eighty-three participants total, but some participants did not answer their measures completely enough for their data to be included in the analyses of each scale and subscale. Our analyses, therefore, are underpowered due to limitations caused by the small number of participants. A future study with more participants would resolve this limitation. The use of convenience sampling prevented the current study from being able to fully replicate the study from which we derived our experimental methodology. The original study (Motyl et al., 2014) consisted of a pre-test in which only those who self-identified as “moderate/neutral” were asked to participate in the research experiment because it was theorized that it would be easier to manipulate the ideology of those who do not yet have a clear ideological identity. Due to time constraints and the use of students as participants who may or may not have been motivated to complete multiple studies for course credit, the current study did not use only participants with average scores of religious fundamentalism.

Another significant issue with this study is the use of a sample obtained from undergraduate psychology students at Georgia Southern University. These results may not be generalizable to the larger population because of our reliance on convenience

sampling. The psychometrics themselves may be a limitation of the study. The religious fundamentalism scale and the spiritual well-being scale, especially the religious well-being subscale of the SWB, were both created with the understanding that a participant's relationship with a personal, anthropomorphic God is of the utmost importance when measuring his or her religious well-being or his or her style of religiousness. For many participants, these measures may not pose a problem but for participants who are atheist, agnostic, or whose religion is not directly related to God or who conceptualize of God or the divine differently, the wording of these questions may undermine the measure's validity. However, we do not believe that these issues of measurement are any different from those experienced by other researchers who are assessing issues of the psychology of religion given the difficulties posed by studying a phenomenon such as religion using rigorous, empirical methodology.

Practical Implications

Religious fundamentalism is characterized by a return to what are perceived to be the fundamental principles of a religion and an uncompromising adherence to these principles. While a lot is known about the relationship between religious fundamentalism and intolerance and how it is related to conservatism and authoritarianism, there was not a lot known about people's motivations for belonging to fundamentalist movements or having a fundamentalist point of view or the intrapersonal and interpersonal benefits that are conferred by either belonging to fundamentalist movements or by oneself having a fundamentalist point of view. The current study is an attempt to understand what is good about religious fundamentalism, because there is already so much known about what is bad about it. If one has a more comprehensive understanding of religious

fundamentalism and those who are religious fundamentalists, it may be possible, with further research and the application of the results of this research, to decrease the negative intrapersonal and interpersonal consequences that are associated with religious fundamentalism. From the standpoint of clinical and counseling psychology, it is often important for a clinician to understand his or her client. It is also important that a clinician the motivations of his or her client and ways in which his or her maladaptive thinking or behaving is functional and beneficial. Clinicians may have clients who are religious and/or who are higher in religious fundamentalism than others and so our findings can provide these clinicians with information about a specific religious perspective and why it may be important to his or her client.

Theoretical Implications

Contrary to our hypotheses, our primary analyses and exploratory analyses suggest that there is not a significant relationship between religious fundamentalism and positive evaluations of the self (Pargament, 2002; Galen & Miller, 2011; Kay & Eibach, 2013), or at least those self-evaluations that can be measured using the Self-Liking, Self-Competence Scale. However, our analyses implies that there may be a significant causal relationship between religious fundamentalisms, decreased religious doubts, and increased spiritual well-being. Our exploratory analysis also suggests that there may be a significant association between religious fundamentalism, increased existential well-being, and decreased existential anxiety. Our findings can be integrated into existing theory about religious fundamentalism, thereby increasing what is known about this subject. As researchers and academics, it is imperative that we continue to work towards a complete understanding of various constructs and phenomena, even if those constructs

or phenomena have been deemed “wrong” or “bad,” because otherwise we are relying on incomplete psychological theory.

Future Directions

A future study that uses the same methodology as was used in this study would benefit from the inclusion of a screening process in which only participants with average levels of the variable of interest participated in the research experiment. By using participants whose ideology may be more easily changed, at least for the duration of the study, through experimental manipulation the statistical power and the effect size for these subsequent studies could be improved. Studies such as the current study could also be improved by more comprehensive measures of religiousness that include more features of someone’s religious experience than just his or her relationship with a personified God as these problems may cause issues of validity or limit the generalizability of a study’s results to a population with more religious variety. A larger sample size and a sample size with more diversity should also be used for adequate power and generalization of results to the population in any subsequent studies. While the results of this study were not entirely supportive of each research hypothesis, the study was nonetheless beneficial because it established some significant differences between the means of each condition, therefore indicating the potential for a causal relationship between religious fundamentalism, decreased religious doubts, and increased religious well-being. Our results provide an abundance of possibilities for future research studies, either to replicate the findings of this study or to further research significant relationships that could not be experimentally validated using the current methodology. Moreover, as this was an initial research study it also provided us with significant information on how

our methodology might be altered so as to contribute to better research in the area of the psychology of religion, especially religious fundamentalism, in the future.

References

- Altemeyer, B. (1988). Enemies of freedom: Understanding right-wing authoritarianism. San Francisco: Jossey-Bass.
- Altemeyer, B. (2003). Why do religious fundamentalists tend to be prejudiced? *The International Journal for the Psychology of Religion, 13*, 17-28.
- Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion, 2*, 113-133.
- Altemeyer, B., & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *The International Journal for the Psychology of Religion, 14*, 47-54.
- Antoun, R. T. (2008). *Understanding fundamentalism: Christian, Islamic, and Jewish movements*. Lanham: Rowman & Littlefield.
- Friedman, M. (2008). Religious fundamentalism and responses to mortality salience: A quantitative analysis. *The International Journal for the Psychology of Religion, 18*, 216-237.
- Friedman, M., & Rholes, S. W. (2008) Religious fundamentalism and terror management. *The International Journal for the Psychology of Religion, 18*, 36-52.

Galen, L. W., & Miller, T. R. (2011). Perceived deservingness of outcomes as a function of religious fundamentalism and target responsibility. *Journal of Applied Social Psychology, 41*, 2144-2164.

Genia, V. (1996). I, E, quest, and fundamentalism as predictors of psychological and spiritual well-being. *Journal for the Scientific Study of Religion, 35*, 56-64.

Green, M., & Elliott, M. (2009). Religion, health, and psychological well-being. *Journal of Religious Health, 49*, 149-163.

Harding, S. (1991). Representing fundamentalism: The problem of the repugnant cultural other. *Social Research, 58*, 373-393.

Hood, R. W. (2005). *The psychology of religious fundamentalism*. New York: The Guilford Press.

Hood, R. W., Hill, P. C., & Spilka, B. (2009). *The psychology of religion: An empirical approach*. New York: The Guilford Press.

Hunsberger, B., Alisat, S., Pancer, M. S., & Pratt, M. (1996). Religious fundamentalism and religious doubts: content, connections, and complexity of thinking. *The International Journal for the Psychology of Religion, 6*, 201-220.

Iannaccone, L., R. (1994). Why strict churches are strong. *American Journal of Sociology*, 99, 1180-1211.

Motyl, M., Iyer, R., Oishi, S., Trawalter, S., & Nosek, B.A. (2014). How ideological migration geographically segregates groups. *Journal of Experimental Social Psychology*, 51, 1-14.

Pargament, K. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry*, 13, 168-181.

Sethi, S. & Seligman, M. (1993). Optimism and fundamentalism. *Psychological Science*, 4, 256-259.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al.(1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.

Strozier, C. B., Terman, D. M., Jones, J. W., & Boyd, K. (2010). *The fundamentalist mindset: Psychological perspectives on religion, violence, and history*. Oxford: Oxford University Press.

Tafarodi, R. W., & Swann, W. B., Jr. (1995). Selfliking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment, 65*, 322-342.

Weems, C. F., Costa, N. M., Dehon, C., & Berman, S. L. (2004) Paul Tillich's theory of existential anxiety: A preliminary conceptual and empirical examination. *Anxiety, Stress, and Coping, 17*, 383-399.

Table 1

Independent samples t-test that displays differences in group means between the experimental and control condition for the independent variable.

Independent Variable	Experimental Condition		Control Condition	
	M	SD	M	SD
Religious Fundamentalism	4.25**	1.02	3.61**	1.21

Note. Values marked with a (*) were significant at $p < .05$ (2-tailed)

Values marked with a (**) were significant at $p < .01$ (2-tailed)

Table 2

Independent samples t-test that displays differences in group means between the experimental and control condition for each dependent variable.

Dependent Variable	Experimental Condition		Control Condition	
	M	SD	M	SD
Hope	4.49 4.94 4.85 4.83** 4.67** 4.84 2.84** 2.99 4.24 4.41	.56	4.59	.39
Agency Subscale		.63	4.95	.51
Pathways Subscale		.71	4.87	.59
Spiritual Well-being		.87	4.37**	.97
Religious Well-being Subscale		1.11	3.98**	1.49
Existential Well-being Subscale		.64	4.75	.55
Religious Doubts		1.11	3.59**	1.16
Existential Anxiety		.69	3.10	.64
Self-Liking Self-Competence		.77	4.15	.65
Self-Liking Subscale		.95	4.32	.96
Self-Competence Subscale		.72	3.96	.50

Note. Values marked with a (*) were significant at $p < .05$ (2-tailed)

Values marked with a (**) were significant at $p < .01$ (2-tailed)

Table 3

Exploratory Pearson's r correlations among religious fundamentalism, spiritual anxiety, and spiritual well-being

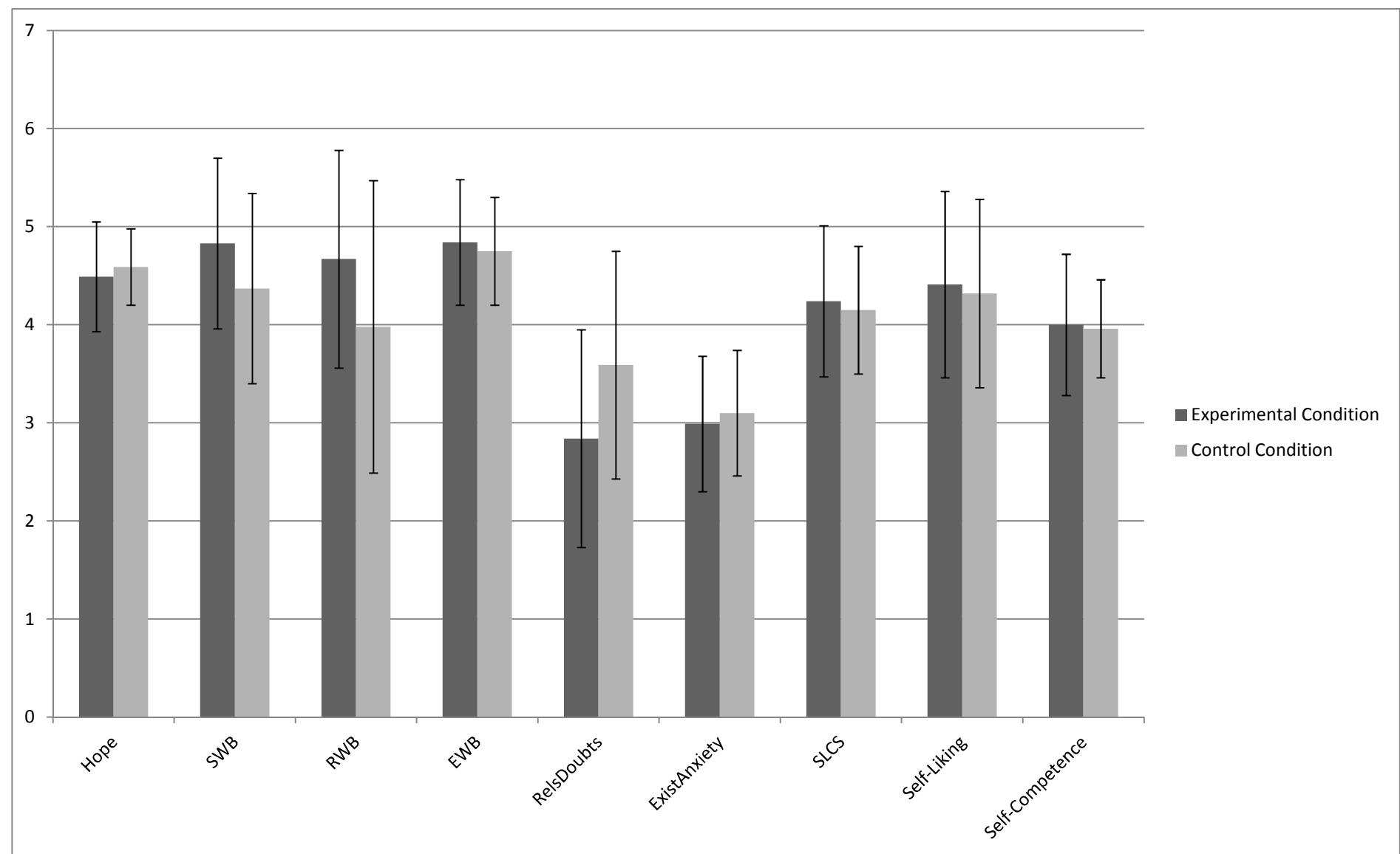
	Religious Fundamentalism	Religious Doubts	Existential Anxiety	Spiritual Wellbeing	Religious Wellbeing Subscale	Existential Wellbeing Subscale
Religious Fundamentalism	--	-.76**	-.26*	.77**	.81**	.37**
Religious Doubts	--	--	.35**	-.81**	-.79**	-.53**
Existential Anxiety	--	--	--	-.43**	-.28*	-.60**
Spiritual Wellbeing	--	--	--	--	.94**	.73**
Religious Wellbeing Subscale	--	--	--	--	--	.47**
Existential Wellbeing Subscale	--	--	--	--	--	--

Note. Correlations marked with a (*) were significant at $p < .05$ (2-tailed)

Correlations marked with a (**) were significant at $p < .01$ (2-tailed)

Graph 1

Bar graph that displays differences in group means between the experimental and control condition for each dependent variable.



Appendix A: The Unmodified Religious Fundamentalism Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

No single book of religious teachings contains all the intrinsic, fundamental truths about life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

It is more important to be a good person than to believe in God and the right religion.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

There is a particular set of religious teachings in this world that are so true, you can't go any "deeper" because they are the basic, bedrock messages that God has given humanity.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

When you get right down to it, there are basically only two kinds of people in the world: the righteous, who will be rewarded by God; and the rest, who will not.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Scriptures may contain general truths, but they should NOT be considered completely, literally true from beginning to end.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

To lead the best, most meaningful life, one must belong to one, fundamentally true religion.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Whenever science and the sacred scripture conflict, science is probably right.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

The fundamentals of God's religion should never be tampered with, or compromised with others' beliefs.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

All of the religions in the world have flaws and wrong teachings. There is no perfectly true, right religion.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Appendix B: The Modified Religious Fundamentalism Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

God has given humanity an incomplete guide to happiness and salvation which does not have to be followed in its entirety.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

No single book of religious teachings contains all the intrinsic, fundamental truths about life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

It is more important to be a good person than to believe in God and the right religion.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

There is no particular set of religious teachings in this world that are true.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

When you get right down to it, everyone in the world will be rewarded by God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Scriptures may contain general truths, but they should NOT be considered completely, literally true from beginning to end.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

To lead the best, most meaningful life, one must belong to whatever religion is preferred over the other religions.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Whenever science and the sacred scripture conflict, science is probably right.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

The fundamentals of God's religion should be modified or compromised with other belief systems.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

All of the religions in the world have flaws and wrong teachings. There is no perfectly true, right religion.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Appendix C: The Adult Hope Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

I can think of many ways to get out of a jam.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I energetically pursue my goals.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel tired most of the time.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

There are lots of ways around any problem.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am easily downed in an argument.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I can think of many ways to get the things in life that are important to me.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I worry about my health.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Even when others get discouraged, I know I can find a way to solve the problem.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

My past experiences have prepared me well for my future.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I've been pretty successful in life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I usually find myself worrying about something.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I meet the goals that I set for myself.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Appendix D: The Religious Doubts Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

I have experienced doubts that religious writings, such as the bible, could really be the word of God, because the writings seemed contradictory, irrational, or wrong.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced doubts about the existence of a benevolent, good God, caused by the suffering or death of someone I knew.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that I had not really developed my own ideas about religion, but instead was just a copy of other people's ideas. (Or, if you were raised in no religion, that Christians, Jews, etcetera in general do not develop their own ideas but instead are copies of other people's ideas.)

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that religion didn't really make people better; people who went to church were still unkind, cheated others, etcetera but pretended that they were better.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that religion exists basically because people are afraid of death and want to believe life does not end then.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that today's religions are based on a collection of superstitions from the past developed to "explain" things primitive people did not understand.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that religion makes people narrow-minded and intolerant and causes conflict between groups who believe different things.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced a feeling that overall religious teachings are contradictory or that they don't make very much sense.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced resentment or rebelliousness when someone (say, a minister, priest, or rabbi) tried to tell me how I should behave or what I should believe. (If you were raised in no religion, how resentful would you have been had this happened?)

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

I have experienced the feeling that religion makes people do stupid things and give up perfectly wholesome pleasures for no good reason.

Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree

Appendix E: The Existential Anxiety Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

I often think about death and this causes me anxiety.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am not anxious about fate because I am resigned to it.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I often feel anxious because I am worried that life might have no meaning.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am not worried about nor think about being guilty.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I often feel anxious because of feelings of guilt.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I often feel anxious because I feel condemned.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I never think about emptiness.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I often think that the things that were once important in life are empty.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I never feel anxious about being condemned.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am not anxious about death because I am prepared for whatever it may bring.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I often think about fate and it causes me to feel anxious.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am not anxious about fate because I am sure things will work out.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I know that life has meaning.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Appendix F: The Spiritual Well-Being Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

I don't find much satisfaction in private prayer with God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I don't know who I am, where I came from, or where I'm going.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I believe that God loves me and cares about me.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel that life is a positive experience.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I believe that God is impersonal and not interested in my daily situations.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel unsettled about my future.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I have a personally meaningful relationship with God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel very fulfilled and satisfied with life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I don't get much personal strength and support from my God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel a sense of well-being about the direction my life is headed in.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I believe that God is concerned about my problems.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I don't enjoy much about life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I don't have a personally satisfying relationship with God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel good about my future.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

My relationship with God helps me not to feel lonely.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel that life is full of conflict and unhappiness.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel most fulfilled when I'm in close communion with God.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Life doesn't have much meaning.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

My relation with God contributes to my sense of well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I believe there is some real purpose for my life.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Appendix G: The Self-Liking Self-Competence Scale

For each of the following statements please indicate the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience.

I tend to devalue myself.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am highly effective at the things I do.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am very comfortable with myself.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am almost always able to accomplish what I try for.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am secure in my sense of self-worth.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

It is sometimes unpleasant for me to think about myself.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I have a negative attitude toward myself.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

At times, I find it difficult to achieve the things that are important to me.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I feel great about who I am.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I sometimes deal poorly with challenges.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I never doubt my personal worth.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I perform very well at many things.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I sometimes fail to fulfill my goals.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I am very talented.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

I do not have enough respect for myself.

Strongly Disagree

Disagree

Somewhat Disagree

Somewhat Agree

Agree

Strongly Agree

I wish I were more skillful in my activities.

Strongly Disagree

Disagree

Somewhat Disagree

Somewhat Agree

Agree

Strongly Agree

Appendix H: The Demographics Questionnaire

The questions below ask you to provide some demographic information about yourself. Please indicate the choice which best describes you.

What is your gender identity?

- Male
- Female
- Transgender Male
- Transgender Female
- Other

What is your age?**What is your race or ethnicity?**

- White/Caucasian
- Black/African-American
- Asian
- Hispanic and/or Latino
- Native American
- Pacific Islander
- Other

What is your religious identification? (If you belong to a religion that is not listed or you would like to indicate a specific denomination or sect of a religion that is listed, please select Other and then specify further in the text box)

- Christian
- Jewish
- Muslim
- Hindu
- Buddhist
- Agnostic
- Atheist
- Wiccan
- Pagan
- Other

What is your political identification?

- Republican
- Democrat
- Libertarian
- Independent
- Other