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May 2019

ASSOCIATIONS BETWEEN INTRINSIC VS. EXTRINSIC RELIGIOSITY AND HOPE

A Senior Honors Thesis

Presented to

The Faculty of the Department

Of Psychology

University of Houston

In Partial Fulfillment

Of the Requirement for the Degree of

Bachelor of Science

By

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ABSTRACT

Extensive research has provided evidence that different levels of religiosity and hope positively correlate with people's life satisfaction, happiness and well-being. Conversely, hopelessness or low levels of hope have been shown to predict maladaptive health behaviors such as anxiety, depression and suicide. The aim of this study is to test whether people's religious orientation (extrinsic vs. intrinsic) is associated with degrees of hope above and beyond personality, demographics and socio-economic traits. In a sample of 417 US adults, a regression analysis was used to test the incremental validity of an individual's religious orientation scale, in predicting levels of hope. We controlled for personality traits using the big five inventory as well for demographics and parental socio-economic status. Contrary to our hypothesis, results evidenced that individuals with higher levels of extrinsic religiosity (vs. intrinsic) religiosity had higher levels of hope, above and beyond demographics and personality traits. This study provided preliminary evidence for the incremental role of religiosity in predicting hope above and beyond personality traits, demographics, and socio-economic status.

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INTRODUCTION

Although research has shown a decline in religious affiliation among Americans (Pew, 2015), a recent study providing the single, largest religious and denominational survey, revealed that 76% of Americans continue to affiliate with a form of religion, faith and/or practice (PRRI, 2017). Additionally, the Pew Research Center predicts that total world religious affiliations will continue to increase alongside natural, global population growth, with many countries surpassing current affiliation to population ratios within the next 50 years (Pew, 2015).

With so many individuals identifying with a religious practice, it comes as no surprise that distinguished professionals within psychological and religious communities have advanced scientific research to further understand and disentangle religion, personality, hope, and their interactions with each other. A plethora of scales have been administered throughout this time period, and they continue to be administered in an endeavor to scientifically measure the relationship between religiosity and its adherents (Hills & Hood, 1999; Koenig, 2012 for a comprehensive review).

Past literature has ventured to create a coherent argument by discussing religion and well-being through posing inquiries regarding issues of conceptualization and empirical measurement. Religion and well-being both represent broad categories of research, each with distinct measurements which profoundly influence their respective results. Well-being is most commonly measured by examining self-reports of positive attributes (i.e., happiness and satisfaction with life) or the absence of negative attributes (i.e., depressed affect or psychiatric diagnosis). Of the various approaches for measuring religiosity, the most common scales in the current literature include: religious attendance, private religious

practice, and intrinsic/extrinsic religious motivation (Hall, Meador, & Koenig, 2008, Hills & Hood, 1999).

The associations that religion has with its followers are extremely complex and multifaceted; therefore, one must look at a religion's entire nomological network when measuring it. Some items in the nomological network include demographics, behaviors and experiences, as well as cultural and social customs. Thus, in determining the relationship between religious orientation and levels of hope, it was necessary to control for individual personality traits as well as demographics and socio-economic status.

In light of this research, the following questions were proposed: is religion associated with well-being? How exactly should religiosity and personality be measured, and how do these variables correlate with hope? The aim of the current study is to test intrinsic vs extrinsic levels of religiosity and their unique associations with hope, which will be measured above and beyond individual's personality traits, demographics, and socio-economic status.

Religion and Well-being

The majority of the literature has revealed that engagement in a religious activity is positively associated with well-being. For example, there have been studies measuring religion's associations with life satisfaction, self-esteem and self-reported perceptions of social connectedness (Paloma, 1990; Keonig, 2001; Hill & Pargament, 2008; Diener, 2011; Aghababaei, 2015).

While research suggests an association between religion and the more positive life aspects, the link between religion and negative outcomes has also been investigated by a comprehensive, literature review of religion and mental/physical health administered from

1872-2010 (Koenig, 2012). The results of this meta-analysis showed religiosity was positively associated with positive attributes (i.e., increased levels of hope, optimism, gratefulness) and negatively associated with depression, and anxiety (Koenig, 2012). Studies have also examined college students' academic performance, determining that students who were more religious outperformed their less religious counterparts (Koenig, 2012), and additional research showing a statistically significant inverse relationship between religiosity and (delinquency & crime) (Regnerus, 2003; Pearce & Haynie, 2004).

In a study of 1,500 Texas adults, 12 health behaviors were measured in a series of regressions to determine their associations with religious attendance. The results indicated that those who consistently attended church on a weekly basis displayed a wide range of positive healthy behaviors (e.g., preventive care use, vitamin use, infrequent bar attendance, seatbelt use, walking, strenuous exercise, reduced smoking and moderate drinking; Hill, 2006).

Although significant association were found, it is important to note that certain personality dimensions were not controlled for in this study. Specifically, previous research has shown a strong association between conscientiousness and similar healthy habits (Piedmont, 1999; Khoynezhad, 2012; Smith, 2007) Therefore, future studies may consider controlling for certain theoretically relevant personality traits as they may confound related outcome variables.

Scientist have also tested the different neurobiological underpinnings in individuals that self-reported having a high belief in the importance of their religion and found them to be associated with thicker cortices in the bilateral, parietal and occipital regions (Liu, 2017;

Miller, 2014). These biomarkers are associated with an increased risk in depression for individuals with thinner cortices in the aforementioned regions (Peterson, 2009).

These variables reveal significant associations between religion and well-being; however, a lack of causal directionality allows for it to be equally possible that people with increased levels of well-being tend to be more participatory in religion, as the increased participation in religion leads to increased levels of well-being. This selection effect has concerned critics, and empirical evidence using longitudinal studies has revealed women who experienced early onset depression were more likely to withdraw from religious participation later in life when compared to their non-depressed peers (Maselko, 2012). This contributes to the idea that selecting out of religious involvement could be a notable contributor to previously observed inverse relationships between attendance and psychopathology.

A 20-year longitudinal study tested the prevalence of depression in 114 offspring of depressed and non-depressed parents. The prevalence of depression was doubled in the high-risk group (at least one parent with depression). Individuals from both risk groups (low and high) who self-reported religion to be highly important had about one-fourth of the risk of developing depression within 10 years; moreover, individuals with a high risk of depression who reported that religion was highly important had about one-tenth the risk of developing depression compared to participants who felt religion was not as important to them (Miller, 2012).

Although most research tends to point out the associations between positive attributes and religion. Studies have also shown religion to associate with negative attributes— such as negative religious coping (Pargament, 2000), which is viewed as a

struggle with one's self and a higher power, and believing illnesses are a form of punishment for sin or wrongdoings (Ellison, 1994) which produce feelings of guilt or shame and a real sense of being punished by God (Ellison & Levin, 1998).

Religion has the potential to influence cognitions, manifesting in behaviors that impact physical and psychological elements of well-being (e.g. church attendance) (Hill, 2006). By attempting to measure an individual's belief systems in addition to religious behaviors researchers can gain a better understanding of how religion is related to physical and psychological variables. Allport attempts to find a deeper understanding of religiosity by creating the religious orientation scale (Allport & Ross, 1967) and introducing the intrinsic and extrinsic religious orientations, both of which have preconceived associations regarding their effects on an individual's well-being.

Intrinsic and Extrinsic Orientation

In *The Individual and his Religion*, Allport (1950) argued that while any two individuals can have similar religious involvement (e.g., church attendance, bible reading), they can be driven by very distinct, underlying motives. To quantify these distinctions, Allport also argued that a measurement of maturity for religious sentiment was needed, which ultimately became what is now known as the religious orientation scale (Allport & Ross, 1967).

After the religious orientation scale was published (Allport & Ross, 1967) speculations and reviews of intrinsic and extrinsic religious orientations were analyzed for their conceptualization, and measurement (Hood, 1970; Donahue, 1985). One critique raised, was a concern about the denomination-specific aspect of the intrinsic scale, as it

embodied a Southern Baptist theology (Feagin, 1964; Strickland & Weddell, 1972; Donahue, 1985).

The original version of the religious orientation scale by Allport and Ross was revised by Gorsuch and Venable to form an “Age Universal” scale to be used on children, young adolescents, and people with variety of educational levels (Gorsuch & Venable, 1983). Original research perpetuated the popular belief that individuals could either endorse an intrinsic or extrinsic religious orientation, and recent literature posits that these orientations are not mutually exclusive and independent of one another, implying that an individual could possess both or neither intrinsic and extrinsic sentiments (Donahue, 1985). Gorsuch and McPherson (1989) then revised their own scale, introducing the 14-item (I/E-R) to encompass the intrinsic and extrinsic measures as separate and distinctive structures for analysis with reliabilities equal to or better than the original measures. The most recent revision of the religious orientation scale was introduced by Kirkpatrick (1989), he concluded that the extrinsic scale subdivides into “Ep” for extrinsic items that are personally oriented towards oneself and “Es” for extrinsic items that are socially oriented.

Intrinsic Religiosity

According to Allport, a person with an intrinsic religious orientation, “finds their master motive in religion” (1967). The individual endeavors to internalize their faith and follows it fully; it is a sense that they *live* their religion rather than *use* their religion (Allport & Ross, 1967). These individuals go to church to live by their creed rather than try to attain some other reward; consequentially, religion for this group is an end in and of itself.

Research suggests individuals with an intrinsic religious orientation tend to report having higher levels of life satisfaction, happiness, responsibility and meaning in life when

compared to individuals who have an extrinsic religious orientation (Poloma, 1990; Diener, 2011; Kahoe, 1974; Wnuk & Marcinkowski, 2012). Individuals with an intrinsic religious orientation tend to have better diet and exercise habits (Hart, 2007), and research has even found possible associations between religious orientation and cardiovascular health, in which individuals of intrinsic religious orientation have lower blood pressure reactivity to stressors than those of the extrinsic orientation (Master et al., 2005).

Studies indicate as adults approach the end of their lives, it is not uncommon to find lower levels of well-being; however, studies show religious individuals with an intrinsic orientation to have higher levels of subjective well-being and view the process of aging more favorably, as well as reporting better life attitudes even when approaching the ends of their lives (Ardelt, 2007). In addition, individuals with an intrinsic religious orientation self-report perceiving lower amounts of perceived stress (Pollard & Bates, 2004), fewer depressive symptoms (Smith et al., 2003), and having lower levels of anxiety (Baker & Gorsuch, 1982; Masters & Bergin, 1992).

Extrinsic Religiosity

Contrary to Allport's conclusions about the intrinsic orientation, individuals with an extrinsic religious orientation have a disposition towards using religion for their own ends, as a tool manipulated "to provide security and solace, sociability and distraction, status and self-justification" (Allport & Ross, 1967, p.434). Individuals with extrinsic religiosity are motivated by, "social purposes such as meeting the right people, gaining social standing and being accepted in the community" (Hoge, 1972, p.375).

A recent study shows that people endorsing an extrinsic religious orientation tend to have lower levels of well-being because they perceive the relationships in their lives as

being less supportive than they are in actuality, thus turning to religion to fill this “social void” (Doane, Elliott, & Dyrenforth, 2013). In a sample of US and Canadian students, researchers found extrinsic religiosity was associated with higher suicidality and delinquent behaviors such as substance abuse (Ji et. al., 2011). Additional studies have found extrinsic religiosity to positively correlate with depression (Masters & Bergin, 1992; Maltby & Day, 2000), higher levels of anxiety (Kuyel, Cusure & Ellison, 2012), emotional instability (Malty & Day, 2003) and ethnic prejudice (Allport and Ross, 1967).

Psychological & physical health, as well as positive outlooks towards oneself and one’s external reality, have been found to be positively correlated with the intrinsic religious orientation, and negatively correlated with the extrinsic orientation (Batson, 1993; Argyle & Hills, 2009; Hood et al, 1996). Research shows measuring religious orientation has advanced our understanding of psychological well-being; however, we should question whether the literature has evolved into a false dichotomy of labeling religious orientations as either strictly positive or negative (Hill & Pargament, 2008; Doane, Elliott, & Dyrenforth, 2013). The religious orientation scale has raised questions in the valuations of a good intrinsic orientation compared to the bad extrinsic orientation, and has been criticized for its acceptance of a particular set of values which can influence the interpretation of the intrinsic and extrinsic orientations it produces (Kirkpatrick and Hood 1990; Zinnbauer et al. 1999).

Hope

Recent studies have indicated that hope could potentially mediate the link between religion and well-being, as hope has been presented as an integral part of religiosity and a valuable and important factor in life (Scioli, 2011; Snyder, 2002; Wnuk, 2012); therefore,

the present study endeavors to measure an individual's level of hope to understand the associations it has with religious orientation and well-being.

Snyder (1991) defined hope as the perceived capability to derive cognitions or pathways, which includes finding the motivation in oneself via *agency thinking* to use aforementioned *pathways* to result in the completion of one's goal. This concept is classified into two domains: (a) agency and (b) pathway thinking. Agency thinking refers to self-referential thoughts that begin and maintain the use of pathway thinking throughout all steps of achieving a goal. Pathway thinking is an individual's perception that, if necessary, they can create and identify new plans to reach desired goals. (Snyder, 2002; Snyder, 1991). Snyder proposed a characteristic of hope is found in goal-oriented cognitions, particularly those involving the belief that one can pursue goals despite challenges (1991). This scale is specifically focused on goal related cognitions, in contrast to other definitions of hope— such as in the nursing literature which incorporates a focus on expectancy outcomes, coping behaviors, and overall adjustment (Stoner, 1997).

Individuals associated with increased levels of hope have a success-oriented focus which facilitates the positive framing of goals and thus increases perceptions that their goals can be achieved (Snyder, 1991). These individuals maintained their motivation or sense of agency even when they encountered obstacles; furthermore, they were more decisive in the pathways they chose, whereas individuals with low levels of hope develop pathways that are more prone to interference (Snyder, 2002). As a result of well-articulated pathways and goal attainment, individuals with higher levels of hope experience a reinforcing, positive affect that feeds back into agency thinking which resulted in continued goal-attainment behavior.

The conceptualization of hope has been evaluated in multiple samples with results revealing individual's with high levels of hope are directly related to positive psychological outcomes, including higher levels of happiness, athletic ability, physical health, better performances in academic achievement, and higher success rates in psychotherapy (Snyder, 2002). Hopelessness, or low levels of hope, was found to contribute to unhealthy states of well-being and emerged as a predictor of suicide, above and beyond prior attempts and depression in a 10-year longitudinal study, measuring a cohort with psychosis (Klonsky et al., 2012).

In summary, hope is a cognitive set of frameworks that an individual evaluates relative to their valued goals which affects their ability to follow through for eventual goal attainment. High levels of hope are linked with adaptive appraisals in one's competency for attaining goals despite challenges. Lastly, hope has demonstrated a number of positive associations in the areas of health, academics and well-being as well as being a predictor for suicidality.

Personality and Religion

Psychology of personality has had a longstanding relationship with religion. Personality is defined as an individual's characteristic patterns of cognitions and behaviors combined with the psychological mechanisms behind those patterns (Funder, 2016). Kirkpatrick (1999) noted that personality psychology is an integral part of religion, in that an interest with the transcendent is inherent to the human experience. Allport (1950) encapsulated the importance of religion by regarding subjective religious sentiments as "facets that supplement the discovery of meaning in one's experiences and are essential in creating one's personal identity." Since hope and religiosity are moderately correlated with

each other, which have been examined as potential predictors of health and well-being (Stroebe & Stroebe, 1995; Eysenck, 1998; Löckenhoff, 2009), research that attempts to find associations between the two would be remiss if it failed to take into account potential mediators such as personality traits (Piedmont, 1999).

Studies have shown positive correlations between religiosity and agreeableness, conscientiousness, and extraversion, as well as negative correlations between religiosity and neuroticism and openness (Saroglou, 2002; Löckenhoff, 2009). In a study consisting of 1,210 clinical (e.g. addiction patients) and non-clinical (general population) participants, religion and well-being were positively related with extraversion and conscientiousness, and negatively correlated with neuroticism (Unterrainer et al., 2010).

The aforementioned studies make important contributions to our understanding of the associations between religion and personality traits. Individual's demographics and socio-economic status have also proven to be associated with religion and personality (Diener, 2011); therefore, when using religion to predict well-being, it is essential to control for both.

Social Demographics and Religion

Females are more likely than males to attend religious activities, as well as self-report religion as being “very important in their lives”, even when accounting for religion's male, archetypal, influence, and religious gender inequalities (Pew, 2007). Answering the religious gender gap question continues to be a struggle and most researchers attempt to tackle the argument with the premise that includes the common nature vs nurture theory (Beit-Hallahmi, 2014). The nature argument attributes gender differences in religious affiliation to physical or physiological causes (i.e., hormones, genes, or biological

predisposition) (Stark, 2002). The nurture category attempts to explain the religious gender gap by factors such as socialization into traditional gender roles (Brasher, 1998), rates of females in the workforce (Hasting & Lindsay, 2013), and national economic structures (Voas, 2013).

In a group of 358 college students, Thompson (1991) demonstrated that a significant association between religiosity and women disappeared when controlling for individuals' differences in masculinity and femininity. This provided support for the idea that being religious could be more associated with functions of gender orientation (masculine/feminine) than biological sex. Progress has revealed that the religious gender gap could stem from several factors, of which the most influential is still up for debate.

As the American population becomes significantly older (Colby and Ortman, 2014; Uekner, 2007) one would predict to see a similar increase in religious affiliation; however, recent research has found that younger, American adults are identifying and affiliating themselves to a lesser extent with and religious practices. Previous research suggests that these younger adults will become more religious with age (Dillon, 2007), evidenced by an increase in prayer, attendance of religious services, and self-reported evaluation of the importance of religion as a part of their lives (Stolzengerb, 1995).

Different socioeconomic backgrounds are associated with varying levels of religiosity; for instance, people in wealthier nations tend to be abandoning organized religion (Pew, 2007) and these declines in religiosity are associated with economic growth (Barro & Mitchell, 2004). Countries where the majority of the population are presented with difficult life conditions, such as lacking basic needs, education, and safety, are more likely to be religious (Diener, 2011) consequently, the impact of religion is increased upon the

well-being of these populations compared to those of developed nations. Studies have shown that the associations between participation in organized religion and life satisfaction are positive when government has low regulation over quality of life and become negative when government regulation increases significantly (Diener, 2011). Associations between religiosity and well-being are dependent upon the living conditions of the sample populations within a society. These in turn can increase feelings of respect, social support and meaning in life, which are all associated with increased levels of well-being (Diener, 2011).

Present study

The present study aimed to examine whether people's religious orientation (Extrinsic vs. Intrinsic) was associated with degrees of hope above and beyond demographics and personality traits. We hypothesized that religiosity would show incremental validity in the prediction of levels of hope, above and beyond personality traits and demographics. Additionally, we predicted that Intrinsic (vs. Extrinsic) religious orientation would show a stronger positive association with hope after including the controls.

METHOD

Participants and Procedures

Data ($N=417$) were gathered from individuals living across the US who work for Amazon's MTurk service (a platform used to recruit study participants). Each participant completed a series of questionnaires, averaging 40 minutes in length, for which they were compensated \$2. A cross-sectional analysis using a priori data exclusionary criteria (See details in the data analysis section) resulted in a final size of 350 participants. The mean age

was 37.5 ($SD = 11.55$) with 54% of the participants identifying as male and 76% identifying as White and Non-Latino.

Measures:

Religious Orientation Scale. The religious orientation scale (ROS) (Allport & Ross, 1967) contains 21 questions that measure responses using a 5-point likert system ranging from 1 = (strongly disagree) to 5 = (strongly agree). The ROS is comprised of two subscales: 9 questions measuring intrinsic levels of religiosity “i.e., my religious beliefs are really what lie behind my whole approach to life,” and remaining 12 question measuring extrinsic levels of religiosity “i.e., Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.” The intrinsic vs extrinsic subscales can be easily conceptualized by using Allport and Ross’s simple distinction, “living” versus “using” one’s religion. To obtain the two measures of religiosity, we averaged the relevant items for each of the two subscales.

Hope. The Adult Trait Hope Scale (Snyder et al., 1991) or “The Future/Goal Scale” is a 12-item measure of respondents’ levels of hope. This scale is comprised of two subscales: 4 questions comprising of Agency (i.e., goal directed will-power) and 4 questions comprising of pathways (i.e., planning and following through to achieve one’s goals.) The remaining 4 questions are fillers. Each question answered is accessed using an 8-point likert-scale ranging from “1 = (Definitely False)” to “8 = (Definitely True).” To obtain two measures of hope, we averaged the scores on the relevant items for each of the two subscales. We also obtained an overall measure of hope by averaging all 8 relevant items.

Personality. Differences in individual personality traits were measured utilizing the BFI-44 (John et al., 1991). This measure assesses the Big Five dimensions (Openness,

Conscientiousness, Extraversion, Agreeableness, and Neuroticism). Here, participants selected answers that best corresponded to how much they would agree or disagree with particular statements, i.e., “ I see myself as someone who remains calm in tense situation” and rating their answers on a 5-point Likert scale ranging from 1 = (strongly disagree) to 5 = (Strongly agree). The five measures of personality traits will be used as covariates in the model.

Demographics. We asked participants to self-report age, gender, race, and parental socioeconomic background information (i.e., highest parental education level and resources available under the household in which they grew up in). Each parent’s educational attainment was measured on a 7-point scale: 1 = (did not complete high school), 2 = (High school diploma or equivalent), 3= (Career/technical training), 4= (Some college, but no degree) , 5= (2-year college degree; associate’s), 6= (4-year college degree; bachelor’s), or 7 = (Some education or degree above a 4 - year college degree). Selections 3 (Career/technical training), 4 (Some college, but no degree), and 5 (career/technical training; some college, but no degree; and 2-year college degree, respectively) were integrated into one item creating a final measure of education scored on a 5-point scale. This provided a more balanced, normal distribution prior to any analysis. Participants were also asked if the following list of resources were available in their household growing up: magazines, newspaper, computer room, a dictionary, room to study, a high number of books, dishwasher. We computed a measure of resources by summing the amount of resources reported. To form an index of parental SES, we first standardized each of the three individual measures described above, and then we averaged them. This measure was used as a covariate in the model.

Data Analysis

The following participant exclusionary criteria were set in place prior to data analysis: completion of study was insufficient (participants completed 40% or less of the survey, $N=49$), failed attention checks (participant failed to correctly answer at least 60% of attention check questions $N= 55$) and study duration (participants who completed the survey < 15 or > 90 minutes, $N=52$).

RESULTS

Table 1 includes correlations between all the variables in the study. When looking at this table, one can see that the raw association between intrinsic religiosity and hope was $r = .10$ (not statistically significant), and that between extrinsic religiosity and hope was $r = .16$, $p < .001$. To examine the above associations while controlling for potential confounds, linear regression was carried out to investigate the relationship between religious orientation and levels of hope. The results are depicted in Table 2, which shows that the link between extrinsic religiosity and hope was found to be significant when controlling for demographic and personality factors ($\beta = .13$, $p < .05$), such that higher levels of extrinsic religiosity were correlated with higher levels of hope. The regression results suggested that intrinsic religious orientation, although positive, did not have a significant relationship with levels of hope ($\beta = .01$, $p > .05$), when controlling for demographic and personality factors. Results also indicated the personality trait of conscientiousness had a strong positive association with hope ($\beta = .27$, $p < .05$); conversely, neuroticism had a negative association with hope ($\beta = -.36$, $p < .05$). People of color (POC) also proved to be negatively associated with hope. ($\beta = -.10$, $p < .05$). Contrary to the hypothesis, results evidenced that individuals with higher

levels of extrinsic religiosity (vs. intrinsic) religiosity had higher levels of hope, above and beyond demographics and personality traits.

DISCUSSION

This study yields an interesting association between religious orientation and one's level of hope, a variable which has been a predictor of well-being (Snyder, et al, 1991; Snyder, 2002). Extrinsic as opposed to intrinsic orientation evidenced positive, significant associations with individual's level of hope above and beyond factors of personality and demographics, contrary to our predicted hypothesis. This particular study is limited by its reliance on cross-sectional and correlational data; thus, the association between religion and those who practice it is far from being completely established, and as with all nonconfirmatory research interpretations of the findings should be done with caution.

The majority of the literature regarding religious orientation has (prescribed) the same negative attributes to the extrinsic religious orientation, which prevents conclusions drawn about these results from being anything more than speculative. Increased levels of hope for individuals with an extrinsic religious orientation could be explained by Snyder's interpretation of the hope scale. This interpretation suggests that hope is focused towards a goal-oriented behavior, and the growing body of research demonstrates that individuals with extrinsic orientation seek religious for social support. Individuals who choose to utilize religion in an endeavor to feel like a part of a community may be associated with an increase in well-being over time due to the social purposes for their engagement in religion (Holt, 2013); furthermore, this engagement can be a tool these individuals use to increase their level of hope, complete their goals, and their well-being.

The investigation into the associations between religious orientation and individuals' well-being will continue to provide a challenge for future research, especially with ongoing changes in aspects that are influential to one's religion. Individuals have varying personal reasons for affiliating with any given religion; additionally, they can each have unique motivations for their religious involvement, such as looking for spiritual growth, seeking solace from personal issues, or finding new opportunities to build supportive social relationships. Religious intention must be accepted as a variable phenomenon, as we cannot say that there is a singular, basic form.

Future studies should continue to move beyond analysis of church attendance to avoid the issue of selection bias (i.e., the people that can actually attend church are probably healthier than those who may want to attend but cannot physically do so). For example, it is now common for church services to be televised and even broadcasted live via the internet. As such, the number of times a person seeks out recorded church services or devotes time for religious readings or reflection might be better indicators of religiosity than simply church attendance. It is also possible that some individuals would falsely respond to lifestyle questions in order to protect their religious identities and prevent themselves from experiencing cognitive dissonance.

An absence in Allport's conceptual clarity when defining intrinsic and extrinsic orientation tends to provide the basis for argument in a continued controversy regarding the measurement of religiosity (Kirkpatrick & Hood, 1991). A main concern with the religious orientation scale is delineating unequivocally the aspect of religion being assessed. Unlike measurements of religious beliefs, practices, and attitudes towards religion, all of which can distinguish religious from non-religious individuals, the religious orientation scale has

methodological challenges with quantifying the different ways in which religious individuals express their religiosity (Francis, 2007).

The current study helps shed light on the current negative sentiments towards extrinsic religious orientation. This study invites the reader to reconsider any preconceived notions concerning extrinsic orientation, because the literature describes intrinsic orientation as a positive and mature state of mind, and extrinsic orientation as a negative and immature sentiment held by those lacking perceived social support. People endorsing the extrinsic orientation are likely in search of social relationships through their religion to compensate for their perception of having less social support in their relationships outside of religion, a key component that might explain why extrinsic individuals express negative associations with well-being, (Doane, Elliott, & Dyrenforth, 2013). Since social support and social integration are distinct constructs (Cohen, 2004) further investigation must be conducted to determine if individuals with an extrinsic orientation perceive themselves to have lower levels of social support than they do in actuality, and if they can overcome this social deficit by participating in religious activities.

CONCLUSION

To recapitulate, the current findings assessed the incremental validity that religious orientation had on levels of hope. The findings suggested that individuals with an extrinsic religious orientation showed significant, positive associations with levels of hope. Conscientiousness and openness proved to have significant positive association with hope, while neuroticism proved a negative relation.

In addition, these results suggest that researchers, and society at large, should be more open in their perceptions of the extrinsic religious orientation, and not view it as a

strictly negative disposition. This study further advocates for future research to measure more variables in addition to the religious orientation scale when considering levels of religiosity and determining their relation to an individual's psychological well-being, as well as determining future research should endeavor to continue the academic disentanglement of the links between religious orientation, personality, and hope.

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Table 1

Intercorrelations Between Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Female											
2. POC	-.04										
3. Age	.11*	-.21**									
4. Parental SES	-.06	-.11*	-.19**								
5. Intrinsic REL	.08	.11*	.12*	-.14**							
6. Extrinsic REL	-.02	.15**	-.04	-.15**	.68**						
7. Extraversion	-.14*	-.05	.03	.08	.16**	.23**					
8. Agreeableness	.05	-.08	.17**	.08	.14*	.10	.34**				
9. Conscientiousness	.10	.01	.17**	.01	.07	.01	.31**	.46**			
10. Neuroticism	.27**	-.05	-.12*	-.06	-.02	-.07	-.53**	-.48**	-.52**		
11. Openness	.02	-.05	-.04	.16**	-.16**	-.10	.22**	.21**	.23**	-.16**	
12. Hope	-.10	-.06	.02	.07	.10	.16**	.47**	.45**	.54**	-.61**	.32**

Note. * $p < .05$; ** $p < .01$; Race Coded (0= White/Caucasian, 1= POC)

Table 2**Regression Analysis Results**

Predictors	β	95 % CI for β
Intrinsic Rel.	.01	[-0.10, 0.12]
Extrinsic Re.	.13*	[0.02, 0.23]
Female	-.01	[-0.10, 0.07]
POC	-.10*	[-0.18, -0.02]
Age	-.10*	[-0.18, -0.02]
Parental SES	.00	[0.00, 0.00]
Extraversion	-.10*	[0.01, 0.19]
Agreeableness	.08	[-0.01, 0.17]
Conscientiousness	.27**	[0.17, 0.36]
Neuroticism	-.36**	[-0.47, -0.25]
Openness	.17**	[0.09, 0.25]

Note. * $p < .05$; ** $p < .01$; Race Coded (0= White/Caucasian, 1= POC)

Appendix A

The following is a list of the instruments that were used in each collection of data:

- Religious Orientation Scale (Allport & Ross, 1967)
- The Adult Hope Scale (Snyder et al., 1991)
- Big Five Inventory (John et al., 1991)
- Demographics & Parental SES

Appendix B

Religious Orientation Scale (Allport & Ross, 1967)

Please indicate the extent to which you agree or disagree with each item below by using the following rating scale: *

1	2	3	4	5
strongly disagree	disagree	neutral	agree	strongly agree

*Extrinsic (sub)scale***

1. Although I believe in my religion, I feel there are many more important things in my life.
2. It doesn't matter so much what I believe so long as I lead a moral life.
3. The primary purpose of prayer is to gain relief and protection.
4. The church is most important as a place to formulate good social relationships.
5. What religion offers me most is comfort when sorrows and misfortune strike.
6. I pray chiefly because I have been taught to pray.
7. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.
8. A primary reason for my interest in religion is that my church is a congenial social activity.
9. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being.
10. One reason for my being a church member is that such membership helps to establish a person in the community.
11. The purpose of prayer is to secure a happy and peaceful life.
12. Religion helps to keep my life balanced and steady in exactly the same way as my citizenship, friendship, and other memberships do. ***

*Intrinsic (sub)scale ***

1. It is important for me to spend periods of time in private religious thought and meditation.
2. If not prevented by unavoidable circumstances, I attend church.
3. I try hard to carry my religion over into all my other dealings in life.
4. The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services.

5. Quite often I have been keenly aware of the presence of God or the Divine Being.
6. I read literature about my faith (or church).
7. If I were to join a church group, I would prefer to join a Bible study group rather than a social fellowship.
8. My religious beliefs are really what lie behind my whole approach to life.
9. Religion is especially important because it answers many questions about the meaning of life.

* Many researchers have used a 9-point response format.

** The ordering of all 20 items should be scrambled

*** Indicates an additional Extrinsic item used by Feagin (1964) but not by Allport and Allport & Ross (1967).

Appendix C

Adult Hope Scale (AHS) (Snyder, 1991)

Directions: Read each item carefully. Using the scale below, please select the number that best describes YOU and put that number in the blank provided.

- 1.= Definitely False
- 2.= Mostly False
- 3.= Somewhat False
- 4.= Slightly False
- 5.= Slightly True
- 6.= Somewhat True
- 7.= Mostly True
- 8.= Definitely True

- ____ 1. I can think of many ways to get out of a jam.
- ____ 2. I energetically pursue my goals.
- ____ 3. I feel tired most of the time.
- ____ 4. There are lots of ways around any problem.
- ____ 5. I am easily downed in an argument.
- ____ 6. I can think of many ways to get the things in life that are important to me.
- ____ 7. I worry about my health.
- ____ 8. Even when others get discouraged, I know I can find a way to solve the problem.
- ____ 9. My past experiences have prepared me well for my future.
- ____ 10. I've been pretty successful in life.
- ____ 11. I usually find myself worrying about something.
- ____ 12. I meet the goals that I set for myself.

Scoring: Researchers can either examine results at the subscale level or combine the two subscales to create a total hope score.

Items 2, 9, 10, and 12 make up the agency subscale.

Items 1, 4, 6, and 8 make up the pathway subscale.

Appendix D

Big Five Inventory BFI-44, (John et al., 1991)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please select the answer that corresponds to how much you agree or disagree with each statement using the following scale:

1	2	3	4	5
strongly disagree	disagree	neutral	agree	strongly agree

I see Myself as Someone Who...

1. Is talkative.
2. Tends to find faults with others.
3. Does a thorough job.
4. Is depressed, blue.
5. Is original, comes up with new ideas.
6. Is reserved.
7. Is helpful and unselfish with others.
8. Can be somewhat careless.
9. Is relaxed, handles stress well.
10. Is curious about many different things.
11. Is full of energy.
12. Start quarrels with others.
13. Is a reliable worker.
14. Can be tense.
15. Is ingenious, a deep thinker.
16. Generates a lot of enthusiasm.
17. Has forgiving nature.
18. Tends to be disorganized.
19. Worries a lot.
20. Has an active imagination.
21. Tends to be quiet.
22. Is generally trusting.
23. Tends to be lazy.
24. Is emotionally stable, not easily upset.
25. Is inventive.
26. Has assertive personality.
27. Can be cold and aloof.
28. Perseveres until the task is finished.
29. Can be moody.
30. Values artistic, aesthetic experiences.
31. Is sometimes shy, inhibited.
32. Is considerate and kind to almost everyone.

- 33. Does things efficiently.
- 34. Remains calm in tense situations.
- 35. Prefers work that is routine.
- 36. Is outgoing, sociable.
- 37. Is sometimes rude to others.
- 38. Makes plans and follows through with them.
- 39. Gets nervous easily.
- 40. Likes to reflect, play with ideas.
- 41. Has few artistic interests.
- 42. Likes to cooperate with others.
- 43. Is easily distracted.
- 44. Is sophisticated in art, music, or literature.

Appendix E

Demographics

1. What is your gender? (a) male, (b) female, (c) Other: _____
2. What is your age? _____ years old.
3. What is your racial background? (a) White/Caucasian, (b) Latino/Hispanic, (c) Native American/American Indian, (d) Black/African- American, (e) Asian/Asian American, (f) Native Hawaiian/Pacific Islander, (g) Multi-Race, (h) Other: _____
4. Which resources were available at home while you were growing up? (Mark all that apply.) (a) Newspapers, (b) Magazines, (c) Dictionary, (d) Computer, (e) Room to study, (f) More than 100 books, (g) Dishwasher.
5. What is the highest educational level of you Mother/Guarding 1? (a) Did not complete high school, (b) High school diploma or equivalent, (c) Career/technical training such as military, apprenticeship, certificate program, etc., (d) Some college, but no degree, (e) 2-year college degree (associate's), (f) 4-year college degree (bachelor's) (g) Some education or degree above a 4-year college degree, (h) I don't know.
6. What is the highest educational level of you Father/Guarding 2? (a) Did not complete high school, (b) High school diploma or equivalent, (c) Career/technical training such as military, apprenticeship, certificate program, etc., (d) Some college, but no degree, (e) 2-year college degree (associate's), (f) 4-year college degree (bachelor's) (g) Some education or degree above a 4-year college degree, (h) I don't know.
7. What is your highest educational level? (a) Did not complete high school, (b) High school diploma or equivalent, (c) Career/technical training such as military, apprenticeship, certificate program, etc., (d) Some college, but no degree, (e) 2-year college degree (associate's), (f) 4-year college degree (bachelor's) (g) Some education or degree above a 4-year college degree, (h) I don't know.

