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# The Impact of Religiosity and Personality on Resilience and Coping Strategies

Leah Eldred

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Leah Eldred

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_____
Dr. Alisha Marciano


_____
Dr. Beth Savage



_____
Dr. Paul McClure



_____
Dr. Nicki Favero

## Abstract

The purpose of the current study was to examine the impact of religiosity and personality on resilience and coping strategies amongst undergraduate college students. Participants completed four different questionnaires measuring religiosity, personality, resilience, and coping skills, as well as a demographic questionnaire. A two-way factorial ANOVA statistical analysis and correlation analyses were conducted. The findings indicated that participants who were pessimistic reported more use of maladaptive coping strategies than optimistic participants. The main implication of this study was that people who are more pessimistic can be taught how to utilize adaptive coping strategies rather than the maladaptive ones that they may already be using.

The Impact of Religiosity and Personality on Resilience and Coping Strategies

Many different factors affect people's ability to deal with stressful events that inevitably occur during a lifetime. Some of these factors include the type of event, levels of stress, religion, and personality. These influencers may have noticeable impacts on both an individual's resilience levels and developed coping skills, including decreased resilience if poor coping is indicated through strategies and high levels of stress. In addition, resilience is present in both non-religious and religious individuals, as well as in people of all personality types, and thus the degree to which these variables impact resilience and coping skills should be further studied.

Religion is a systematic organization of believers who share the same beliefs, practices, and symbols to worship a divine entity (Monod, Brennan, Rochat, Martin, Rochat, & Bula, 2011). Religion encompasses faith and is generally associated with a structured form, such as Christianity, Judaism, and many others (Monod et al., 2011). In turn, then, religiosity is the level of commitment one feels to a particular religion and/or faith, including both external and internal factors (Monod et al., 2011; Hill & Pargament, 2008). External factors include church attendance and attending events sponsored by the church, whereas internal factors are made up of one's relationship with their God and private religious behaviors such as praying (Monod et al., 2011; Hill & Pargament, 2008).

Personality consists of many different facets of individuals that relate to cognition, behavior, and emotion (American Psychological Association, 2019). Studies have been conducted examining religion and personality (Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, & Fink, 2010; Unterrainer, Lewis, Collicutt, & Fink, 2013). Personality is complex and has many different facets, but two broad categories of personality include optimism and pessimism. In general, people's personality tends to be either pessimistic or optimistic, and

thus would make for generalizable research. However, there needs to be further research examining the relationship between religiosity and personality dimensions optimism and pessimism. Optimism is when an individual experiences life in a positive manner and expects beneficial, positive things to occur even when stress levels are high (Kivimaki, Marko, Singh-Manoux, Vahera, Helenius, & Pentti, 2005). Pessimism, on the other hand, involves expecting negative things to occur and generally viewing life in a negative manner (Kivimaki et al., 2005).

Both personality and religiosity impact resilience and coping strategies. Resilience is the ability to recover positively from stressful experiences and the ability to adapt successfully, whereas coping strategies are skills and mechanisms developed to aid in an individual's efforts to manage and deal with stress in life (Fleming & Ledogar, 2008). There are many different coping strategies that can be utilized, but many of the methods can be divided into one of two categories: adaptive or maladaptive. Adaptive coping strategies are those which confront the problem and allow for healthy adaptation and management of the problem. Maladaptive coping skills, on the other hand, are strategies that are harmful, avoid addressing the problem, and are unhealthy ways of dealing with stress. Resilience and coping strategies, both adaptive and maladaptive, are influenced by religiosity and personality, specifically pessimism and optimism. Understanding how these variables are interrelated is extremely important because everyone undergoes stress, so understanding exactly what factors contribute to a stress response enables psychologists to help people overcome stress and further develop adaptive coping skills based on their personality and religiosity.

**Religiosity**

The impact of religiosity on resilience is often examined by researchers because religion shapes people and their social lives, including non-religious factors (Smith, 2017). Religion itself has a huge impact on the lives of people, but people are complex and thus no one is influenced by only one factor (Smith, 2017). Some researchers have examined the role of religiosity among college students, an important age group to study (Bryant & Astin, 2008; Wang & Distelberg, 2019; Giordano et al., 2015; Bryant, 2007).

Bryant and Astin (2008) examined spiritual struggle during the college years by examining the causes and influences behind students' spiritual struggles. They found that spiritual struggle was correlated with challenging situations posed during college years, and while these challenges negatively impacted psychological well-being, they also positively impacted acceptance of individuals of religions different from their own. In other words, the researchers found that religiosity increased their ability to overcome challenges, or increased their resilience. In addition, they found that spiritual struggle was more common amongst members of minority religions, such as Buddhism, Hinduism, and Islam, as well as amongst females, students attending religious colleges, students majoring in psychology, and undergoing a lot of new experiences (Bryant, & Astin, 2008). Recently, Wang and Distelberg (2019) also examined the impact of social and religious factors on quality of life and resilience. They found that gender, time, relationships, abuse history, and faith predicted quality of life, which is extremely beneficial research because it demonstrates the usefulness of examining religion and addressing the stress that college students undergo, including the factors that contribute to the process of building resilience.

Unlike the previous research, Giordano, Prosek, Daly, Holm, Ramsey, Abernathy, and Sender (2015) conducted a study examining the relationship between religious coping,

spirituality, and substance abuse (specifically alcohol, marijuana, and psychotic drugs) among college students. The researchers found that on average, participants who reported more religious and adaptive coping also reported less marijuana use (Giordano et al., 2015). This study provides a good basis for descriptions for religious and spiritual coping, although further research needs to be conducted examining the interaction between religiosity and forms of coping.

Like the previous researchers, Bryant (2007) also examined the role of religion in the lives of young adults. She focused on gender differences and found that there were significant gender differences in religiosity, such as higher religiosity being associated with women (Bryant, 2007). She also found that identifying with an organized religion such as Protestantism or Buddhism was related to an increased sense of commitment, and thus an increase in religiosity (Bryant, 2007).

**Religiosity and Personality**

Personality is a common variable in many psychological studies, especially because there are so many facets of personality to examine. Unterrainer, Ladenhauf, Moazedi, Wallner-Liebmann, and Fink (2010) examined the relationship between religious and psychological well-being and personality dimensions. They found a significant positive correlation between personality and religiosity, as well as general correlations between religiosity impacts and increased psychological well-being (Unterrainer et al., 2010). These findings support the notion that psychologists ought to take all aspects of the client into consideration, including and even emphasizing religiosity and personality traits.

Although research has found correlations between certain aspects of personality like the Big 5 and religiosity, there are still other aspects of personality that need to be further explored, such as optimism and pessimism, a topic into which Scheier, Weitraub, and Carver (1986)

delved. They examined the relationship between personality and coping skills, as well as how optimists and pessimists differ in their coping strategies. They discovered that optimists reported using more adaptive coping skills than maladaptive ones, and they also found that pessimists were more likely to report the use of maladaptive strategies (Scheier et al., 1986). Similarly, Fredrickson (2001) examined the role of optimism in building resilience and improving psychological well-being. In her literature review, Fredrickson found that optimism, or positive emotions, were the reasons behind the uniqueness of individuals' resilience. She claimed that positive emotions were fuel for adaptive coping strategies to develop, including setting goals, building resources such as social support, and enabling creativity and flexibility (Fredrickson, 2001). Finally, Fredrickson stated that this optimism, which leads to adaptive coping styles, will also eventually increase one's levels of resilience because the greater one's emotional and psychological well-being, the greater one's resiliency, as well.

The aforementioned studies all focused on specific aspects similar to the study conducted by Mattis, Fontenot, Hatcher-Kay, Grayman, and Beale (2004). From their experiment, they found that age was positively correlated with optimism, aspects of high religiosity like church attendance, subjective religiosity/spirituality, and positive relationship with God were positively correlated with optimism, and that aspects of low religiosity like negative perceived relationships with God were negatively correlated with optimism (Mattis et al., 2004). While this research examined the relationship between disposition and religiosity in adult African Americans, further research needs to examine this association in other populations. Furthering the research on religion and personality, Macdonald (2000) developed a five factor model of personality relating to religiosity to determine development and measurement of religiosity. He found that there were five dimensions of the factor analysis used that were statistically significant: cognitive

orientation towards spirituality, experiential/phenomenological dimension, existential

well-being, paranormal beliefs, and religiousness (Macdonald, 2000). Therefore, Macdonald was

influential in determining important aspects of religiosity and spirituality for which to test, and in

the current study, the measure chosen for the procedure incorporates these aspects of

Macdonald's findings.

Cohn, Fredrickson, Brown, Mikels, and Conway's (2009) research appears to contradict

the aforementioned research. They examined the relationship between optimism, positive

emotions, resilience, and overall life satisfaction and found that resilience was mediated by

positive emotions, while life satisfaction was not. They determined that acute positive emotions,

rather than optimism, form the relationship between life satisfaction and resilience (Cohn et al.,

2009). The results of this study suggests that further research is needed to clarify the role of

optimism and pessimism on resilience.

**Coping Strategies and Resilience**

There are an abundance of coping strategies utilized by individuals, all of which can be

categorized as adaptive, maladaptive, and/or avoidant. In their study, Harrison, Koenig, Hays,

Eme-Akwari, and Pargament (2001) reviewed studies that had been conducted about religious

coping specifically. They defined religious coping as any strategy, either adaptive or

maladaptive, that relied on some aspect of religion and/or faith to cope with a stressor (Harrison

et al., 2001). They found that religious coping could be predicted by social, personal, and

situational factors, and that on average, religious coping was positively correlated with physical

health, psychological well-being, and increased self-efficacy (Harrison et al., 2001). Furthering

the research, Pierceall and Keim (2007) focused on stress and coping strategies in college

students. They examined the amount of stress undergone by college students and the coping

strategies developed as a result and found that female students were more stressed than male students, and that the most common adaptive coping strategies were talking to loved ones, relaxing, and exercising (Pierceall & Keim, 2007). The most common maladaptive coping strategies were drinking, smoking, and using illegal substances, and they also found that students who reported higher stress levels were more likely to cope via maladaptive practices (Pierceall & Keim, 2007).

While Pierceall and Keim (2007) studied many types of maladaptive coping strategies, Ciarrocchi and Brelsford (2009) only focused on the maladaptive coping strategy of substance use and abuse. They examined whether religion could predict psychological well-being and resilience more than personality and substance coping, which is a type of maladaptive coping. The researchers found that participants who reported higher psychological well-being did not report substance coping and that those who reported a higher religiosity also reported higher positive emotions, though the relationship was not statistically significant (Ciarrocchi & Brelsford, 2009). In their study, Gloria and Steinhardt (2014) also focused on the relationship between coping strategies, positive emotions/optimism, mental health, and resilience. The coping strategies were categorized by adaptive or maladaptive, and mental health was defined by anxiety and/or depressive symptoms. They found that those who reported positive emotions also scored high in resilience, a relationship which was mediated by coping skills (Gloria & Steinhardt, 2014). This research suggested that optimistic individuals use more adaptive coping strategies and thus would be more resilient.

Furthering the research to include practical applications, Paterson and Francis (2017) explored the relationship between religiosity and psychological well-being through the use of psychological therapies. They found that atheists reported lower levels of psychological distress

and higher levels of well-being, but that participants who reported higher levels of religiosity reported greater benefits from psychological therapy, specifically in regards to coping skills. The relationship between higher religiosity and increased benefits from therapy pertaining to well-being was also statistically significant (Paterson & Francis, 2017). Therefore, counselors and therapists ought to take into consideration the religiosity of the patients/clients, because those who reported higher religiosity levels gained more benefits from therapy. Furthermore, Fredrickson, Tugade, Waugh, and Larkin (2003) examined the role of positive emotions on resilience and found that positive emotions reported before the terrorist attacks on 9/11, such as love and thankfulness, were critical in resilience levels after the stressful event. Specifically, the researchers stated that positive emotions impacted the participants' resiliency so that they were less susceptible to depression and more likely to engage in resilient behaviors (Fredrickson et al., 2003). While most research does not focus on any specific event such as 9/11, this study provides good background for future research because it provides support for the hypothesis that positive emotions, or optimism, has a positive impact on resilience.

Unterrainer, Lewis, Collicutt, and Fink (2013) conducted a study that examined the relationship between religiosity, personality, and recovery from addiction disorders through various coping strategies. They found that participants who reported high religiosity also reported using adaptive coping strategies, and those who reported low religiosity reported an increase in substance abuse disorders, a type of maladaptive coping (Unterrainer et al., 2013). The most important implication of this study was that this research indicates that religiosity and personality seem to influence coping skills, which further promotes and increases resilience. It is important to examine religiosity as a tool for improvement. While the current study is not focusing on substance abuse disorders, that is still a type of stressor and thus fits under the broad

umbrella topic. This study combines all of the elements discussed in the aforementioned research: religiosity, personality, coping skills, and resiliency through therapy.

While prior research was enlightening in this specific area of research, there are nevertheless areas that need further study. One limitation of the previous studies is the lack of examining both personality and religiosity and how they interact to influence coping skills and resilience. There were studies conducted examining a few of the variables, but no study examined both the influence of religiosity and personality on resilience and coping strategies separately as well as the interaction of religiosity and personality.

**The Current Study**

The current study aims to examine the impact of independent variables religiosity and personality on dependent variables resilience and coping strategies, as well as examine the interaction of religion and personality. It was hypothesized that participants who had high religiosity would report a higher resilience score and use of adaptive coping strategies, while those who had low religiosity would score lower on resilience and higher on maladaptive coping strategies. In addition, those who reported being optimistic would also score higher on resilience and adaptive coping strategies, while those who reported being pessimistic would score lower on resilience and higher on maladaptive coping strategies. Finally, those with high religiosity and a higher optimism level would score the highest in resilience and adaptive coping, followed by those with low religiosity and high optimism, then high religiosity and pessimistic, and lastly low religiosity and pessimistic.

**Method**

**Participants**

The current study consisted of 59 participants who were recruited through convenience sampling at the University of Lynchburg. The average age of the participants was 21 years ($M =$ 20.7, $SD = 5.6$). These participants were recruited through convenience sampling from psychology courses and the Westover Honors College on campus via email. There were 42 (73.7%) females, 14 (24.6%) males, and 1 nonbinary (1.8%), with 49 (86.0%) white/caucasian, 4 (7.0%) black/African American, 3 (5.3%) Hispanic/Latino, and 1 (1.8%) Middle Eastern/caucasian. Of the participants, 43 (75.8%) were religious and 13 (22.8%) were non-religious.

**Materials**

A demographic questionnaire was provided to the participants. This survey consisted of six questions and asked about age, gender, race/ethnicity, and religion, as evident in Appendix A.

In order to measure religiosity, Huber and Huber's Centrality of Religiosity Scale (CRS-15) was used (2012). This self-report inventory shown in Appendix B consisted of 15 forced choice questions with a Cronbach's alpha of .96 (Huber & Huber, 2012). The measure tested five religious dimensions: intellect, ideology, public practice, private practice, and experience, with three questions per dimension. Responses were scored by dividing the sum of the item scores by the total number of questions. This measure consisted of five multiple choice answers on a 5-point Likert scale ranging from 1-5, with option A correlating to a score of 5, option B a score of 4, option C 3, option D 2, and option E 1. Not religious was defined as a score ranging from 1-2.5, and religious was defined as a final score ranging from 2.6-5, taking into account all the religious dimensions tested.

The Life Orientation Test-Revised (Scheier, Carver, & Bridges, 2013) was used to measure personality, specifically optimism and pessimism. As seen in Appendix C, test items 2,

5, 6, and 8 were distracter items out of 10 total questions, and answer options were on a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) with a Cronbach's alpha of .83. For final scoring, some of the items were reverse scored and then the total score was examined, not including the distracter items. A median split of 23 was used, with values higher than 23 reflecting optimism, and lower values indicating pessimism.

To test resilience, the Brief Resilience Scale (BRS) was used (Smith, Dalen, Wiggins, Tooley, Christopher, & Bridges, 2013). Shown in Appendix D, the inventory was composed of six items with a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For final scoring, items 2, 4, and 6 were reverse scored and the total score was examined. Higher scores were indicative of more resilience whereas lower scores reflected less resilience. The BRS had a Cronbach's alpha of .83.

Finally, in order to test coping strategies, the Maladaptive and Adaptive Coping Styles (MAX) Questionnaire was used (Moritz, Jahns, Schroder, Berger, Lincoln, Klein, & Goritz, 2016). This inventory, shown in Appendix E, consisted of 21 items testing maladaptive, adaptive, and avoidance coping strategies, though for the current study only the adaptive and maladaptive subscales were analyzed. The MAX questionnaire's scoring was adapted to fit a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For final scoring, the sum of the item scores was divided by the total number of questions, with higher scores indicating adaptive coping. The adaptive coping items had a Cronbach's alpha of .72, and the maladaptive coping items had a Cronbach's alpha of .77.

**Procedure**

Participants signed up for a time slot via a Google form. At the time of their session, they came to the computer lab in the psychology building. Up to 12 participants attended a single

session, though some sessions had fewer than 12 participants. The participants were given the

informed consent form to read and all questions were answered by the researcher. A copy of the

form was returned to the researcher, and once this was completed, the researcher used the names

on the consent forms to email a link to the survey to each participant. The participants logged

into a computer in the computer lab and opened their email to open the study survey with the

measures and demographic questionnaire and completed it. The data was collected via that

Google form onto a secure, password protected Google drive. The participants only attended one

session that took approximately 15-20 minutes. Once the survey was complete, the participant

logged out of the computer and was verbally debriefed by the researcher about the study.

### Results

A 2 (Religiosity) X 2 (Personality) factorial ANOVA was conducted to analyze the

relationship among religiosity, personality, and resilience. It was hypothesized that those who

reported higher religiosity would report higher resilience and that those who scored higher on

optimism would also report higher resilience. It was also hypothesized that those who reported

higher religiosity and scored higher on optimism would report the most resilience. The hypothesis

test did not reveal a significant main effect for religiosity, $F (1, 53) = .193$, $p = .74$. Those with a

high religiosity reported a mean resilience level of 20.19 ($SD = 4.51$), whereas those with a low

religiosity reported a mean resilience level of 19.20 ($SD = 4.88$). The hypothesis was thus not

supported because the means were too similar. The hypothesis test did not reveal a significant

main effect for personality, $F (1, 53) = 34.37$, $p = .11$. Optimists reported a mean resilience level

of 21.72 ($SD = 3.49$), whereas pessimists reported a mean resilience of 17.89 ($SD = 4.89$). The

hypothesis was not supported because the main effect was not significant. Finally, the hypothesis

test did not reveal a significant interaction effect for religiosity and personality, $F(1, 53) = .31$, $p$ = .59. See Table 1 for descriptive statistics. The hypothesis was thus not supported.

A 2 (Religiosity) X 2 (Personality) factorial ANOVA was conducted to analyze the relationship among religiosity, personality, and adaptive coping strategies. It was hypothesized that those who reported higher religiosity would report a higher level of adaptive coping strategies and that those who scored higher on optimism would also report higher levels of adaptive coping skills. It was also hypothesized that those who reported high religiosity and scored higher on optimism would report the highest level of adaptive coping skills used. The hypothesis test did not reveal a significant main effect for religiosity, $F(1, 53) = 1.73$, $p = .41$. Those with a higher religiosity reported a mean adaptive coping strategy level of 32.70 ($SD$ = 4.93), whereas those with a lower religiosity reported a mean adaptive coping strategy level of 32.75 ($SD = 4.93$). The hypothesis was not supported because not only was this main effect statistically not significant, but the means were extremely close. The hypothesis test did not reveal a significant main effect for personality, $F(1, 53) = 52.35$, $p = .09$. Optimists reported a mean adaptive coping level of 34.90 ($SD = 3.43$), whereas pessimists reported a mean adaptive coping level of 30.46 ($SD = 4.76$). The hypothesis was not supported because the effect was not significant. Finally, the hypothesis test did not reveal a significant interaction effect for religiosity and personality, $F(1, 53) = .31$, $p = .58$. See Table 2 for descriptive statistics. Since the interaction effect was insignificant, the hypothesis was not supported.

Finally, a 2 (Religiosity) X 2 (Personality) factorial ANOVA was conducted to analyze the relationship among religiosity, personality, and maladaptive coping strategies. It was hypothesized that those who reported higher religiosity would report a lower level of maladaptive coping strategies and that those who scored higher on optimism would also report a

lower level of maladaptive coping strategies. It was also hypothesized that those who reported

high religiosity and scored high on optimism would report the least amount of maladaptive

coping skills. The hypothesis test did not reveal a significant main effect for religiosity, $F$ (1, 53)

= .62, $p$ = .58. Those with a higher religiosity reported a mean maladaptive coping strategy level

of 20.00 ($SD$ = 5.66), whereas those with a lower religiosity reported a mean maladaptive coping

strategy level of 20.95 ($SD$ = 4.74). The hypothesis was therefore not supported. The hypothesis

test revealed a significant main effect for personality, $F$ (1, 53) = 1270.09, $p$ < .05. Optimists

reported a mean maladaptive coping level of 17.90 ($SD$ = 4.86), whereas pessimists reported a

mean maladaptive coping level of 22.86 ($SD$ = 4.63). The hypothesis was supported because

optimists reported a statistically significant lower mean maladaptive coping score than

pessimists, as shown in Figure 1. Finally, the hypothesis test did not reveal a significant

interaction effect for religiosity and personality, $F$ (1, 53) = .01, $p$ = .92. See Table 3 for

descriptive statistics. Therefore, the hypothesis was not supported.

The previous statistical analyses examined the difference in means, but correlational

analyses were also conducted to examine the relationship between the variables. A Pearson

correlation was conducted to examine the relation between the two independent variables,

personality and religiosity. There was no significant correlation found between personality and

religiosity, $r$(57) = .23, $p$ = .09.

Another Pearson correlation was conducted to analyze the relation between personality

and adaptive coping strategies, maladaptive coping strategies, and resilience. There was a

significant positive correlation between personality and adaptive coping strategies, $r$(57) = .61, $p$

<.01. These results indicate that higher optimism scores were related to more adaptive coping

strategies. There was a significant negative correlation between personality and maladaptive

coping, $r(57) = -.65$, $p < .01$. These results indicated that pessimism, or a lower optimism score, was related to more maladaptive coping strategies. There was also a significant positive correlation between personality and resilience, $r(57) = .59$, $p < .01$. These results indicate that higher optimism scores were related to increased resilience scores.

A Pearson correlation was also conducted to examine the relation between religiosity and adaptive coping strategies, maladaptive coping strategies, and resilience. There was no significant correlation between religiosity and adaptive coping strategies, $r(57) = .12$, $p = .40$. There was also no significant correlation between religiosity and maladaptive coping strategies, $r(57) = -.11$, $p = .41$. There was no significant correlation between religiosity and resilience, $r(57) = .06$, $p = .66$.

A Pearson correlation was also conducted to analyze the relation between coping strategies and resilience. There was a significant positive correlation between adaptive coping skills and resilience, $r(57) = .52$, $p < .01$. These results indicate that increased use of adaptive coping strategies was associated with more resilience. There was a significant negative correlation between maladaptive coping and resilience, $r(57) = -.60$, $p < .01$. These results indicate that increased use of maladaptive coping strategies was associated with less resilience.

**Discussion**

The purpose of the current study was to examine the impact of religiosity and personality on resilience and coping strategies amongst undergraduate college students. One of the hypotheses for the current study was supported, while the others were not. The hypothesis that was supported was that participants who exhibited pessimistic personality traits would also report  more use of maladaptive coping strategies. Unlike the current study, past research found significant interactions (Unterrainer et al., 2013; Fredrickson et. al., 2003). For example,

Unterrainer et al. (2013) found that participants with high religiosity also reported more adaptive coping skills. The findings of the current study found no impact of high religiosity on adaptive coping skills, thus differing from previous studies. However, while most hypotheses were not supported, personality type did affect use of coping strategies.

The findings of this study also suggest that optimists are more likely to engage in adaptive coping strategies, while pessimists reported more maladaptive coping strategies. This result reproduces the findings of a study conducted by Scheier et al. in 1986, which was the basis behind the hypotheses examining the relationship between personality and coping strategies.This finding is particularly useful in a clinical setting. It is important to take into account all aspects of a client, but knowing the personality of the client is extremely beneficial in developing individualistic therapeutic methods and outlining potential pitfalls of the client. If the psychologist is aware that the client scores high on pessimism rather than optimism, then measures can be put in place to ensure that the client is aware of the difference between adaptive and maladaptive coping strategies and knows how to engage in adaptive strategies rather than maladaptive ones.

Although Unterrainer et al. (2010) found a positive correlation between personality and religiosity, there was not an association between these variables in this sample. Findings of the current study did, however, indicate that personality was significantly related to coping strategies. Participants who exhibited more traits of optimism in their personality were more likely to use adaptive coping strategies, while those who exhibited traits of pessimism in their personality were more likely to use maladaptive coping strategies. Plus, there were significant correlations between personality and resilience. Those who exhibited more optimism were more likely to also exhibit more resilience, whereas those who exhibited more pessimistic personality

traits were less likely to exhibit resilience. These results support past research (Pierceall & Keim, 2007; Fredrickson et al., 2003; Fredrickson, 2001; Scheier et al., 1986) and thus contributes to the theory that both personality and coping strategies are correlated, as well as personality and resilience.

There were no significant relationships between religiosity and the dependent variables: adaptive coping skills, maladaptive coping skills, and resilience. Participants who reported high religiosity did not use more adaptive or maladaptive strategies than those who reported low religiosity, nor was there a difference in resilience between participants. The results of the current study do not support past research (Mattis et al., 2004; Pierceall & Keim, 2007; Paterson & Francis, 2017; Unterrainer et al., 2013; Ciarrocchi & Brelsford, 2009). These researchers found that religiosity was significantly related to adaptive and maladaptive coping strategies as well as resilience, and as a result, more research needs to be conducted in order to further determine the role of religiosity on coping strategies and resilience, especially in undergraduate students.

There was a significant relationship between coping strategies and resilience. The findings indicate that participants who used adaptive coping strategies also exhibited more resilience, while participants who used maladaptive coping strategies exhibited less resilience. This supported past research (Pierceall & Keim, 2007; Gloria & Steinhardt, 2014; Paterson & Francis, 2017), all of whom found that participants who reported using more adaptive coping strategies were also more likely to exhibit more resilience than those who utilized maladaptive coping strategies. This finding emphasizes the importance of incorporating coping strategies into therapy sessions, as mentioned earlier, because if adaptive coping skills are positively correlated with resilience, then those are important skills to teach clients to equip them for future stressors.

Since the current study focused on college students, only undergraduate students from one university were recruited. Thus, an obvious limitation of this study was the number and diversity of participants. This impacted the findings, particularly the main effect of personality on adaptive coping. If there had been more participants, this relationship could have been statistically significant, though there is no way to definitively prove this without further research. In addition, the racial makeup of the participants proved limiting to the research. 86% of the participants were white/caucasian, which limits the data of the study and reduces the generalizability. The hypothesis that was supported can only be applied to those who participated in the research, and since the majority of those participants were white/caucasian, the research is difficult to apply to other races besides those who are white/caucasian.

A second limitation of the current study was the length of the measures given to the participants. Since four measures were used during the procedure, the overall survey provided was lengthy. As a result, participants could have suffered from respondent fatigue, which is when participants become tired of the survey, specifically of its length, and are thus more susceptible to pay less attention to the survey questions and their answers towards the end of the survey. As a result, some of the answers provided on the survey could be less accurate than others.

Similarly, a third limitation of the current study was that the participants could have suffered from a number of responses biases, including social desirability bias and participant bias. The participants could have altered their answers based on what they believe would be most socially desirable, especially on questions related to adaptive vs maladaptive coping and religiosity. They also could have figured out exactly what the current study was examining, and altered their responses to either help or hurt the results depending on their assumptions.

Further research on this topic should focus on eliminating as many limitations from the current study as possible. First, future research should recruit participants from not just one university, but from multiple colleges as well as people of the same age group who are not enrolled in college. In addition, research incorporating further diversity would be beneficial in order to further generalize results. Future research should also address the issue of respondent fatigue. This could be done by asking participants to participate in two shorter sessions rather than one longer one, or the order of questions could be shifted so that all participants were receiving the same survey in a different order to eliminate the effects of respondent fatigue because the questions at the end of the survey would be different for each participant.

In addition, future research should seek to eliminate any biases, such as those listed above. To reduce participant bias, future researchers could incorporate more distractor items or as more indirect questions. The questions should also be denoted by simple numbers, rather than by variable. In the current study, questions from the religiosity measure were labeled as R followed by the number of the question, which could have allowed participants to guess how they felt they should answer. Further research should avoid doing this.

Finally, future research could focus on how these variables change as participants grow older. A longitudinal study would yield interesting results and follow the same participants as they advance through college and continue into adulthood, then middle-age, then old age. This would further examine the impact of religiosity and personality on resilience and coping strategies and go further in depth to examine how these change over time as maturity and experience increases. This would also enable the researchers to determine scores for the independent variables based on both observable behaviors and self-report, rather than just the latter.

Religiosity and personality are factors which affect everyone, and thus ought to be examined in relation to other facets of people, including resilience and coping strategies. Together, all of these are influential and seminal in determining the proper therapeutic care for individuals and must be taken into account.

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**Table 1** *Mean Values of the Interaction Effect Between Independent Variables (Religiosity and Personality) and Dependent Variable (Resilience) Separated By Condition*
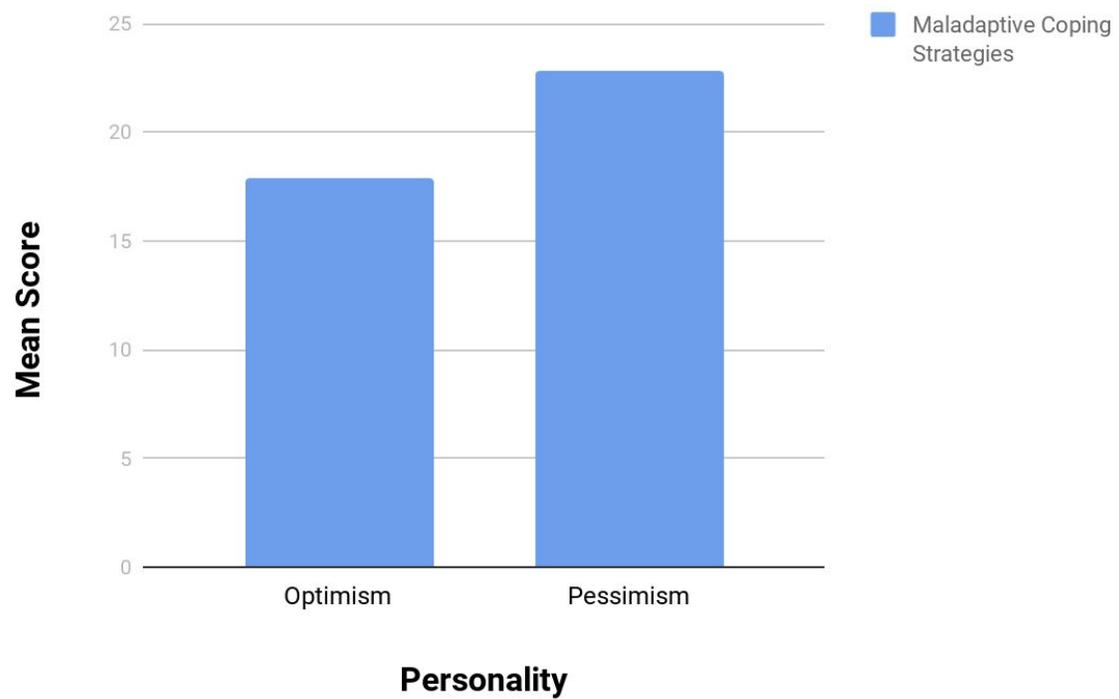
| | Pessimism | | Optimism | |
|---|---|---|---|---|
| **Variable** | ***M*** | ***SD*** | ***M*** | ***SD*** |
| Religiosity | | | | |
| Low Religiosity | 17.33 | 4.85 | 22.00 | 3.59 |
| High Religiosity | 18.31 | 5.04 | 21.62 | 3.54 |

**Table 2** *Mean Values of the Interaction Effect Between Independent Variables (Religiosity and Personality) and Dependent Variable (Adaptive Coping Strategies) Separated By Condition*

|  | Pessimism | | Optimism | |
| --- | --- | --- | --- | --- |
| **Variable** | *M* | *SD* | *M* | *SD* |
| Religiosity | | | | |
| Low Religiosity | 30.58 | 4.94 | 36.00 | 2.73 |
| High Religiosity | 30.38 | 4.79 | 34.48 | 3.63 |

**Table 3** *Mean Values of the Interaction Effect Between Independent Variables (Religiosity and Personality) and Dependent Variable (Maladaptive Coping Strategies) Separated By Condition*

|  | Pessimism | | Optimism | |
| --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | *M* | *SD* |
| Religiosity |  |  |  |  |
| Low Religiosity | 23.00 | 4.45 | 17.88 | 3.44 |
| High Religiosity | 22.75 | 4.91 | 17.90 | 5.37 |

*Figure 1.* Mean Differences Between Levels of Independent Variable Personality (Optimism and

Pessimism) on Reported Use of Maladaptive Coping Strategies

**Appendix A**

1. What is your age? _____
2. What is your race/ethnicity? Select one
   a. Black/African American
   b. White/Caucasian
   c. Asian
   d. Middle Eastern
   e. Native Islander or Pacific Islander
   f. American Indian or Alaskan Native
   g. Hispanic or Latino
   h. Other: _____
3. What is your gender?
4. What is your religion? Select one
   a. Catholic
   b. Islam
   c. Judaism
   d. Protestant
   e. None
   f. Other: _____
5. If you selected Protestant, what denomination are you?
6. Did your family practice the religion selected when you were a child?
   a. Yes
   b. No

**Appendix B**

1. How often do you think about religious issues?
   a. Very often
   b. Often
   c. Occasionally
   d. Rarely
   e. Never
2. To what extent do you believe that God or something divine exists?
   a. I believe and have no doubts
   b. I believe but sometimes have doubts
   c. I am generally skeptical but sometimes believe
   d. I am not sure
   e. I do not believe
3. How often do you take part in religious services?
   a. Very often
   b. Often
   c. Occasionally
   d. Rarely
   e. Never
4. How often do you pray?
   a. Very often
   b. Often
   c. Occasionally
   d. Rarely
   e. Never
5. How often do you experience situations in which you have the feeling that God or something divine intervenes in your life?
   a. Very often
   b. Often
   c. Occasionally
   d. Rarely
   e. Never
6. How interested are you in learning more about religious topics?
   a. Very interested
   b. Interested
   c. Slightly interested
   d. Not interested
   e. I am not religious
7. To what extent do you believe in an afterlife-- e.g. immortality of the soul, resurrection of the dead or reincarnation?

         a.  I believe and have no doubts

         b.  I believe but sometimes have doubts

         c.  I am generally skeptical but sometimes believe

         d.  I am not sure

         e.  I do not believe

8.  How important is it to take part in religious services?

         a.  Very important

         b.  Important

         c.  Slightly important

         d.  Not important

         e.  I do not take part in religious services

9.  How important is personal prayer for you?

         a.  Very important

         b.  Important

         c.  Slightly important

         d.  Not important

         e.  I do not pray

10. How often do you experience situations in which you have the feeling that God or something divine wants to communicate or to reveal something to you?

         a.  Very often

         b.  Often

         c.  Occasionally

         d.  Rarely

         e.  Never

11. How often do you keep yourself informed about religious questions through radio, television, internet, newspapers, and/or books?

         a.  Very often

         b.  Often

         c.  Occasionally

         d.  Rarely

         e.  Never

12. In your opinion, how probable is it that a higher power really exists?

         a.  Definitely probable

         b.  Very probable

         c.  Somewhat probable

         d.  Equally probable that a higher power does or does not exist

         e.  Not probable

13. How important is it for you to be connected to a religious community?

         a.  Very important

         b.  Important

  c. Slightly important

  d. Not important

  e. I am not religious

14. How often do you pray spontaneously when inspired by daily situations?

  a. Very often

  b. Often

  c. Occasionally

  d. Rarely

  e. Never

15. How often do you experience situations in which you have the feeling that God or something divine is present?

  a. Very often

  b. Often

  c. Occasionally

  d. Rarely

  e. Never

**Appendix C**

| Strongly Disagree | Disagree | Neutral |
|:---:|:---:|:---:|
| 1 | 2 | 3 |

| Agree | Strongly Agree |
|:---:|:---:|
| 4 | 5 |

1. In uncertain times, I usually expect the best
2. It's easy for me to relax
3. If something can go wrong for me, it will
4. I'm always optimistic about my future
5. I enjoy my friends a lot
6. It's important for me to keep busy
7. I hardly ever expect things to go my way
8. I don't get upset too easily
9. I rarely count on good things happening to me
10. Overall, I expect more good things to happen to me than bad

**Appendix D**

Strongly Disagree                       Disagree                       Neutral

     1                                 2                               3

               Agree                   Strongly Agree

               4                        5

1. I tend to bounce back quickly after hard times
2. I have a hard time making it through stressful events
3. It does not take me long to recover from a stressful event
4. It is hard for me to snap back when something bad happens
5. I usually come through difficult times with little trouble
6. I tend to take a long time to get over set-backs in my life

**Appendix E**

| Strongly Disagree | Disagree | Neutral |
|---|---|---|
| 1 | 2 | 3 |

| Agree | Strongly Agree |
|---|---|
| 4 | 5 |

1. I actively address a problem and try to resolve it
2. I accept a situation and try to make the best of it
3. I strive to view problems as an opportunity and to grow with the challenge
4. I try to stay relaxed
5. I try to quickly stop fruitless ruminations
6. I try to imagine a happy ending
7. I can understand well the cause of a problem
8. I try to let negative thoughts simply pass by like 'dark clouds'
9. Stress or problems do not immediately nag at my self-esteem
10. I seek out help
11. I am prone to rumination
12. I emotionally overreact quickly
13. I quickly imagine the worst
14. I tend to make problems even bigger than they are
15. lems to myself and do not share them with others
16. I put on 'a good face' and hide my true feelings
17. I avoid problems
18. I try to suppress negative thoughts