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Attachment to God and Psychological Adjustment: God's Responses and Our Coping Strategies

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Abstract

An outgrowth of research has established an association between attachment to God dimensions and psychosocial indices. There has been a dearth of studies, however, examining variables that mediate these relationships. This study examined three categories of coping strategies (emotion-focused, problem-focused, and dysfunctional) as mediators in the relationship between attachment to God dimensions and psychological adjustment. This study employed a cross-sectional design to examine the association among attachment to God dimensions, coping strategies, and psychological adjustment among 315 undergraduate students at a midsize southeastern university. Participants completed a demographic questionnaire, the Attachment to God Inventory, the Brief COPE, the Center for Epidemiologic Studies Depression Scale, and the Positive and Negative Affect Schedule. Structural equation modeling was used to examine direct and indirect effects. Analyses revealed an indirect influence of secure God attachment on positive affect via emotion-focused coping, as well as an indirect influence of secure God attachment on all three mental health indices—positive and negative affect and depression—via dysfunctional coping. Analyses also revealed an indirect influence of avoidant God attachment on depression and both positive and negative affect via dysfunctional coping, as well as an indirect influence of ambivalent God attachment on depression and both positive and negative affect via dysfunctional coping. Although causality cannot be established, results suggest that attachment to God dimensions are associated with psychological adjustment through the use of specific coping strategies. Future research should employ longitudinal designs in order to identify temporal influences among attachment to God dimensions, coping styles, and psychological indices.

Keywords Attachment to God · Coping strategies · Depression · Positive and negative affect

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Introduction

Attachment and Psychological Adjustment

Bowlby's (1969) seminal attachment theory has long provided a developmental paradigm for examining and predicting attachment patterns in adulthood. In this regard, an individual's relationship with early caregivers creates an internalized social-emotional blueprint that influences his/her adult relationships. Building on Bowlby's work, Ainsworth et al. (1971, 1978) delineated three attachment styles based on her observations of various caregiver–infant interactions. An infant with a *secure* attachment uses the caregiver as a safe base from which to explore his/her environment and has developed trust that the caregiver will consistently respond to his/her needs. Ainsworth also described two subtypes of insecure attachment: avoidant and anxious-ambivalent. Infants with an *avoidant* attachment typically have caregivers who are rejecting and nonresponsive and consequently learn not to seek comfort or nurturing from their caregivers. Infants with an *anxious-ambivalent* attachment appear to desire and seek comfort from their caregivers, but also reject such comfort when it is provided, the result of having caregivers who respond inconsistently to their children (Ainsworth et al. 1971, 1978).

Attachment styles molded through infant–caregiver interactions can sculp relationship dynamics in adulthood through the development of internal working models (Bowlby 1969), with many studies in this empirical arena focusing on adult romantic relationships. In this regard, various studies have examined the influence of attachment on individuals' relationship goals and motives, interaction with partners, and response to relationship dissolution (for review see Pietromonaco and Beck 2015).

Attachment to God and Psychological Adjustment

Although research on the psychosocial sequelae of attachment styles has pivoted on adult relationships, this empirical domain has radiated into a broader focus on God as the object of attachment. Kirkpatrick and Shaver (1992) delineated three classifications of attachment to God: Individuals with a *secure* attachment to God perceive God as caring and responsive. Individuals with an *avoidant* attachment to God, on the other hand, discern God as uncaring and rejecting, while those with an *anxious* (*ambivalent*) attachment to God perceive God as inconsistent in His caring and responsiveness.

The attachment literature has branched into a subset of studies examining attachment to God dimensions and psychological adjustment. In this regard, Kirkpatrick and Shaver (1992) found that individuals who experience avoidant or anxious attachment to God reported higher levels of anxiety and depression, lower levels of life satisfaction, and poorer physical health compared to individuals with a secure attachment to God. Avoidant and anxious attachment to God have also been found to be associated with higher levels of substance use among male college students (Horton et al. 2012). Furthermore, a longitudinal analysis of Presbyterian (PCUSA) elders and rank-and-file laypersons revealed that secure attachment to God was

associated with decreased distress over time (Ellison et al. 2012). Analyses also revealed that secure God attachment buffered the negative impact of stressful life events, while anxious God attachment exacerbated the baleful effects of such events.

A slice of studies within this empirical realm has examined the association between dimensions of attachment to God and the use of spiritual/religious coping strategies. In this regard, Belavich and Pargament (2002) found that secure attachment to God was associated with positive spiritual coping, which, in turn, was associated with better adjustment in individuals waiting for a loved one undergoing surgery, while avoidant and anxious attachment to God were associated with negative spiritual coping, which, in turn, was associated with poorer adjustment. Furthermore, Cooper et al. (2009) examined religious coping efforts among individuals categorized according to attachment to God styles: Secure, Preoccupied (Anxious/Ambivalent), Dismissing (Avoidant), and Fearful (Disoriented/Disorganized), as suggested by Bartholomew (1990) and Brennan et al. (1998). It was found that the Secure group used significantly more spiritually based activities than the Dismissing and Fearful group, and the Preoccupied group used more such activities than the Fearful group. The Secure group also reported greater use of religious avoidance, or turning to religion to avoid problems (Pargament et al. 1990), while the Fearful group reported more anger and doubt toward God. To the authors' knowledge, however, no studies have examined various *secular* coping strategies as they relate to attachment to God dimensions, and specifically, as mediators in the association between attachment to God and psychological adjustment.

Coping Strategies and Psychological Adjustment

Lazarus and Folkman's transactional model of stress (1984) provides an empirical template from which to formulate the current mediation model. Lazarus and Folkman delineated a two-step appraisal process through which an individual filters specific situations. According to the transactional model, an individual first engages in *primary appraisal*, in which he/she evaluates the meaning of the situation and determines whether it is positive, negative, or neutral. If the situation is appraised as negative or threatening, the individual then progresses to *secondary appraisal*, which involves gauging his/her resources and options for coping. In regard to coping, Lazarus and Folkman (1984) delineated between emotion-focused coping, which involves efforts to modulate stressful emotions, and problem-focused coping, which encompasses attempts to modify the situation causing distress.

The transactional model of stress has previously been employed to examine secular coping strategies as mediators in the relationship between religious appraisals and psychological adjustment in chronic pain patients (Parenteau et al. 2011). Whereas this previous study examined how individuals filtered the meaning of a specific experience (e.g., chronic pain) through a religious lens, both benevolent (e.g., "Tried to see how God might be trying to strengthen me in this situation.") and punitive (e.g., "Felt punished by God for my lack of devotion."; Pargament et al. 1998), the current study focused on individuals' general perception of their attachment to God and God's responsiveness to their needs/problems. Furthermore,

whereas the previous study analyzed pain-related coping strategies as mediators, the current study examined a panoply of secular coping strategies, as well as one religious-focused strategy, utilized to cope with stress during the semester.

The coping strategies examined in this study have been parceled into three overarching categories, per Coolidge et al. (2000): *emotion-focused* (acceptance, use of emotional support, humor, positive reframing, religion); *problem-focused* (active coping, use of instrumental support, planning), and *dysfunctional* (behavioral disengagement, denial, self-distraction, self-blame, substance use, venting) strategies. Research has generally provided evidence for the adaptive function of emotion- and problem-focused coping strategies, and the maladaptive nature of dysfunctional coping strategies.

In regard to emotion-focused coping strategies, Hagan et al. (2017) found that *acceptance* was associated with not only lower levels of depression and anxiety, but also better quality of life, in cancer patients. Research has also supported the mental health benefits of *emotional support* for parents of children with autism spectrum disorder (ASD) (Whitehead et al. 2015; Zablotsky et al. 2013) and cancer patients (Hagan et al. 2017; Hill 2016).

Research regarding *humor* and mental health, however, has produced mixed results. For example, humor was associated with lower levels of anxiety and depressive symptoms in a community sample of older adults (Marziali et al. 2008). A longitudinal study examining the use of humor in individuals with systemic sclerosis (SSc), however, demonstrated the use of humor to be inversely associated with disease-related outcomes in cross-sectional analysis, but this association became insignificant after controlling for covariates in both cross-sectional and longitudinal analysis (Merz et al. 2009).

Positive reframing was prospectively associated with decreased depression and suicidal ideation and behavior in adolescent and young adult psychiatric emergency patients (Horwitz et al. 2018). Hagan et al. (2017) also found that positive reframing was associated with lower levels of depression, and better quality of life, in cancer patients.

Finally, *religion* has been associated with both positive and negative outcomes (for reviews, see Koenig 2009; Koenig and Larson 2001). Through a synthesis of the literature, Ano and Vasconcelles (2005) have established that positive forms of religious coping (e.g., collaborative religious coping, seeking spiritual support) are positively associated with positive outcomes (e.g., stress-related growth, positive affect) and inversely associated with negative outcomes (e.g., depression, anxiety), while negative forms of religious coping (e.g., feeling punished by God) generally have a positive association with such negative outcomes.

Problem-focused strategies involve finding ways to resolve or modify a stressful situation instead of coping with the emotions regarding the situation (Lazarus and Folkman 1984). In this regard, research on the effectiveness of *instrumental support* has yielded mixed results; in one study, emotional, but not instrumental, support predicted quality of life and depressive symptomatology in women with ovarian cancer (Hill 2016). In a study examining the potential protective function of instrumental and emotional social support in people living with HIV (PLWH), however, anticipated stigma was associated with HIV symptoms via stress only at the lowest

levels of instrumental social support; emotional support did not significantly buffer the effects of stigma (Earnshaw et al. 2015).

Greater use of *active coping* was associated with less depression and anxiety, and better quality of life, in cancer patients (Hagan et al. 2017), and with fewer depressive symptoms in the context of high uncontrollable stress in African-American homeless men (Littrell and Beck 2001).

Moreover, Walker and Stephens (2014) found that behaviorally oriented problem-focused coping, including active coping and *planning*, was associated with greater use of protective behavioral strategies (PBS) regarding alcohol use in college students. Problem-focused strategies in general have been associated with less psychological distress in women experiencing domestic abuse (Wong et al. 2016).

Dysfunctional coping strategies are generally maladaptive and broadly associated with negative adjustment. *Behavioral disengagement*, for example, has been found to be associated with poorer psychological adjustment and quality of life in cancer patients (Hagan et al. 2017) and has even predicted future depression and suicidal ideation in young psychiatric emergency patients (Horwitz et al. 2018).

Furthermore, using *denial* to cope was also associated with higher levels of depression and anxiety, and lower quality of life, in cancer patients (Hagan et al. 2017), as well as lower mental and physical health quality of life in patients diagnosed with HIV (Kamen et al. 2012). Interestingly, using denial to cope was also associated with improvement in quality of life for the HIV patients over time, but those who used denial still experienced a lower quality of life compared to those who did not use denial to cope as often (Kamen et al. 2012).

Moreover, it has been found that women who frequently use *self-distraction* and *self-blame* are more vulnerable to exhibiting disordered eating when comparing their bodies to those they perceive as more ideal or attractive (Pinkasavage et al. 2015). *Self-blame* has also been found to predict depression, as well as suicidal ideation, attempt and behavior, in adolescent and young adult psychiatric emergency patients (Horwitz et al. 2018), and higher levels of anxiety and depression, and lower quality of life, in cancer patients (Hagan et al. 2017).

Substance use has been associated with a wide range of risky sexual behaviors in adolescents in substance abuse treatment as they transition to young adulthood (Tapert et al. 2001), and with multiple risk behaviors in middle school students (DuRant et al. 1999). Finally, *venting* contributed to stress and depressive and anxiety symptoms in parents of children diagnosed with autism spectrum disorder (ASD) (Whitehead et al. 2015), and was also associated with greater anxiety in older adults (Orgeta and Orrell 2014). Dysfunctional coping strategies as a whole were associated with greater psychological distress in Chinese women experiencing domestic abuse (Wong et al. 2016).

Present Study

The objectives of the present study were twofold: (1) to determine if attachment to God dimensions (secure, avoidant, and ambivalent) are associated with psychological indices (positive/negative affect, depression) and (2) to determine if

specific coping strategies (emotion-focused, problem-focused, and dysfunctional) mediate the association between attachment to God dimensions and psychological indices. The main question addressed in this study was as follows: Is an individual's perceived attachment to God associated with his/her use of specific coping strategies, and are those coping strategies, in turn, related to psychological adjustment?

Based on research establishing an association between secure attachment to God and favorable adjustment, and between both avoidant and anxious-ambivalent attachment to God and poor adjustment, we expected that (1) secure attachment to God would be associated with higher levels of positive affect and lower levels of negative affect and depression and (2) avoidant and ambivalent attachment to God would be associated with lower levels of positive affect and higher levels of negative affect and depression.

In regard to mediation effects, based on research establishing an association between emotion- and problem-focused coping strategies and favorable adjustment, and between dysfunctional coping strategies and poor adjustment, we predicted that (3) secure attachment to God would be associated with higher levels of positive affect and lower levels of negative affect and depression through the use of emotion- and problem-focused coping strategies and (4) avoidant and ambivalent attachment to God would be associated with lower levels of positive affect and higher levels of negative affect and depression through the use of dysfunctional coping strategies (see Fig. 1 for mediation model).

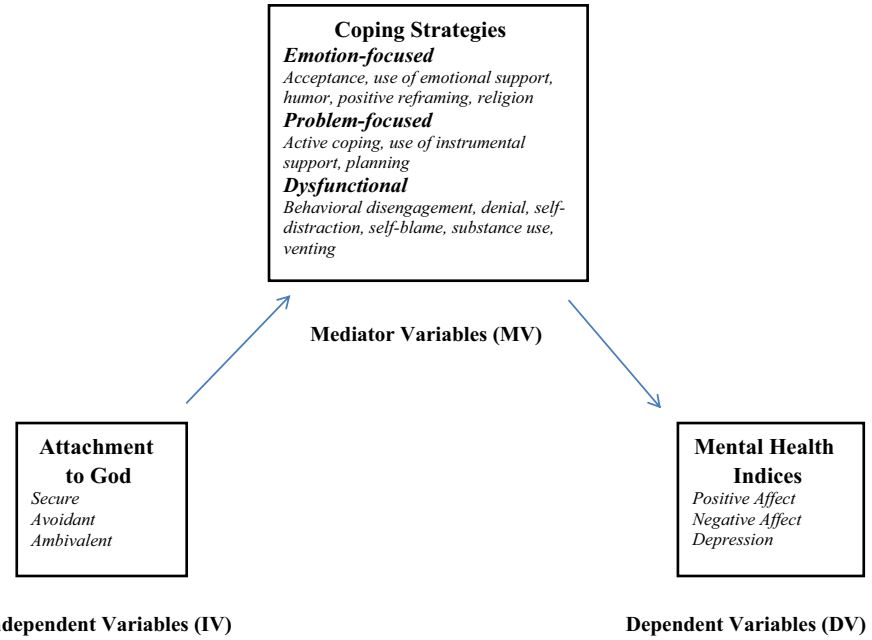

Fig. 1 Mediation model

Methods

Participants

The sample was comprised of 315 (237 females and 78 males) undergraduate students enrolled in Introductory to Psychology courses at a midsize southeastern university. Average age was 19.98, SD = 3.11. Forty-two percent of the sample was Caucasian; 49% African-American; 3.5% Asian; .3% American Indian/Alaskan Native; and 4.8% biracial/multiracial, while .6% did not report race.

The majority of the sample identified as freshmen (70.5%), with sophomores comprising 18.4% of the sample; juniors 9.5%; and seniors 1.6%. Most participants were single (95.2%), with 4.1% married and .6% divorced. In regard to annual family income, 21.9% reported an income equal to or less than $20,000; 25.7%, between $20,001 and $40,000; 17.5%, between $40,001 and $60,000; 14.6%, between $60,001 and $80,000; 10.2%, between $80,001 and $100,000; and 7%, over $100,000, with 3.2% not reporting annual family income.

Religious affiliation broke down as follows: Catholic (4.4%); Protestant (55.9%); Other Christian (13%); Jewish (.6%); Muslim (3.2%); Hindu (.3%); Mormon (.3%); Atheist/Agnostic (4.4%); Other Faith Tradition (.3%); non-denominational (12.4%); and Not Revealed (4.8%). Regarding church attendance, 41.3% reported attending church once per week; 14.9%, once per month; 24.4%, one to eleven times per year; and 14.6% never attending church, with 4.8% not reporting frequency of church attendance.

Procedure

Institutional Review Board (IRB) approval was attained prior to beginning data collection. After signing an informed consent form, participants completed questionnaires in a counterbalanced order. Participants earned one credit toward the research participation requirement for their Introductory to Psychology course.

Measures

Demographic questionnaire Participants provided information on age, sex, race, academic class, marital status, family income, religious affiliation, and church attendance.

Attachment to God Inventory (AGI; Rowatt and Kirkpatrick 2002) The AGI is a 9-item scale measuring dimensions of attachment to God. Rowatt and Kirkpatrick (2002) parceled the nine items into *avoidance* (three items measuring secure attachment to God are reverse-scored for this subscale) and *anxiety* dimensions. The present study grouped items into three scales: secure ("I have a warm relationship with God"), avoidant ("God seems impersonal to me"), and ambivalent ("God sometimes seems very warm and other times very cold to me") attachment to God. Each attachment dimension was measured with three items on a 4-point

Likert scale ranging from 1 (not at all) to 4 (a great deal), with the items averaged for all three subscales. The scale has demonstrated high internal consistency, with a Cronbach's alpha of .92 for the *avoidance* dimension and .80 for the *anxiety* dimension (Rowatt and Kirkpatrick 2002). Please see Table 1 for descriptive statistics for all variables in the present study.

Brief COPE (Carver 1997) The Brief COPE is a shortened version of the original COPE inventory (Carver et al. 1989), measuring fourteen coping strategies with two items each. Each item was rated using a 4-point Likert scale ranging from 1 (not at all) to 4 (a great deal). Alpha coefficients from the fourteen scales range from .50 (venting) to .90 (substance use) (Carver 1997). For the present study, the fourteen coping strategies were clustered into three overarching scales (Coolidge et al. 2000): emotion-focused, problem-focused, and dysfunctional coping strategies, with items averaged for all three subscales. This cluster approach has been utilized in previous studies (Coolidge et al. 2000; Cooper et al. 2008b). The three composite subscales have demonstrated sound internal reliability, with alpha coefficients of .72, .84, and .75 for the emotion-focused, problem-focused, and dysfunctional subscales, respectively (Cooper et al. 2008a).

Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977) The CES-D scale is a 20-item questionnaire assessing depressive symptomology, on a 4-point Likert scale (0 = rarely or none of the time to 3 = most or all of the time). Items were averaged to produce a score indicating severity of depressive symptoms. Sample items include "I thought my life had been a failure" and "I felt sad." The scale has demonstrated excellent internal consistency (.85) (Hann et al. 1999).

Positive and Negative Affect Schedule (PANAS; Watson et al. 1988) The PANAS consists of 10 items measuring positive affect and 10 items measuring negative affect, on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). Items were averaged to produce two subscores indicating levels of positive and negative affect. The PANAS has demonstrated excellent internal consistency, with coefficient alphas ranging from .86 to .90 for the Positive Affect scale and .84 to .87 for the Negative Affect scale (Watson et al. 1988).

Table 1 Descriptive statistics for attachment to God, coping strategies, and mental health indices

Variable	*M* (ranges)	SD	Cronbach's alpha
Secure God attachment	9.50 (3–12)	2.63	.88
Avoidant God attachment	4.44 (3–12)	2.24	.80
Ambivalent God attachment	5.63 (3–12)	2.28	.66
Emotion-focused coping strategies	25.33 (12–38)	5.65	.74
Problem-focused coping strategies	16.33 (6–24)	3.96	.78
Dysfunctional coping strategies	21.83 (12–48)	5.73	.80
Positive affect	33.01 (14–50)	8.18	.87
Negative affect	22.03 (10–48)	7.98	.86
Depression	15.90 (1–50)	9.64	.88

Results

Preliminary Analyses

Demographic variables with more than one category were converted into dichotomous variables prior to analysis. Marital status was recoded into not married ("0")/married ("1"); race was recoded into white ("0")/non-white ("1"); and religious affiliation was recoded into Christian ("0")/non-Christian ("1"). Family income was assessed as an ordinal variable (0 = ≤ $20,000/year through 5 = > $100,000); this variable was not recoded into a dichotomous variable, since higher categorical values indicate higher income brackets. Academic class was also assessed as an ordinal variable (0 = freshman; 1 = sophomore; 2 = junior; 3 = senior), as was frequency of church attendance (0 = never; 1 = 1-11x/year; 2 = 1x/month; 3 = 1x/week). Demographic variables were controlled for in statistical analyses.

Confirmatory Factor Analysis

Twelve participants (3.8% of the sample) were excluded from analyses due to large amounts of missing data. Confirmatory factor analysis (CFA) was conducted at the individual level using Mplus 7.11 (Muthén and Muthén 1998–2016) to test the measurement model specifying three attachment to God dimensions, three categories of coping strategies, two types of affect, and depressive symptoms. The measurement model (M1) provided a satisfactory fit to the data: $\chi^2 = 6263.31$ ($df = 2813$); CFI = .676; TLI = .663; RMSEA = .064 [CI = .061, .066]; SRMR = .082. We then compared this model to all models in which two factors were specified to correlate at unity. In each case, the fit decreased as indicated by statistically significant Chi-square difference tests ($p < .001$) and worsened by values that rounded to .05 or more.

Due to our focus on testing multi-mediation models, we used path analysis in the structural equation modeling (SEM) framework in Mplus 7.11 (Muthén and Muthén 1998–2016) to analyze the data. SEM allows tests of three general coping strategies, at the same time, as mediators in the relationship between dimensions of God attachment and mental health indices. In addition, SEM allows for simultaneous estimation of the parameters in the mediation models, offering more robust estimates of standard errors of parameters than piecemeal approaches. We constructed three full mediation models to test the influence of different types of God attachment on psychological variables via multiple types of coping strategies. The direct and indirect effects of secure God attachment were estimated in M_1; the direct and indirect effects of avoidant God attachment were estimated in M_2; and the direct and indirect effects of ambivalent God attachment were estimated in M_3.

Table 2 presents bivariate correlation coefficients for all study variables. As can be seen in the table, secure God attachment was significantly associated with positive affect ($r = .25$, $p < .01$) and depression ($r = -.13$, $p < .05$). Avoidant God attachment was significantly associated with positive affect ($r = -.16$, $p < .01$)

Table 2 Bivariate correlations among attachment to God dimensions, coping strategies, and mental health indices

	Secure	Avoidant	Ambivalent	Emotion-focused coping	Problem-focused coping	Dysfunctional coping	Positive affect	Negative affect	Depression
Secure	–	−.55**	−.27**	.32**	.16**	−.11	.25**	−.02	−.13*
Avoidant			.24**	−.13*	−.05	.21**	−.16**	.07	.17**
Ambivalent				.01	−.001	.24**	−.05	.16**	.18**
E-F					.70**	.35**	.32**	.18**	.08
P-F						.30**	.33**	.15*	.04
Dys							−.26**	.67**	.72**
PA								−.27**	−.43**
NA									.72**
DS									–

**$p < .01$; *$p < .05$

Secure secure God attachment, *Avoidant* avoidant God attachment, *Ambivalent* ambivalent God attachment, *E-F* emotion-focused coping, *P-F* problem-focused coping, *Dys* dysfunctional coping, *PA* positive affect, *NA* negative affect, *DS* depression

and depression ($r = .17$, $p < .01$), while ambivalent God attachment was significantly associated with negative affect ($r = .16$, $p < .01$) and depression ($r = .18$, $p < .01$).

Correlation analyses also revealed a significant association between secure God attachment and emotion-focused coping ($r = .32$, $p < .01$) and problem-focused coping ($r = .16$, $p < .01$); between avoidant God attachment and emotion-focused coping ($r = -.13$, $p < .05$) and dysfunctional coping ($r = .21$, $p < .01$); and between ambivalent God attachment and dysfunctional coping ($r = .24$, $p < .01$). Bivariate correlations between all three attachment to God dimensions and individual coping scales are presented in Table 3.

Hypotheses 1 and 2: Direct Effects

Secure attachment to God was not significantly associated with positive affect ($\beta = .117$, n.s.), negative affect ($\beta = .019$, n.s.), or depression ($\beta = .032$, n.s.) after controlling for demographic variables and church attendance (see Table 4). Avoidant attachment to God was not significantly associated with positive affect ($\beta = -.003$, n.s.), negative affect ($\beta = -.008$, n.s.), or depression ($\beta = -.008$, n.s.) (see Table 5).

Table 3 Bivariate correlations between attachment to God dimensions and Brief COPE subscales

Brief COPE subscale	Secure God attachment	Avoidant God attachment	Ambivalent God attachment
Emotion-focused strategies			
Acceptance	.00	.06	.09
Emotional support	.09	.04	−.01
Humor	−.08	.04	.10
Positive reframing	.19**	−.13*	.05
Religion	.70**	−.36**	−.15**
Problem-focused strategies			
Active coping	.13*	−.07	−.05
Instrumental support	.08	.02	.00
Planning	.15*	−.08	.04
Dysfunctional strategies			
Behavioral disengagement	−.10	.19**	.19**
Denial	.03	.10	.11
Self-distraction	−.02	.06	.23**
Self-blame	−.13*	.19**	.15**
Substance use	−.10	.13*	.04
Venting	−.09	.17**	.18*

Individual subscales were scored by summing the two items comprising the subscale

**$p < .01$; *$p < .05$

Table 4 Beta weights for secure God attachment predicting coping strategies and mental health indices

	E-F	P-F	Dys	PA	NA	DS
Age	−.007	.020	.027	−.031	.100	−.036
Sex	.121	.114	.149*	−.056	.130**	.037
Race	.039	.071	.081	.023	−.009	−.071
Academic class	.087	.041	.060	−.013	.031	.054
Marital status	.015	.074	−.077	.030	−.012	−.022
Family income	.005	−.101	.002	.040	.077	−.069
Religious affiliation	.003	.041	−.014	.127**	−.023	−.101
Church attendance	.070	.064	.055	.031	−.004	−.047
Secure God attachment	.240***	.102	−.150*	.117	.019	.032
Emotion-focused coping				.225***	−.073	−.084
Problem-focused coping				.197*	−.026	−.101
Dysfunctional coping				−.304***	.605***	.455***

*$p < .05$, **$p < .01$, ***$p < .001$

E-F emotion-focused coping, *P-F* problem-focused coping, *Dys* dysfunctional coping, *PA* positive affect, *NA* negative affect, *DS* depression

Table 5 Beta weights for avoidant God attachment predicting coping strategies and mental health indices

	E-F	P-F	Dys	PA	NA	DS
Age	.026	.033	.014	−.015	.102	−.032
Sex	.122	.115	.139*	−.057	.130**	.037
Race	.082	.084	.093	.048	−.006	−.066
Academic class	.082	.041	.046	−.018	.030	.053
Marital status	.023	.077	−.073	.033	−.012	−.022
Family income	.002	−.106	.033	.041	.076	.070
Religious affiliation	−.012	.039	−.035	.116*	−.023	−.103
Church attendance	.161*	.095	.051	.076	.001	−.036
Avoidant God attachment	−.060	−.051	.234***	−.003	−.008	−.008
Emotion-focused coping				.255***	−.069	−.077
Problem-focused coping				.193*	−.027	−.102
Dysfunctional coping				−.326***	.604***	.452***

*$p < .05$, **$p < .01$, ***$p < .001$

E-F emotion-focused coping, *P-F* problem-focused coping, *Dys* dysfunctional coping, *PA* positive affect, *NA* negative affect, *DS* depression

Likewise, ambivalent attachment to God was not significantly associated with positive affect ($\beta = .015$, n.s.), negative affect ($\beta = .009$, n.s.), or depression ($\beta = .037$, n.s.) (see Table 6).

Table 6 Beta weights for ambivalent God attachment predicting coping strategies and mental health indices

	E-F	P-F	Dys	PA	NA	DS
Age	.034	.044	.044	− .012	.104	− .026
Sex	.119	.114	.156**	− .056	.130**	.039
Race	.095	.096	.058	.049	− .004	− .062
Academic class	.075	.034	.057	− .019	.030	.052
Marital status	.026	.079	− .085	.033	− .012	− .022
Family income	.010	− .100	− .009	.041	.077	− .070
Religious affiliation	− .018	.036	.028	.117*	− .024	− .101
Church attendance	.181**	.114*	.018	.079	.004	− .031
Ambivalent God attachment	.038	.054	.253***	.015	.009	.037
Emotion-focused coping				.257***	− .068	− .073
Problem-focused coping				.193**	− .027	− .103
Dysfunctional coping				− .331***	.601***	.441***

*$p < .05$, **$p < .01$, ***$p < .001$

E-F emotion-focused coping, *P-F* problem-focused coping, *Dys* dysfunctional coping, *PA* positive affect, *NA* negative affect, *DS* depression

Hypotheses 3 and 4: Indirect Mediation Effects

As evident in Table 4, secure God attachment was significantly related to emotion-focused coping ($\beta = .240$, $p < .001$), and emotion-focused coping was significantly related to positive affect ($\beta = .225$, $p < .001$) (see Fig. 2). In addition, the indirect influence of secure God attachment on positive affect via emotion-focused coping was .054, with a 95% bias-corrected bootstrap confidence interval of [.019, .107]

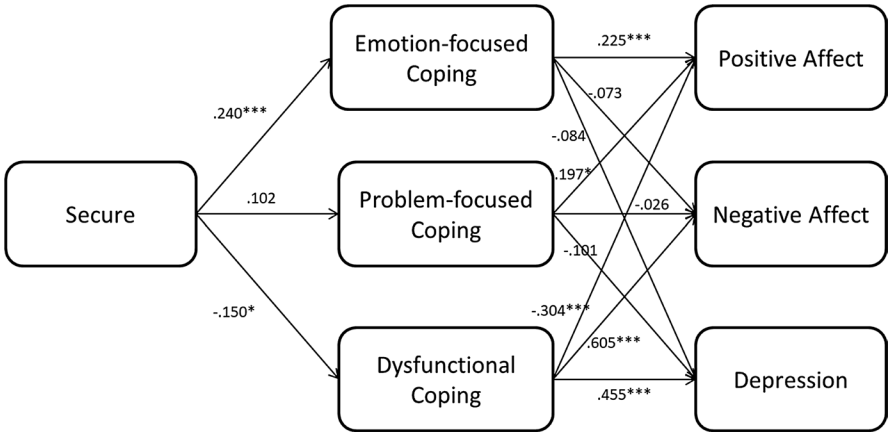

Fig. 2 Coping strategies as mediators in the association between secure God attachment and mental health indices. Note: values are beta weights

(see Table 7). This finding indicates that secure God attachment was significantly related to positive affect via emotion-focused coping.

Furthermore, secure God attachment was significantly associated with dysfunctional coping ($\beta = -.150$, $p < .05$), and dysfunctional coping was significantly associated with positive affect ($\beta = -.304$, p $< .001$), negative affect ($\beta = .605$, $p < .001$), and depression ($\beta = .455$, $p < .001$) (see Table 4). In addition, the indirect influence of secure God attachment on positive affect via dysfunctional coping was .046, with a 95% bias-corrected bootstrap confidence interval of [.008, .095]. The indirect influence of secure God attachment on negative affect via dysfunctional coping was − .091, with a 95% bias-corrected bootstrap confidence

Table 7 Indirect effects of coping strategies in the relationship between attachment to God and mental health indices

IV	Mediator	Outcome	Estimate	SE	95% CI
Secure	Emotion-focused coping	Positive affect	.054*	.023	[.019, .107]
Secure	Problem-focused coping	Positive affect	.020	.017	[− .003, .068]
Secure	Dysfunctional coping	Positive affect	.046*	.022	[.008, .095]
Secure	Emotion-focused coping	Negative affect	− .018	.014	[− .050, .005]
Secure	Problem-focused coping	Negative affect	− .003	.007	[− .024, .007]
Secure	Dysfunctional coping	Negative affect	− .091*	.041	[− .179, − .015]
Secure	Emotion-focused coping	Depression	− .020	.017	[− .062, .007]
Secure	Problem-focused coping	Depression	− .010	.007	[− .044, .002]
Secure	Dysfunctional coping	Depression	− .068*	.033	[− .142, − .013]
Avoidant	Emotion-focused coping	Positive affect	− .015	.015	[− .052, .010]
Avoidant	Problem-focused coping	Positive affect	− .010	.014	[− .046, .012]
Avoidant	Dysfunctional coping	Positive affect	− .076**	.028	[− .138, − .029]
Avoidant	Emotion-focused coping	Negative affect	.004	.005	[− .002, .017]
Avoidant	Problem-focused coping	Negative affect	.001	.005	[− .004, .018]
Avoidant	Dysfunctional coping	Negative affect	.142**	.045	[.060, .238]
Avoidant	Emotion-focused coping	Depression	.005	.007	[− .003, .028]
Avoidant	Problem-focused coping	Depression	.005	.009	[− .006, .032]
Avoidant	Dysfunctional coping	Depression	.106**	.039	[.043, .197]
Ambivalent	Emotion-focused coping	Positive affect	.010	.014	[− .016, .039]
Ambivalent	Problem-focused coping	Positive affect	.010	.013	[− .009, .045]
Ambivalent	Dysfunctional coping	Positive affect	− .084***	.022	[− .135, − .048]
Ambivalent	Emotion-focused coping	Negative affect	− .003	.004	[− .016, .003]
Ambivalent	Problem-focused coping	Negative affect	− .001	.004	[− .019, .003]
Ambivalent	Dysfunctional coping	Negative affect	.152***	.035	[.092, .227]
Ambivalent	Emotion-focused coping	Depression	− .003	.005	[− .021, .004]
Ambivalent	Problem-focused coping	Depression	− .006	.008	[− .032, .004]
Ambivalent	Dysfunctional coping	Depression	.112**	.033	[.057, .185]

*$p < .05$, **$p < .01$, ***$p < .001$

Secure secure God attachment, *Avoidant* avoidant God attachment, *Ambivalent* ambivalent God attachment

interval of [−.179, −.015], while the indirect influence of secure God attachment on depression via dysfunctional coping was −.068, with a 95% bias-corrected bootstrap confidence interval of [−.142, −.013] (see Table 7). These findings indicate that secure God attachment was significantly related to positive affect, negative affect, and depression via dysfunctional coping.

However, as can be seen in Table 4, emotion-focused coping was not related to negative affect ($\beta = -.073$, n.s.) or depression ($\beta = -.084$, n.s.), and secure God attachment was not significantly related to problem-focused coping ($\beta = .102$, n.s.). In other words, there is no indirect influence of secure God attachment on negative affect or depression via emotion-focused coping, and there is no indirect influence of secure God attachment on any of the mental health indices via problem-focused coping.

Table 5 illustrates that avoidant God attachment was significantly related to dysfunctional coping ($\beta = .234$, $p < .001$), and dysfunctional coping was significantly related to positive affect ($\beta = -.326$, $p < .001$), negative affect ($\beta = .604$, $p < .001$), and depression ($\beta = .452$, $p < .001$) (see Fig. 3). In addition, the indirect influence of avoidant God attachment on positive affect via dysfunctional coping was −.076, with a 95% bias-corrected bootstrap confidence interval of [−.138, −.029]. The indirect influence of avoidant God attachment on negative affect via dysfunctional coping was .142, with a 95% bias-corrected bootstrap confidence interval of [.060, .238], while the indirect influence of avoidant God attachment on depression via dysfunctional coping was .106, with a 95% bias-corrected bootstrap confidence interval of [.043, .197] (see Table 7). These findings indicate that avoidant God attachment was significantly related to positive affect, negative affect, and depression via dysfunctional coping. However, as can be seen in Table 5, avoidant God attachment was not significantly related to problem-focused coping ($\beta = -.051$, n.s.) or emotion-focused coping ($\beta = -.060$, n.s.).

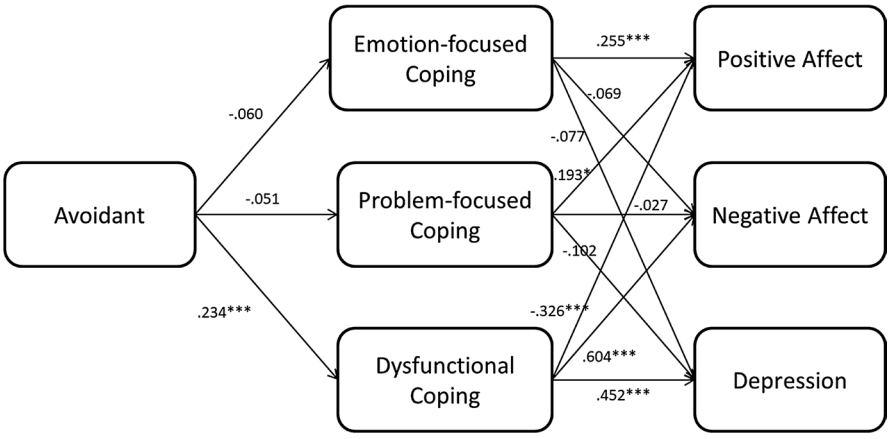

Fig. 3 Coping strategies as mediators in the association between avoidant God attachment and mental health indices. Note: values are beta weights

Thus, there is no indirect influence of avoidant God attachment on positive affect, negative affect, or depression via problem-focused or emotion-focused coping.

As can be seen in Table 6, ambivalent God attachment was significantly related to dysfunctional coping ($\beta = .253$, $p < .001$), and dysfunctional coping was significantly related to positive affect ($\beta = -.331$, $p < .001$), negative affect ($\beta = .601$, $p < .001$), and depression ($\beta = .441$, $p < .001$) (see Fig. 4). In addition, ambivalent God attachment was related to both positive and negative affect and depression via dysfunctional coping significantly. The indirect influence of ambivalent God attachment on positive affect via dysfunctional coping was −.084, with a 95% bias-corrected bootstrap confidence interval of [−.135, −.048]. The indirect influence of ambivalent God attachment on negative affect via dysfunctional coping was .152, with a 95% bias-corrected bootstrap confidence interval of [.092, .227], while the indirect influence of ambivalent God attachment on depression via dysfunctional coping was .112, with a 95% bias-corrected bootstrap confidence interval of [.057, .185] (see Table 7). However, ambivalent God attachment was not significantly related to problem-focused coping ($\beta = .054$, n.s.) or emotion-focused coping ($\beta = .038$, n.s.). Thus, there is no indirect influence of ambivalent God attachment on positive affect, negative affect, or depression via problem-focused or emotion-focused coping.

Discussion

The objectives of the present study were to determine if attachment to God dimensions were associated with depression and positive and negative affect, and to establish whether specific types of coping strategies mediate these relationships. Findings revealed no direct association between the three attachment to God dimensions and any of the mental health indices after controlling for demographic variables and church attendance.

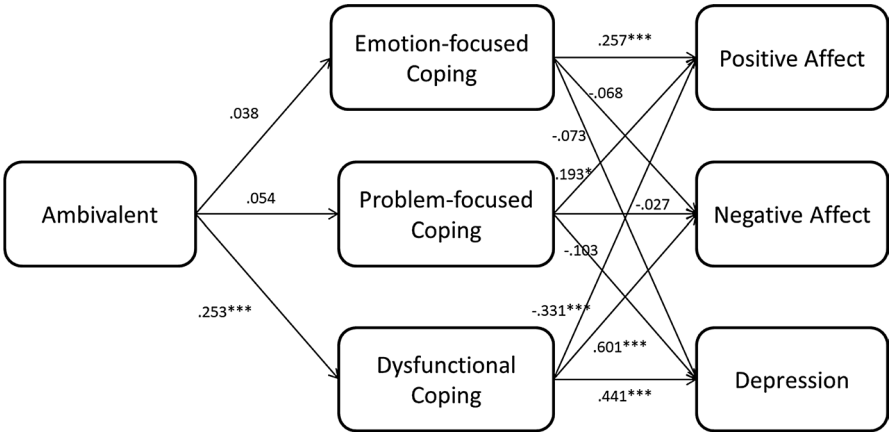

Fig. 4 Coping strategies as mediators in the association between ambivalent God attachment and mental health indices. Note: values are beta weights

In regard to our mediation hypotheses, an examination of indirect effects revealed that emotion-focused coping mediates the association between secure attachment to God and positive affect, such that secure attachment to God is associated with greater use of emotion-focused coping strategies, which, in turn, are related to higher levels of positive affect. This finding harmonizes with previous findings that identified religion and positive reframing, both emotion-focused coping strategies, per Coolidge and colleagues (2008), as mediators in the relationship between secure attachment to others and posttraumatic growth (PTG) in cancer survivors (Schmidt et al. 2012). These collective findings dovetail with results from previous studies that consistently align positive religious processes with positive psychological indices (Bush et al 1999; Parenteau et al. 2011; Phillips and Stein, 2007; for review, see Ano and Vasconcelles 2005), suggesting that positive religious appraisal/coping processes commonly exert their beneficial effects by fanning positive coping and mood states.

Furthermore, although causality cannot be determined, the present findings suggest that individuals who believe God responds to their needs may be more likely to use strategies to manage their emotions, rather than directing their efforts at altering the stressful situation. Feeling cared about by God may empower individuals on an emotional level rather than a practical one, impelling them to mollify their distress by using emotion-focused coping strategies like positive reframing or finding comfort in religion.

Dysfunctional coping strategies also mediated the relationship between secure attachment to God and all three of the mental health indices. In this regard, secure God attachment is associated with less frequent use of dysfunctional coping strategies, such as self-blame, which, in turn, are associated with higher levels of positive affect and lower levels of negative affect and depression. Feeling loved and cared for by God, therefore, may not only spur the use of adaptive coping strategies, but also curtail the use of coping strategies associated with negative psychological adjustment.

Although neither avoidant nor ambivalent attachment to God was associated with any of the mental health indices, an examination of indirect effects revealed that dysfunctional coping strategies mediated the relationship between avoidant attachment to God and depression and both positive and negative affect, as well as the association between ambivalent attachment to God and depression and both positive and negative affect. These findings suggest that perceiving God as nonresponsive, or inconsistent in His attention or caring, is associated with the use of dysfunctional coping strategies, which, in turn, are associated with negative psychological adjustment. In this regard, it is possible that feeling neglected by God, or perceiving "mixed messages" from God, may catalyze the use of dysfunctional coping strategies, such as venting, behavioral disengagement, and substance use, which may, in turn, inflate depressed mood and negative affect and/or diminish positive affect.

Limitations and Future Directions

There are some limitations that should be underscored in regard to the current study findings. First, the cross-sectional design of the study precludes the opportunity to establish causality among the examined variables. In this regard, results from the

present study indicate that specific coping strategies serve a mediating role in the relationship between attachment to God dimensions and psychological adjustment. It is also possible, however, that using specific types of coping strategies (e.g., emotion-focused) may influence how secure one feels in his/her relationship with God, which may, in turn, influence one's mental health. Future studies should employ longitudinal or quasi-experimental designs in order to elucidate the complex association among attachment to God dimensions, specific coping strategies, and psychological outcomes.

An additional limitation is the circumscribed configuration of the study sample, particularly in regard to religious affiliation, as the majority of participants identified as Christian. It is possible that attachment to God dimensions have differential relationships with specific coping strategies, contingent on religious denomination. Secure attachment to God, for example, may be associated with problem-focused, rather than emotion-focused, coping in non-Western populations. Future studies should target individuals of non-Christian religious affiliations, including Muslim and Hindu.

Limitations notwithstanding, the present study bears important empirical fruit. The present study contributes to the literature by not only establishing an association between each attachment to God dimension and specific types of coping strategies, but also identifying such strategies as mediators in the relationship between attachment to God dimensions and psychological adjustment. Moreover, while some studies have examined the association between attachment to God dimensions and spiritual/religious coping (Belavich and Pargament 2002; Cooper et al. 2009), secular coping strategies have received far less attention in this regard. With the exception of using religion, all of the coping strategies examined in the present study were secular in nature. Hence, the present findings illuminate the importance of specific types of coping strategies as they relate to a significant religious concept, and provide evidence that religious and secular factors are not necessarily polarized influences on psychological adjustment.

Compliance with Ethical Standards

Conflict of interest The authors declare that there is no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

Human and Animal Rights This article does not contain any studies with animals performed by any of the authors.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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