The International Journal for the Psychology of Religion, 20 97–108, 2010 Copyright © Taylor & Francis Group, LLC ISSN 1050-8619 print/1532-7582 online DOI 10 1080/10508611003607983



# Attachment to God, Spiritual Coping, and Alcohol Use

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We examined the effect of emotional God attachment on undergraduates' alcohol use generally and for coping purposes and whether spiritual coping styles (collaborative, deferring, and self-directing) drive this effect. As hypothesized, people who feel secure in their emotional relationship with God use significantly more deferring, more collaborative, and less self-directing coping styles than people who feel anxious-ambivalent in their emotional relationship to God. Anxious-ambivalents use significantly more deferring, more collaborative, and less self-directing coping than people who feel disengaged from God (avoidants). Secures use alcohol significantly less than anxiousambivalents, who use alcohol significantly less than avoidants. The effect of God attachment on general alcohol use was mediated by the use of self-directing (but not deferring or collaborative) spiritual coping style

According to attachment theory, the bond a child forms with his or her primary caretaker (usually the mother) can greatly affect the child's security in future relationships (Bowlby, 1969). Acting on Bowlby's theory in now-classic research, Ainsworth, Blehar, Waters, and Wall (1978) observed the behavior of infants separated from their primary caretaker and identified three distinct styles of attachment: secure, avoidant, and anxious-ambivalent. A decade later, Hazan and Shaver (1987) applied attachment theory to understand adult romantic attachment, finding that the same distinct styles map well onto behaviors exhibited in adult couples. This research suggests that attachment styles endure to some extent across the lifespan—a finding confirmed in much empirical work (Fraley & Shaver, 2000). Specifically, people with a secure attachment style are raised with consistently emotionally available caregivers, and as a result, they feel confident, loved, and secure in adult romantic relationships. People with an avoidant attachment style are raised by distant caregivers and have trouble trusting and getting close

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## 98 HERNANDEZ, SALERNO, BOTTOMS

to others in future romantic relationships. People with an anxious-ambivalent attachment style are raised by inconsistent caregivers and are constantly seeking close romantic relationships with others yet are fearful that others will not return their affection.<sup>1</sup> In this study, we focus on attachment theory as it has been applied to understand people's perceived relationship with God (Kirkpatrick & Shaver, 1990, 1992). Specifically, we sought to extend research investigating the relation between God attachment styles, the use of specific spiritual coping strategies, and well-being outcomes (e.g., Belavich & Pargament, 2002). More specifically, for the first time, we investigated whether attachment to God is related to general alcohol use and to the use of alcohol for coping purposes and whether this effect is driven by the use of various spiritual coping strategies.

## ATTACHMENT AND RELIGION

Kirkpatrick and Shaver (1990, 1992) saw parallels between qualities inherent in relationships with parents and relationships with God. Within monotheistic religions, God is seen as one who guides and protects his followers, similar to a parent. Thus, paralleling Ainsworth et al.'s (1978) theoretical conceptualization of parent-child attachment and Hazan and Shaver's (1987) conceptualization of adult romantic attachment, Kirkpatrick and Shaver theorized that there are three styles of attachment to God. They found empirical evidence that people with a secure God attachment have a relationship to God characterized by feelings of security, comfort, and satisfaction; people with an avoidant God attachment have a distant and aloof relationship to God; and people with an anxious-ambivalent God attachment have a relationship to God characterized by feelings of security for God characterized by feelings of inconsistency and confusion.

Attachment to God is related to several markers of health and well-being. For example, Kirkpatrick and Shaver (1992) found that a secure God attachment style was associated with more overall contentment and less physical illness than an insecure God attachment style. Those who were insecurely attached to God reported higher levels of anxiety, loneliness, and depression. One avenue through which God attachment may affect mental and physical health is coping strategy.

## ATTACHMENT AND SPIRITUAL COPING

Spirituality can be a source of coping strategies for those facing adversity (Hathaway & Pargament, 1990). People who use religion as a tool to cope with negative life events have

<sup>&</sup>lt;sup>1</sup>Later, Bartholomew and Horowitz (1991) reconceptualized attachment along two orthogonal dimensions of avoidance and dependence, revealing that the best categorization scheme involves four, not three, adult romantic attachment styles. The Bartholomew and Horowitz categories are secure (positive view of self and others), preoccupied (i.e., negative view of self and positive view of others—formerly anxious/ambivalent), dismissing (i.e., positive view of self and negative view of others—formerly avoidant), and fearful (i.e., negative view of self and others—formerly as ubset of avoidant). We employed the original three-group distinction to enable us to make a direct comparison to prior studies that have investigated God attachment specifically (Belavich & Pargament, 2002). That is, Kirkpatrick and Shaver (1992) conceptualized God attachment as theoretically parallel to Hazan and Shaver's (1997) adult romantic attachment and thus measured it with a three-item scale.

psychological and emotional benefits compared to people who do not (Burker, Evon, Sedway, & Egan, 2005; Kirkpatrick & Shaver, 1992; Pargament, Magyar, Benore, & Mahoney, 2005). Pargament et al. (1988) operationalized spiritual coping as the use of spirituality to solve various problems. They created the Religious Problem-Solving Scale to identify three types of spiritual coping styles: self-directing, deferring, and collaborative. People who see themselves as independent from God when coping and solving problems use a self-directing coping style. People who believe they are waiting for God to offer solutions to their problems use a deferring coping style. People who feel they work together with God to solve problems use a collaborative coping style.

Belavich and Pargament (2002) studied the relation between spiritual coping styles and God attachment in participants who were waiting for a friend or family member to get through a surgery. They found that, first, a secure God attachment style was positively related to collaborative spiritual coping and negatively related to self-directing spiritual coping. That is, the more attached people are to God, the more comfortable they are with him, and in turn the more likely they are to turn to God while dealing with negative affect. Second, an avoidant God attachment style was positively related to self-directing spiritual coping and negatively related collaborative spiritual coping. In other words, people with a more avoidant God attachment style see God as more distant and therefore emphasize personal responsibility more when solving problems, rather than relying on God for help. Third, anxious-ambivalent God attachment was positively related to self-directing spiritual coping. People with an anxious-ambivalent God attachment style experience uncertainty that leads them to construe negative life events as evidence of God's inconsistency. They angrily turn away from God, solving their problems independently. Belavich and Pargament found no relation, however, between God attachment and the use of a deferring spiritual coping style. These differences in spiritual coping styles then predicted various outcome measures (e.g., general health, adjustment, etc.). In other words, participants' God attachment style predicted the extent to which they utilized different spiritual coping styles, which in turn influenced well-being.

We sought to extend this literature by investigating the effects of God attachment and spiritual coping on alcohol use (generally and for coping purposes), new outcome variables that are relevant to health, and emotional well-being.

## ATTACHMENT AND ALCOHOL-RELATED COPING

We are the first to investigate the effect of God attachment on general alcohol use and the use of alcohol for coping, meaning the maladaptive use of alcohol to reduce negative affect, including depression and anxiety (Kassel, Wardle, & Roberts, 2007). This is an important issue to investigate within a college sample, 31% of whom meet the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; American Psychiatric Association, 1994) criteria for alcohol abuse (Knight et al., 2002).

Researchers have investigated the relation between adult romantic attachment and the frequency of alcohol use and use of alcohol-related coping. This work finds, for example, that people with an avoidant attachment style drink more frequently than people with a secure attachment style (Brennan & Shaver, 1995; Cooper, Shaver, & Collins, 1998; Doumas, Blasey, & Mitchell, 2007; Doumas, Turrisi, & Wright, 2006). Brennan and Shaver theorized that drinking provides avoidants (who do not rely on others to help manage their emotions) with a way to escape negative feelings, decrease stress, and avoid emotional attachments with others. Kassel et al. (2007) recently found that both drug and alcohol use are also related to anxious-ambivalent attachment. Specifically, the more one tends toward anxious-ambivalent attachment (but not toward secure or avoidant attachment), the more likely one is to engage in stress-motivated alcohol use. The researchers theorized that anxiously attached individuals drink alcohol to decrease their negative emotions, especially feelings of abandonment by others. Finally, McNally, Palfai, Levine, and Moore (2003) found that the effect of adult attachment style on alcohol use was mediated by coping motives, specifically, the motive of decreasing negative affect. This suggests that coping strategies might also drive the relationships we propose between God attachment and alcohol use, as described next.

## SUMMARY AND HYPOTHESES

It is clear that romantic attachment style can influence coping motives, which can in turn affect alcohol use. Research has not yet shown, however, that these findings replicate when considering God attachment style as opposed to romantic attachment style. Based on the existing literature, we hypothesized that God attachment style would affect alcohol use generally, as well as alcohol-related coping specifically. Because prior research has found that alcohol use is positively associated with avoidant (Brennan & Shaver, 1995) and anxious-ambivalent adult romantic attachment (Kassel et al., 2007), we hypothesized that compared to secures, people with insecure God attachment (avoidant or anxious-ambivalent) would be more likely to utilize alcohol-related coping and to drink alcohol more often in general.

Even more interesting questions focus on explanations for such effects, such as, How does God attachment style influence alcohol use? Because we know that the effect of romantic attachment style on alcohol use is mediated by coping motives (McNally et al., 2003), we hypothesized that the effect of God attachment on alcohol use would be mediated by spiritual coping styles. More specifically, we expected that those with an insecure attachment to God would use less collaborative and deferring religious coping strategies and more self-directing coping strategies. In turn, they would need other ways of dealing with stress and problems, and one of those ways could be the use of alcohol. In contrast, participants with a secure attachment to God would use more collaborative and deferring religious coping and less selfdirecting coping strategies. In turn, they would use their connection to God to cope and would be less in need of alternative coping activities (i.e., the use of alcohol). One could argue that self-directing coping is synonymous with constructs such as independence, autonomy, or greater internal locus of control, which might lead to less drinking. Self-directing religious problem solving, however, is related to feeling abandoned by God (Phillips, Pargament, Lynn, & Crossley, 2004). Thus, self-directing coping more likely reflects negative affect produced by feeling abandoned by God, which might explain increased drinking.

Thus, we hypothesize that the effect of God attachment on alcohol use will be mediated by self-directing, collaborative, and deferring coping styles. Specifically, we predict that people with insecure (compared to secure) attachment style will use collaborative and deferring coping styles less and self-directing coping style more, which in turn will lead to greater alcohol use.

#### METHOD

#### Participants

Participants were 429 Introductory Psychology students (40% men) at the University of Illinois at Chicago who participated in return for psychology class credit. The sample was 46% Catholic, 2% Fundamentalist Christian, 16% Protestant, 18% another type of Christian, 7% nondenominational, 6% Hindu, 3% Muslim, 2% Jewish, 0.4% Greek Orthodox, and 0.4% Sikh.<sup>2</sup> Although we did not collect race/ethnicity information from these participants, they were a representative subsample of the entire diverse group of students enrolled in Introductory Psychology at our university, who generally are 43% White, 22% Asian, 18% Hispanic, 11% Black, 0.3% Native American, and 5% other.

#### Measures

Attachment to God Scale (Kirkpatrick & Shaver, 1992). The Attachment to God Scale is derived from the Adult Romantic Attachment Scale (Hazan & Shaver, 1987) and measures participants' perceived emotional attachment to God in a forced-choice categorization format. Participants self-categorize as having a relationship with God that is either secure (comfortable and satisfying) or one of two insecure styles: avoidant (distant and aloof), or anxious-ambivalent (inconsistent and confusing). In our sample, 52% of participants identified themselves as having a secure God attachment style (n = 121), 5% as avoidant (n = 13), and 43% as anxiousambivalent (n = 100). Thus, attachment to God is measured as a categorical variable. Although our percentage of avoidants was low, there were enough avoidants in each cell of our design to support the analyses we performed (Keppel & Wickens, 2004).

Religious Problem-Solving Scale (Pargament et al., 1988). The 18-item Religious Problem-Solving Scale comprises three separate six-item scales measuring the extent to which a person utilizes self-directing, deferring, and collaborative spiritual coping styles. Participants rate how often each statement applies to them on a 5-point scale, ranging from 1 (never) to 5 (always). The participants' religious problem-solving tendencies were measured dispositionally, as opposed to in response to a particular stressor. Mean scores were calculated for each of the three scales, which, in our sample generally (and for each of the three God attachment groups separately), were internally reliable as indicated by these Cronbach's alpha values: self-directing (.88), deferring (.89), and collaborative (.94).

<sup>&</sup>lt;sup>2</sup>We excluded an additional 183 participants who indicated that they fell into at least one (and sometimes more than one) of the following categories: (a) "strongly not religious" (n = 38), (b) Atheists (n = 37) or Buddhists (n = 9), (c) one participant who answered the religious denomination question "will find later," and/or (d) participants who indicated that they never drink alcohol (n = 115). There were 183 participants who were in at least one (and sometimes more than one) of these categories. We excluded those in the first three categories because their lack of belief in God would make the attachment question irrelevant. We reconducted our analyses with the people who do not drink alcohol, and the results did not change (i.e., the significant effects of God attachment on the three types of spiritual coping and on frequency of alcohol use were still significant, all Fs > 4.07, all  $ps \le .02$ , and the nonsignificant effect of God attachment on alcohol coping was still nonsignificant, F(2, 313) = .83, p = .43.

## 102 HERNANDEZ, SALERNO, BOTTOMS

Alcohol-Related Coping Scale (Cooper, Russell, Skinner, & Windle, 1992). The Alcohol-Related Coping Scale measures social, coping, and enhancement motives for drinking alcohol. Given our focus, we included only the five items measuring coping motives. Participants rate on a 4-point scale, ranging from 1 (*never*) to 4 (*always*), the extent to which they drink (a) "to relax," (b) "to forget your worries," (c) "to feel more self-confident or sure of yourself," (d) "to help when you feel depressed or nervous," and (e) "to cheer up when you're in a bad mood." The mean of the five ratings constitutes a participant's alcohol-related coping score. This measure was internally reliable in our sample, with a Cronbach's alpha of .88.

Alcohol Frequency Scale (Cooper et al., 1992). To measure general alcohol use, participants responded to the question, "How often do you drink alcoholic beverages?" on an 8-point scale, ranging from 1 (never) to 8 (a few times a day).

Religious characteristics. We measured several aspects of participants' religious experiences. First, participants identified their religious denomination from a checklist comprising Protestant, Fundamentalist Christian, Christian (Not Protestant or Fundamentalist), Catholic, Jewish, Muslim, Hindu, Buddhist, Nondenominational, Atheist, or other (which required them to write in a religion). Second, each participant indicated religiosity by answering the question, "How religious would you consider yourself?" on a 5-point scale ranging from 1 (*strongly not religious*) to 5 (*strongly religious*). Third, giving a behavioral indication of religiosity, participants answered, "How often do you attend religious services?" on an 8-point scale ranging from 1 (*less than once a year*) to 8 (*once a day*; Davis, Smith, & Marsden, 2004).

#### Procedure

After being informed of the voluntary and anonymous nature of their participation, the participants completed a large set of unrelated measures from many Psychology Department researchers in one class period (a "mass testing session"). Among the measures were the Attachment to God Scale, Religious Problem-Solving Scale, Alcohol-Related Coping Scale, Alcohol Frequency Scale, and religious characteristics measures, in that order.

#### RESULTS

First, we present a series of separate one-way between-subjects analyses of variance with the independent variable of God attachment style (secure, avoidant, anxious-ambivalent), followed by planned comparisons. Dependent measures, presented in order next, were the three spiritual coping styles, alcohol-related coping, and general alcohol use. (See Table 1 for all means.) Finally, we present analyses outlined by Baron and Kenny (1986) to test whether the effect of God attachment on alcohol use and alcohol coping was mediated by spiritual coping styles.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>Bivariate correlations revealed that neither religiosity, r(246) = -.07, ns, nor church attendance, r(245) = -.12, ns, were related to alcohol use, and neither religiosity, r(246) = -.48, ns, nor church attendance, r(245) = -.08, ns, were related to alcohol coping. Thus, as others have done (Belavich & Pargament, 2002), we did not include either variable in our analyses.

Coping Strategies	God Attachment Style		
	Secure	Anxious-Ambivalent	Avoidant
Spiritual coping			
Self-directing	2.71 <sub>a</sub> (.91)	3.47 <sub>b</sub> (.91)	4.05 <sub>c</sub> (.85)
Deferring	2.55 <sub>a</sub> (.95)	2.07 <sub>b</sub> (.82)	1.52 <sub>c</sub> (.89)
Collaborative	3.26 <sub>a</sub> (1.02)	2.43 <sub>b</sub> (1.03)	1.60 <sub>c</sub> (1.10)
Alcohol-related coping	1.85 <sub>a</sub> (.73)	1.93 <sub>a</sub> (.77)	2.15 <sub>a</sub> (.65)
General alcohol use	3.58 <sub>a</sub> (1.39)	3.90 <sub>b</sub> (1.34)	4.46 <sub>b</sub> (1.56)

TABLE 1			
Mean Ratings of Spiritual Coping Styles, Alcohol-Related Coping, and			
General Alcohol Use as a Function of God Attachment Style			

Note. Standard deviations are noted parenthetically. Planned comparisons revealed that the means with varying subscripts within the same row differ significantly at p < .05.

Spiritual coping. There was a significant main effect of God attachment style on mean ratings of collaborative spiritual coping, F(2, 226) = 26.88, p < .05. As predicted, planned comparisons revealed that participants with a secure God attachment style used a collaborative spiritual coping style significantly more than did participants with an avoidant, F(1, 226) = 30.40, p < .05, or anxious-ambivalent God attachment style, F(1, 226) = 36.92, p < .05, who also differed significantly from each other, F(1, 226) = 7.46, p < .05.

The predicted main effect of God attachment on use of deferring spiritual coping was also statistically significant, F(2, 226) = 12.67, p < .05. Planned comparisons indicated that participants with a secure God attachment style used a deferring spiritual coping style more than did participants with an avoidant, F(1, 226) = 15.35, p < .05, or anxious-ambivalent God attachment style, F(1, 226) = 15.41, p < .05, who also differed significantly from each other, F(1, 226) = 4.27, p < .05.

Finally, the predicted main effect of God attachment was also significant for the self-directing spiritual coping variable, F(2, 226) = 25.67, p < .05. Planned comparisons revealed that, as expected, participants with a secure God attachment style used a self-directing spiritual coping style less than did participants with an avoidant God attachment style, F(1, 226) = 25.11, p < .05, or anxious-ambivalent God attachment style, F(1, 226) = 36.91, p < .05, who also differed significantly from each other, F(1, 226) = 4.64, p < .05.

Alcohol-related coping. God attachment style did not have a significant effect on alcohol-related coping, F(2, 234) = 1.11, ns, although Table 1 shows that means were in the predicted direction.

General alcohol use. There was a significant main effect of God attachment style on mean ratings of general alcohol use, F(2, 234) = 3.24, p < .05. As hypothesized, participants with a secure God attachment used alcohol less than did participants with an avoidant God attachment style, F(1, 231) = 4.82, p < .05, but only marginally less than did participants with an anxious-ambivalent God attachment style, F(1, 231) = 2.97, p = .09. Participants with an avoidant attachment style did not differ significantly from participants with an anxious-ambivalent attachment style, F(1, 231) = 1.91, ns.

## 104 HERNANDEZ, SALERNO, BOTTOMS

#### Mediation Analyses

We conducted a mediation analysis to determine whether the effect of God Attachment on alcohol use was mediated by how much one employs self-directing, deferring, and/or collaborative spiritual coping styles. Because avoidants' and anxious-ambivalents' alcohol use did not differ significantly, we combined these two groups into one "insecure" group, and our analyses compared participants with a secure versus insecure God attachment. Mediation was tested using the following procedure recommended by MacKinnon (2008), who modified Baron and Kenny's (1986) procedure to include multiple mediators in regression models. Specifically, first, we regressed the dependent variable (e.g., alcohol use) on the independent variable (e.g., God attachment). Second, we regressed each mediator (e.g., each spiritual coping style) on the independent variable (e.g., God attachment). Third, to determine that the independent variable no longer affects the dependent variable when the mediator was controlled, we regressed the dependent variable (e.g., alcohol use) on all three of the mediators (e.g., each spiritual coping style) and the independent variable (e.g., God attachment). To establish mediation: (a) the given mediator must be a significant predictor of the outcome, and (b) the effect of the independent variable (e.g., God attachment) should be weaker in the third equation in the case of partial mediation, or drop out completely in the case of full mediation (Baron & Kenny, 1986).

This analysis revealed that the use of self-directing spiritual coping fully mediated the effect of God attachment on alcohol use. Participants with an insecure God attachment used alcohol more than did participants with a secure God attachment ( $\beta = .14$ ), t(232) = 2.13, p < .05(Step 1). Participants with an insecure God attachment used self-directing coping style more  $(\beta = .41), t(227) = 6.78, p < .05;$  and deferring  $(\beta = -.29), t(227) = -4.56, p < .05;$ and collaborative coping ( $\beta = -.41$ ), t(227) = -6.71, p < .05, styles less than participants with a secure God attachment (Step 2). Finally, when God attachment and the three spiritual coping were entered into the same step (Step 3), God attachment was no longer a significant predictor of alcohol use ( $\beta = .03$ ), t(224) = .48, p = .63. Further, self-directing coping was the only significant mediator that significantly predicted alcohol use, such that greater selfdirecting coping led to increased alcohol use ( $\beta = .19$ ), t(224) = 2.12, p < .05. Deferring and collaborative coping styles were not predictive of alcohol use when self-deferring coping was controlled for (all  $\beta$ s < -.04), all ts(224) < -.44, all ps > .66. (See Figure 1.) Thus, the use of self-directing spiritual coping fully mediated the effect of God attachment on alcohol use. When God attachment was insecure (vs. secure), participants used self-directing coping more, which in turn, led to increased alcohol use.

## DISCUSSION

As hypothesized, we found that securely attached people are significantly more likely to use collaborative and deferring spiritual coping styles and less likely to use self-directing than anxious-ambivalents, who, in turn, use self-directing coping less and deferring and collaborative coping styles more than avoidants. Our findings are logical intuitively and theoretically. That is, people who are secure (vs. insecure) in their attachment to God are more comfortable deferring to God when dealing with problems, because deferring spiritual coping is characterized by the trust that insecures lack. That is, people with a secure God attachment have an additional

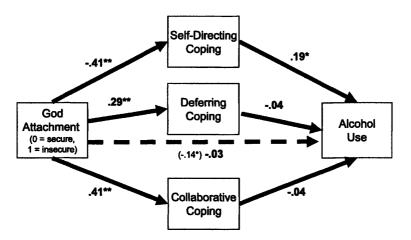


FIGURE 1 Multiple mediator model with collaborating, deferring, and self-directing coping styles as mediators of the relationship between God attachment and alcohol use. *Note.* \*p < .05. \*\*p < .001.

support source that insecurely attached people do not have. This additional support might allow securely attached people to regulate negative emotions in a healthier way. Therefore, this factor might be one mechanism underlying Kirkpatrick and Shaver's (1992) finding that a secure God attachment is associated with more overall contentment, less anxiety and depression, and even less physical illness than insecure God attachment. This reinforces Belavich and Pargament's (2002) findings insofar as we found an effect of God attachment style on an outcome that was driven by spiritual coping styles and extends their contribution by testing a novel outcome: alcohol use.

We also found, for the first time, that people with a secure God attachment style use alcohol significantly less often compared to people with an avoidant God attachment. Secures were marginally less likely to use alcohol than anxious-ambivalents, who did not differ significantly from avoidants. By showing that alcohol use is affected not only by romantic attachment but also by God attachment, we have extended Brennan and Shaver's (1995) finding that people with an avoidant romantic attachment style drink more frequently than people with other romantic attachment styles, and Kassel et al.'s (2007) finding that romantic anxious-ambivalence is associated with more frequent drinking. In addition, just as Brennan and Shaver theorized that drinking helps romantically avoidant people escape negative emotions and avoid attachments with others, people who are God avoidant might use alcohol for similar reasons and perhaps even to avoid their perceived distant relationship with God. Further, just as Kassel et al. theorized that people with an anxious romantic attachment drink alcohol to decrease their negative feelings related to abandonment by others, people with an anxious attachment to God might also drink to avoid their fears of abandonment by God.

We did not find, however, relations between God attachment and people's self-reported use of alcohol specifically to cope. This may mean that people with insecure (vs. secure) God attachment are not more likely to use alcohol specifically as a coping mechanism to regulate negative emotions, even though insecurely attached people generally drink more than secures. Alternatively, it is fair to ask how accurate people are in consciously realizing that they drink specifically for the reason of coping-which is what our measure of alcohol-related coping asked the participants to do. People are probably more accurate in reporting their general frequency of drinking than in reporting their use of drinking to cope. In fact, Klein (1992) found that college students only reported socially acceptable reasons for drinking (e.g., to celebrate with others). To admit the use of alcohol as a coping mechanism is not socially acceptable. This factor might have contributed to the findings of the present study because participants were asked about their use of alcohol to cope in the context of a questionnaire about religion. Other studies that were not in a religious context (Kassel et al., 2007; McNally et al., 2003) found links between romantic attachment style and alcohol-related coping. Also, frequent drinking might be more normative in this college sample compared to an older community sample. Thus, links between God attachment and alcohol use (generally or as a coping mechanism) might exist in an older community population but might have been masked in this sample by the normatively high base rate of drinking among college students (Knight et al., 2002). Replication of this study with an older community sample would be useful, but even so, both of these issues would have increased the possibility of a Type II error, making these findings more rather than less conservative.

Finally, we also found that the novel effect of God attachment on alcohol use was mediated by the use of self-directing spiritual coping. Participants with an insecure God attachment engaged in trust- and faith-based spiritual coping styles (i.e., collaborative and deferring) less and self-directing spiritual coping style more than did participants with an insecure God attachment. Only differences in *self-directing* coping in turn influenced alcohol use. As people's use of self-directing spiritual coping (characterized by an independence from God) increased, they drank alcohol more often. Thus, an insecure God attachment leads to greater use of self-directing coping, which in turn leads to increased drinking.

Why would self-directing coping lead to *more* alcohol use? It is, after all, a coping technique, even if it does not involve reliance on God. For example, higher self-control is associated with less problem drinking in adolescents (Williams & Ricciardelli, 1999). Self-directing coping, however, might not be measuring personal control. Phillips et al. (2004) found that selfdirecting spiritual coping style was significantly correlated with feelings of God abandonment, but uncorrelated with the perception of God as supportive, but not intervening. Further, selfdirecting coping was negatively associated with life satisfaction and spiritual well-being. Thus, it might be that the more people rely on themselves because they feel that God has abandoned them, the more they need alternatives such as alcohol to cope with negative affect. This is the first time these effects have been shown in the literature, extending the study of spiritual coping and alcohol-related coping. It would be interesting to see if future research could replicate this pattern of findings with other maladaptive coping behaviors such as drug use and disordered eating.

## CONCLUSION

This study establishes a novel link between God attachment and alcohol use. A person's God attachment style is an important factor in the use of positive (spiritual coping) and negative (alcohol use) coping techniques. We found that the effect of God attachment style on alcohol use is mediated by the extent to which self-directing spiritual coping is used. Insecure

God attachment results in more self-directing spiritual coping (i.e., greater independence from God), which in turn leads to increased alcohol use Our findings extend the specific literatures on attachment to God and pioblem-focused coping as well as the general study of the psychology of religion, the importance of which has been often noted (e.g., Paloutzian, 1996, Spilka, Hood, Hunsberger, & Gorsuch, 2003) The study of God attachment and coping mechanisms can help researchers to better understand healthy and unhealthy ways of coping and emotional well-being generally For example, this research may have implications for identifying people at risk for maladaptive substance-based coping It might also be useful for religious teachers and counselors to understand God attachment research as they try to help individuals who believe in God and who want to cope with problems in their lives within a spiritual framework (Eckert, Kimball, Hall, & McMinn, 2003) Thus, we believe our study is an important step toward understanding the influence of religion on the choice between beneficial and maladaptive coping strategies, and we hope future researchers will continue this promising line of research

## REFERENCES

- Ainsworth, M D S, Blehar, M C, Waters, E, & Wall, S (Eds) (1978) Patterns of attachment A psychological study of the strange situation Hillsdale, NJ Erlbaum
- American Psychiatric Association (1994) Diagnostic and statistical manual of mental disorders (4th ed ) Washington, DC Author

Baron, R M, & Kenny, D A (1986) The moderator-mediator variable distinction in social psychological research Conceptual, strategic, and statistical considerations *Journal of Personality and Social Psychology*, 51, 1173–1182

Bartholomew, K, & Horowitz, L M (1991) Attachment styles among young adults A test of a test of a four-category model Journal of Personality and Social Psychology, 61, 226-244

Belavich, T G, & Pargament, K I (2002) The role of attachment in predicting spiritual coping with a loved one in surgery Journal of Adult Development, 9, 13–29

Bowlby, J (1969) Attachment and loss Vol 1 Attachment New York Basic Books

Brennan, K A, & Shaver, P R (1995) Dimensions of adult attachment, affect regulation, and romantic relationship functioning *Personality and Social Psychology Bulletin*, 21, 267–283

Burker, E J, Evon, D M, Sedway, J A, & Egan, T (2005) Religious and non-spiritual coping in lung transplant candidates Does adding God to the picture tell us more? *Journal of Behavioral Medicine*, 28, 513–526

Cooper, M L, Russell, M, Skinner, J, & Windle, M (1992) Development and validation of a three-dimensional measure of drinking motives *Psychological Assessment*, 4, 123–132

Cooper, M L, Shaver, P R, & Collins, N L (1998) Attachment styles, emotion regulation, and adjustment in adolescence Journal of Personality and Social Psychology, 74, 1380–1397

Davis, J A, Smith, T W, & Marsden, P V (2004) General Social Surveys, 1972–2004 [CUMULATIVE FILE] [Computer file] ICPSR04295-v2 Chicago National Opinion Research Center [producer], 2005 Storrs, CT Roper Center for Public Opinion Research, University of Connecticut/Ann Arbor, MI Inter university Consortium for Political and Social Research [distributors], 2006 04 05

Doumas, D M, Blasey, C M, & Mitchell, S (2007) Adult attachment, emotional distress, and interpersonal problems in alcohol and drug dependency treatment *Alcoholism Treatment Quarterly*, 24, 41-54

Doumas, D, Turnsi, R, & Wright, D (2006) Risk factors for heavy drinking and associated consequences in college freshmen Athletic status and adult attachment *The Sport Psychologist*, 20, 419–434

Eckert, K G, Kimball, C N, Hall, T W, & McMinn, M R (2003) God as a secure base and haven of safety Attachment theory as a framework for understanding relationship to God In T W Hall & M R McMinn/(Eds), Spiritual formation, counseling, and psychotherapy (pp 109–128) New York Nova Science

Fraley, R C, & Shaver, P R (2000) Adult romantic attachment Theoretical developments, emerging controversies, and unanswered questions *Review of General Psychology*, 4, 132–154

- Hathaway, W. L., & Pargament, K. I. (1990). Intrinsic religiousness, spiritual coping, and psychosocial competence: A covariance structure analysis. *Journal for the Scientific Study of Religion, 29*, 423–441.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511–524.
- Kassel, J. D., Wardle, M., & Roberts, J. E. (2007). Adult attachment security and college student substance use. Addictive Behaviors, 32, 1164–1176.
- Keppel, G., & Wickens, T. D. (2004). Design and analysis: A researcher's handbook (4th edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Kirkpatrick, L. A., & Shaver, P. R. (1990). Attachment theory and religion: Childhood attachments, religious beliefs, and conversion. *Journal for the Scientific Study of Religion, 29*, 315–334.
- Kirkpatrick, L. A., & Shaver, P. R. (1992). An attachment-theoretical approach to romantic love and religious belief. Personality and Social Psychology Bulletin, 18, 266-275.
- Klein, H. (1992). Self-reported reasons for why college students drink. Journal of Alcohol and Drug Education, 37, 14-28.
- Knight, J. R., Wechsler, H., Kuo, M., Seibring, M., Weitzman, E. R., & Schuckit, M. A. (2002). Alcohol abuse and dependence among U.S. college students. *Journal of Studies on Alcohol*, 63, 263–270.
- MacKinnon, D. P. (2008). Introduction to statistical analysis. New York: Erlbaum.
- McNally, A. M., Palfai, T. P., Levine, R. V., & Moore, B. M. (2003). Attachment dimensions and drinking-related problems among young adults the meditational role of coping motives. *Addictive Behaviors*, 28, 1115–1127.
- Paloutzian, R. F. (1996). Invitation to the psychology of religion. Needham Heights, MA: Simon & Schuster.
- Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal of the Scientific Study of Religion*, 27, 90–104.
- Pargament, K. I., Magyar, G. M., Benore, E., & Mahoney, A. (2005). Sacrilege: A study of sacred loss and desecration and their implications for health and well-being in a community sample. *Journal for the Scientific Study of Religion*, 44, 59-78.
- Phillips, R. E., Pargament, K. I., Lynn, Q. K., & Crossley, C. D. (2004). Self-directing religious coping: A deistic God, abandoning God, or no God at all? *Journal for the Scientific Study of Religion*, 43, 409–418.
- Williams, R. J., & Ricciardelli, L. A. (1999). Restrained drinking and cognitive control among adolescents. Adolescence, 34, 557–565.



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