

ATTACHMENT TO GOD: THE ATTACHMENT TO GOD INVENTORY, TESTS OF WORKING MODEL CORRESPONDENCE, AND AN EXPLORATION OF FAITH GROUP DIFFERENCES

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Recent theoretical and empirical work by Lee Kirkpatrick and others has suggested that relationship with God can be fruitfully described as an attachment bond. However, this literature has been limited by the lack of a sound theoretical and psychometric scale that operationalizes the attachment to God construct. Toward that end, the paper presents data from three samples, two college and one community sample, describing the psychometric properties of the Attachment to God Inventory (AGI) as well as providing tests of the correspondence and compensation hypotheses. In general, the AGI subscales of Avoidance of Intimacy and Anxiety about Abandonment display good factor structure, internal consistency, and construct validity. Comparisons of the AGI with adulthood attachment measures appear to support, albeit weakly, a correspondence between working models of romantic others and God.

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Can a relationship with God be described within an attachment framework? The generalization of Bowlby's (1969, 1973, 1980) Attachment Theory regarding infant-caregiver bonds to adulthood love relationships has generated a wealth of research over the last two decades regarding the dynamics of personal relationships in adulthood (see Simpson & Rholes, 1998, for an edited volume providing an excellent overview of the field). However, one might question if Attachment Theory can be generalized to relationships between an individual and a Deity. And yet, recent theoretical and empirical work done by Lee Kirkpatrick and others has suggested that an attachment framework may provide an interesting line of inquiry in the psychology of religion literature.

God as an attachment figure

In describing the attachment bond, Ainsworth (1985) delineated four criteria: Maintaining proximity with the attachment figure, seeing the attachment figure as a secure base of explorative behavior, considering the attachment figure as providing a haven of safety, and experiencing separation anxiety when removed from the attachment figure (leading to grief if the attachment figure is also lost). Using these criteria, Kirkpatrick (1999) has persuasively argued that relationship with God can be described as an attachment bond. (Although Biblical passages suggest that God has been viewed in the Judeo-Christian tradi-

tion as a mother, father, and a lover, it is less clear how an attachment model describes Deity/Person relationships in other world religions, particularly if the Deity is not thought of as "personal" in nature. Consequently, in this series of studies we chose to focus our attention on the Judeo-Christian tradition, Christianity in particular. We revisit this issue in our subsequent discussions.)

Empirical research concerning attachment with God

The limited but growing empirical literature concerning attachment with God and the relationship between attachment styles and religiosity has suggested that attachment perspectives are a fruitful line of investigation in the psychology of religion research. In two studies, Kirkpatrick and Shaver (1990, 1992) found relationships between attachment style and religious variables such as religious belief, commitment, and involvement; God image; conversion experiences; and experiences of glossolalia. In addition, Kirkpatrick (1997, 1998) in two longitudinal studies, found evidence that God may serve as a compensatory attachment figure for individuals displaying insecure attachment patterns. Granqvist (1998) also found evidence that individuals may use God as a substitute attachment figure; although Granqvist suggested that this process may be more complex than previously thought. Others have found relationships between adulthood attachment and spiritual maturity (TenElshof & Furrow, 2000).

Assessing attachment to God and the "compensation or correspondence hypothesis"

Although the empirical research has suggested intriguing relationships between attachment variables and religious constructs, this literature has been limited by the lack of a psychometrically sound instrument to assess attachment to God. This void has limited researchers from addressing one of the more intriguing questions in this literature. The "correspondence or compensation" question is an attempt to determine if attachment to God basically mirrors the person's caregiver and lover attachment style (the correspondence hypothesis), or rather, if relationship with God helps the person compensate for deficient caregiver bonds, where a relationship with God fills an attachment void (the compensation hypothesis). As noted above, some evidence suggests that the compensation hypothesis may be correct

(Granqvist, 1998; Kirkpatrick, 1997, 1998). However, other evidence (e.g., Brokaw & Edwards, 1994; Hall & Brokaw, 1995; Hall, Brokaw, Edwards, & Pike, 1998), building upon Object Relations theory, suggests that the correspondence hypothesis may be correct. Specifically, this work has shown that positive relationships with caregivers are associated with more loving and nurturing God images. Conversely, it appears that negative relations with caregivers are associated with God being experienced as more demanding and authoritarian.

These conflicting lines of evidence suggest that researchers must be careful when framing the issue of correspondence versus compensation. Specifically, there is a distinction between compensatory *behavior* (e.g., conversion, religious practices) and how an individual *experiences* God (i.e., Is God perceived as loving and kind, or distant and judgmental?), and one cannot necessarily be inferred from the other. Within the attachment to God literature, this issue is even more vexing due to the lack of a psychometrically sound instrument assessing attachment to God. Consequently, comparisons between attachment to God, God imagery, and compensatory religious behavior cannot proceed until the psychometric issues are resolved.

The Attachment to God Inventory

Building upon attachment pattern classification schemes for childhood bonds with caregivers (Ainsworth, Blehar, Waters, & Wall, 1978) and adulthood love relationships (Bartholomew, 1990; Hazan & Shaver, 1987, 1990), Brennan, Clark, and Shaver (1998) have recently argued that two dimensions underlay most attachment classification models: Avoidance of Intimacy and Anxiety about Abandonment. Consequently, this model is dimensional in nature allowing individuals to vary along the two continuous dimensions of Avoidance and Anxiety. Yet, should one choose to use a typological model, these dimensions can be dichotomized to generate the classic fourfold typology of Secure, Preoccupied, Fearful, or Avoidant attachment (Bartholomew, 1990). The flexibility of this classification model is clear in that it can incorporate both dimensional and typological schemes of attachment classification. To synthesize the wide variety of adulthood attachment measures used by researchers, and to operationalize the Avoidance and Anxiety dimensions, Brennan et al. (1998) have

developed, through factor analytic work with existing attachment scales, the Experiences in Close Relationships (ECR) scale.

Following Brennan et al. (1998), we wanted to develop a measure that assessed the attachment dimensions of Avoidance of Intimacy and Anxiety about Abandonment as they apply to relationship with God. Consequently, the Experiences in Close Relationships scale became a model for our Attachment to God Inventory (AGI).

Our conceptualizations of the Avoidance and Anxiety dimensions as they apply to relationship with God were straightforward and paralleled Brennan et al.'s (1998) descriptions. Specifically, Avoidance of Intimacy with God involves themes such as a need for self-reliance, a difficulty with depending upon God, and unwillingness to be emotionally intimate with God. In contrast, Anxiety over Abandonment involves themes such as the fear of potential abandonment by God, angry protest (resentment or frustration at God's lack of perceived affection), jealousy over God's seemingly differential intimacy with others, anxiety over one's lovability in God's eyes, and, finally, preoccupation with or worry concerning one's relationship with God.

Of the three studies that follow, the first two overview the scale construction and validation of the AGI. The AGI is then used to test hypotheses concerning correspondence or compensation in both a college and community sample (Studies 2 and 3). Finally, in the adult community sample, faith group differences concerning attachment to God are explored (Study 3). Since relationship to God is often fostered within diverse religious communities, we wanted to determine if the construct was stable across religious affiliation.

STUDY 1

The focus of Study 1 was the construction of the Attachment to God Inventory (AGI). As mentioned above, we attempted to model the AGI after the Experiences in Close Relationships (ECR; Brennan et al., 1998) scale which operationalizes the attachment dimensions of Avoidance and Anxiety in adulthood love relationships. Specifically, we sought to create a self-report measure that would assess Avoidance of Intimacy with God and Anxiety about Abandonment by God. From a psychometric stance, we aimed to create a two-dimensional scale (corresponding to the Avoidance and Anxiety dimensions)

that displayed simple factor structure, internal consistency, and minimal shared variance between subscales. From a theoretical standpoint, we wanted to achieve a balance of items within each subscale to adequately sample the various themes involved in the higher-order dimensions of Avoidance and Anxiety.

METHOD

Item development

Items were initially developed to assess a variety of sub-domains subsumed under the Avoidance and Anxiety dimensions. As noted above, for the Avoidance dimension, we generated items assessing themes of difficulty depending upon God, unwillingness with expressing intimacy with God, and need for self-reliance. For the Anxiety dimension, items were generated for themes concerning angry protest, preoccupation with the relationship, fears of abandonment by God, anxiety over one's lovability, and jealousy. Using these themes, an initial item pool of 70 items was generated. When appropriate, some items closely followed the wording of items from the Experiences in Close Relationships scale. Each item was rated along a 7-point Likert scale (1 = Disagree strongly, 4 = Neutral/Mixed, 7 = Agree strongly).

Participants and procedure

Participants were 507 undergraduate and graduate students from Abilene Christian University. Abilene Christian University is a small (approximately 4500-5000 students), private, Christian institution. Sixty-two percent of the sample was female. The mean age of the sample was 20.13 ($SD = 2.89$). Eighty-five percent of the sample was Caucasian, 6.3% African-American, and 3.9% Hispanic. Sixty-seven percent of the sample was affiliated with the Churches of Christ, 11.0% Baptist, 6.5% Non-Denominational, 3.4% Catholic, and 2.2% as Methodist. Participants were asked to complete the 70-item measure. Course credit was offered for participation.

Results and Discussion

As mentioned previously, the final item selection was based on achieving the best balance between three psychometric properties simultaneously: factor structure (dominant factor loadings $\geq .40$, cross factor loadings $\leq .25$), internal consistency ($\alpha > .80$), and minimal shared variance between subscales ($r^2 < .10$). We also made theoretical decisions to

Table 1
Principal components with Varimax rotation factor loadings for AGI items

AGI Item	Factor 1: Avoidance	Factor 2: Anxiety
My experiences with God are very intimate and emotional. (R)	.74	.05
I prefer not to depend too much on God.	.68	.15
My prayers to God are very emotional. (R)	.66	-.16
I am totally dependent upon God for everything in my life. (R)	.65	.19
Without God I couldn't function at all. (R)	.64	-.01
I just don't feel a deep need to be close to God.	.64	.08
Daily I discuss all of my problems and concerns with God. (R)	.61	.25
I am uncomfortable allowing God to control every aspect of my life.	.60	.21
I let God make most of the decisions in my life. (R)	.59	.22
I am uncomfortable with emotional displays of affection to God.	.54	.15
It is uncommon for me to cry when sharing with God.	.53	-.23
I am uncomfortable being emotional in my communication with God.	.50	.05
I believe people should not depend on God for things they should do for themselves.	.50	.07
My prayers to God are often matter-of-fact and not very personal.	.47	.24
I worry a lot about my relationship with God.	-.05	.65
I often worry about whether God is pleased with me.	-.04	.65
I get upset when I feel God helps others but forgets about me.	.24	.63
I fear God does not accept me when I do wrong.	.11	.62
I often feel angry with God for not responding to me.	.17	.61
I worry a lot about damaging my relationship with God.	-.09	.61
I am jealous at how God seems to care more for others than for me.	.19	.60
I am jealous when others feel God's presence when I cannot.	.16	.56
I am jealous at how close some people are to God.	.17	.56
If I can't see God working in my life, I get upset or angry.	.05	.55
Sometimes I feel that God loves others more than me.	.20	.55
Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."	.08	.50
I crave reassurance from God that God loves me.	-.25	.50
Even if I fail, I never question that God is pleased with me. (R)	.09	.43
Factor eigenvalue:	6.51	3.88

Note: (R) = reverse scored item

ensure balanced content within each subscale. Based on these criteria, 28 items (14 Avoidance items, 14 Anxiety items) were ultimately selected to comprise the Attachment to God Inventory (see Appendix for the entire scale and scoring instructions). The final principal components analyses with Varimax rotation for these 28 items indicated that, indeed, two factors best fit the data. Factor 1 accounted for 23.2% of the variance and was labeled "Avoidance." Factor 2 accounted for 13.9% of the variance and was labeled "Anxiety." Table 1 presents the loadings of each of the items on the two higher-order factors.

Oblique rotations also were investigated but did not improve factor structure. The subscales exhibited good internal consistency, with an alpha coefficient of .86 for the Avoidance items and .84 for the Anxiety items. Finally, after summing the subscale totals, Avoidance and Anxiety were found to share only 6.1% of their variance ($r = .248$).

STUDY 2

There were two goals for Study 2. First, it was important to ascertain whether the factor structure and internal consistency estimates of the AGI sub-

scales could be maintained in a replication sample. The second goal was to compare the Attachment to God Inventory to the adult romantic attachment scale that it was closely based on, the Experiences in Close Relationships scale (Brennan et al., 1998). This comparison would provide an initial exploration into the compensation versus correspondence hypotheses.

METHOD

Participants and procedure

Surveys were administered to 118 students (89 females and 29 males) in undergraduate and graduate courses at Abilene Christian University. Students ranged in age from 18 to 46 with mean of 20.66 ($SD = 3.98$). Seventy-two percent of the sample was Caucasian, 6.9% Hispanic, 6% Asian, and 8.6% African/African American. Over half of the sample (55.1%) described themselves as Church of Christ, 18.6% Baptist, 6.8% Catholic, 6.8% Non-Denominational, and 1.7% Methodist. Course credit was offered for completion of the measures.

Measures

In addition to the 28-item Attachment to God Inventory, participants completed the 36-item Experiences in Close Relationships scale (Brennan et al., 1998). As previously mentioned, the ECR is an adult romantic attachment inventory that assesses the attachment dimensions of Avoidance and Anxiety.

RESULTS AND DISCUSSION

Replication of AGI psychometrics

As discussed above, a main agenda of Study 2 was a replication of the AGI's psychometric properties in an independent sample. Toward that end, we conducted a principal components factor analysis with Varimax rotation for the 28 AGI items. Based upon the scree plot for this analysis, a two-factor solution was deemed to be the best solution for the data. Factor 1 was labeled "Anxiety" and accounted for 17.9% of item variance. Factor 2 was labeled "Avoidance" and accounted for 15.4% of the item variance.

The AGI items performed well in the replication sample. Specifically, 26 of the 28 AGI items loaded most strongly with their original dimensions, Anxiety or Avoidance (Items 14 and 16, originally drafted and selected for the Avoidance dimension, had higher loadings on the Anxiety dimension). Overall, despite

the performance of two items, the factor structure of the AGI remained stable in the replication sample. Further, good internal consistency estimates were observed for both the AGI-Anxiety ($\alpha = .80$) and AGI-Avoidance ($\alpha = .84$) subscales.

Finally, based upon the strong two-factor solution for the AGI, we expected that the summed Anxiety and Avoidance subscales would share little of their variance. This was the case with the AGI subscales sharing only 1.4% ($r = .12$) of their variance. By contrast, in this sample the ECR Anxiety and Avoidance subscales shared 5.3% of their variance.

Comparison of AGI and ECR: Correspondence or compensation?

The additional goal of Study 2, beyond replicating AGI psychometrics, was a comparison of our attachment to God measure with the ECR, a measure of adulthood attachment in love relationships. Table 2 presents the zero-order correlations between the ECR and AGI subscales. As can be seen in Table 2, the pattern of correlations is more ambiguous than what either the correspondence or compensation hypotheses would have anticipated. Specifically, although AGI-Avoidance was unrelated with ECR-Anxiety its relationship with ECR-Avoidance, although positive, was also non-significant. However, there was some evidence of correspondence between the AGI-Anxiety and ECR-Anxiety ratings.

These correlations are intriguing in that they present one of the first direct tests of association between an attachment to God measure and an adulthood attachment measure. If any trend is apparent in this data, it is towards correspondence (particularly for the attachment dimension of Anxiety). However, the present results are by no means clear. Specifically, the pattern of associations regarding the Anxiety dimensions may be due to a developmental characteristic of the sample. That is, college students may display a pervasive preoccupation with their relationships. There is some evidence to support this in that ECR-Anxiety scores ($M = 61.89$, $SD = 19.69$) were significantly higher ($t_{117} = 6.82$, $p < .001$) than ECR-Avoidance scores ($M = 49.32$, $SD = 17.81$); similarly, AGI-Anxiety scores ($M = 47.03$, $SD = 13.11$) were also greater ($t_{117} = 3.97$, $p < .001$) than AGI-Avoidance scores ($M = 41.06$, $SD = 11.42$). Obviously, a replication in an adult population is needed to assess this possibility.

Table 2
Zero-order correlations between AGI and ECR subscales

	AGI-Anxiety	AGI-Avoidance
ECR-Anxiety	.54*	-.01
ECR-Avoidance	.19	.13

* $p < .001$ (two-tailed)

Note: AGI = Attachment to God Inventory; ECR = Experiences in Close Relationships

STUDY 3

Having replicated the psychometrics of the AGI in a religiously homogenous college sample, the goal of Study 3 was to administer the AGI to a more religiously diverse community sample. In addition, we wanted to conduct additional tests of the correspondence and compensation hypotheses in a sample that should, developmentally, be less preoccupied with establishing relational bonds with peers, romantic partners, and, for religious populations, God. Finally, we wanted to expand the construct validation of the AGI by comparing it to additional attachment and spirituality measures.

The more diverse Christian sample in Study 3 also provided an opportunity to test for potential faith group differences on the attachment to God measure. Specifically, participants were recruited from three different faith groups in the Abilene community: Church of Christ, Roman Catholic, and a Non-Denominational Charismatic congregation. Although some researchers (Granqvist, 1998; Kirkpatrick, 1997) have speculated about faith-group differences regarding attachment (adulthood and God), little quantitative research has been devoted to this issue. Consequently, our contrasts between these groups were largely exploratory in nature.

METHOD

Participants and procedure

Participants were 109 community adults recruited from adult education programs from three churches in Abilene, TX. Participants were asked to complete an assessment battery assessing demographics, attachment to God, adulthood attachment, and spiritual well-being. Thirty-eight participants were members of a Church of Christ congregation, 34 individuals participated from a Roman Catholic church, and

an additional 34 persons were recruited from a Non-Denominational Charismatic congregation (three participants failed to note their religious affiliation on the assessment battery). Sixty-one percent of the sample was female. The mean age of the participants was 38.82 ($SD = 13.00$). The ethnicity breakdown was as follows: 79.8% Caucasian, 11% Hispanic, 2.8% African-American, and 2.8% Asian-American. Approximately 82% of the sample was currently married. The majority of the sample (55.1%) had an annual income between \$21,000 and \$60,000.

Assessment instruments

As in Study 2, participants completed the 28-item Attachment to God Inventory (AGI) and the Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). Two additional measures were also used. To compare with the ECR, the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) was used as a second measure of adulthood attachment. The RQ provides four prototypical descriptions of the Secure, Fearful, Preoccupied, and Dismissing adulthood attachment styles. Respondents can either designate which of the four styles are most characteristic of themselves or they can rate each description on a continuum as to how well a particular description fits their general relational style. The latter method was adopted in this study, with participants being asked to rate each attachment description on a 1-7 Likert scale. Finally, the 20-item Spiritual Well-Being Scale (SWBS; Paloutzian & Ellison, 1982) was also used to provide a contrast between the AGI and a widely used religiosity measure. The SWBS has two 10-item subscales assessing Religious Well-Being (i.e., satisfaction with one's relationship with God) and Existential Well-Being (i.e., general satisfaction with life and having a sense of life meaning and purpose). SWBS items are rated on a 1-6 Likert scale. In the current sample, Cronbach alphas of

.88 for Religious Well-Being and .87 for Existential Well-Being were obtained.

RESULTS AND DISCUSSION

Psychometrics of the AGI

In the community sample, the scree test of the principal components analysis again generated a two-factor solution, with the Anxiety factor accounting for 30.42% of the variance between AGI items and the Avoidance factor accounting for an additional 9.83%. The factor loadings in the community sample were very similar to the pattern observed in both Study 1 and 2 (as shown in Table 1). Specifically, most AGI items displayed good simple structure, loading on their proper factors. However, as was also observed in Study 2, AGI items 14 and 16 (drafted to be Avoidance items) once again showed strong cross-factor loadings, correlating more strongly with the Anxiety factor. Due to the performance of these two items, we suggest that researchers may choose to delete these two items in future studies employing the AGI. The AGI subscale again generated good internal consistency coefficients (Avoidance = .86, Anxiety = .87). Finally, both the AGI ($r^2 = .31$) and ECR ($r^2 = .20$) subscales were slightly more interrelated than was observed in the college sample. This might have been due to the community sample displaying more secure attachment patterns, both with God and romantic partners. To explore this possibility we conducted formal contrasts between the college sample (Study 2) and the data from the community adults.

Comparison of community sample versus college sample

Interestingly, the community sample, like the college sample, displayed higher ($t_{105} = 3.63, p < .001$) ECR-Anxiety Scores ($M = 50.72, SD = 22.01$) than ECR-Avoidance Scores ($M = 42.88, SD = 19.52$). In contrast to the college sample, the community sample AGI-subscale scores for Anxiety ($M = 36.74, SD = 15.03$) and Avoidance ($M = 36.91, SD = 13.83$) did not significantly differ ($t_{108} = .13, p = .90$). Comparing across samples, the college sample scored significantly higher on ECR-Anxiety ($t_{225} = 4.31, p < .01$) and ECR-Avoidance ($t_{225} = 2.79, p < .01$). Similarly, the college sample was higher on both AGI-Anxiety ($t_{225} = 5.51, p < .01$) and AGI-Avoidance ($t_{225} = 2.47, p < .05$). Overall, comparing the two samples, the

older community sample appeared to show greater trends to secure attachments (lower Anxiety and Avoidance scores) for both adulthood and God attachments. As we suggested previously, these trends seem consistent with the developmental differences between college-age and adult populations.

Correspondence versus compensation revisited

The zero-order correlations between the AGI, ECR, SWBS, and RQ are presented in Table 3. As can be seen in Table 3, the AGI subscales were uniformly and positively correlated with both ECR subscales. In sum, these zero-order correlations were not consistent with either the correspondence or compensation hypotheses. However, the Anxiety and Avoidance subscales of both the AGI and ECR were also significantly correlated within each scale, making it difficult to determine if relationships in Table 3 were spurious (i.e., present mainly because of the shared variances within the ECR and AGI subscales). To test for these effects, we calculated second-order partial correlations between the AGI and ECR subscales. For each correlation between an AGI and ECR subscale pair, the remaining two subscales of the ECR and AGI were controlled for. For example, the partial correlation between the AGI-Anxiety and ECR-Anxiety subscales was calculated by controlling for their shared variance with AGI-Avoidance and ECR-Avoidance. These partial correlations are presented in Table 4. These partial correlations do display convergent trends, with the Anxiety subscale of the AGI sharing unique variance with the ECR-Anxiety subscale and similar trends evident for the Avoidance subscales. As formulated in this study, these trends appear consistent with the correspondence hypothesis. Specifically, once shared variance with the other attachment dimensions had been controlled for, persons with greater attachment-related anxiety in adulthood love relationships displayed greater attachment anxiety in their relationship with God (with parallel trends for the avoidance constructs). This pattern of results was roughly consistent with the trends observed between the RQ and AGI (referring back to Table 3). Specifically, lower scores on AGI Anxiety and Avoidance were associated with increased ratings of the RQ Secure description. Conversely, both AGI Anxiety and Avoidance ratings were positively associated with RQ Fearful ratings. Also showing trends for correspondence, AGI-Anxiety, but not AGI-Avoidance, was positively

Table 3
Zero-order correlations between AGI, ECR, SWBS, and RQ subscales (community sample)

	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. AGI-Anxiety	.56**	.61**	.34**	-.61**	-.69**	-.43**	.48**	.39**	.30*
2. AGI-Avoidance		.41**	.41**	-.62**	-.51**	-.29*	.40**	.20	.22
3. ECR-Anxiety			.45**	-.40**	-.57**	-.47**	.66**	.45**	.20
4. ECR-Avoidance				-.27*	-.44**	-.38**	.51**	.08	.40**
5. SWBS-Religious					-.76**	.27*	-.35**	-.29*	-.22
6. SWBS-Existential						.41**	-.48**	-.37**	-.30*
7. RQ-Secure							-.60**	-.16	-.37*
8. RQ-Fearful								.31*	.35**
9. RQ-Preoccupied									-.07
10. RQ-Dismissing									

* $p < .01$ (two-tailed) ** $p < .001$ (two-tailed)

Note: AGI = Attachment to God Inventory; ECR = Experiences in Close Relationships; SWBS = Spiritual Well-Being Scale; RQ = Relationship Questionnaire

Table 4
Partial correlations between AGI and ECR subscales

	AGI-Anxiety	AGI-Avoidance
ECR-Anxiety	.48*	.03
ECR-Avoidance	.01	.25*

* $p < .01$ (two-tailed)

Note: Each correlation represents the relationship between an AGI and ECR subscale pair controlling for the influence of the remaining AGI and ECR pair. AGI = Attachment to God Inventory; ECR = Experiences in Close Relationships

associated with Preoccupied RQ ratings. The only RQ description not displaying correspondence trends was RQ Dismissing which was positively associated with both AGI subscales. Overall, then, the correlations with the AGI and the two attachment measures—ECR and RQ—appear to provide converging evidence for the correspondence hypothesis.

Finally, the relationships between the SWBS and AGI subscales further support the construct validity of the AGI. Specifically, increased ratings on the AGI-Anxiety and AGI-Avoidance subscales were uniformly related to decreased Religious Well-Being. That is, increased AGI ratings were associated with less fulfilling and satisfying relationships with God. In a similar fashion, increased AGI ratings were also

uniformly associated with lower Existential Well-Being ratings. That is, and not surprising for a religious population, poorer attachment bonds with God appear related to trouble with finding meaning and purpose in life.

Faith group differences for attachment to God

Due to the different faith groups participating in Study 3, we undertook an analysis of potential differences among these groups for the AGI dimensions of Anxiety and Avoidance. Significant group differences were found for both AGI-Anxiety ($F_{3,104} = 9.61, p < .001$) and AGI-Avoidance ($F_{3,104} = 7.42, p < .001$). Post hoc contrasts revealed that although the Roman Catholic and Non-Denominational Charismatic

groups did not differ on AGI-Anxiety scores, each had lower scores when compared to the Church of Christ group. In addition, the Church of Christ group had significantly higher AGI-Avoidance scores when compared to the Roman Catholic and Non-Denominational Charismatic group (again, these latter two groups did not significantly differ). Although we are hesitant to read too much into these contrasts, these findings suggest that faith group practices (e.g., worship styles, devotional practices, discipleship activities) and theology (i.e., beliefs about God's nature, human sinfulness, and God's activity in the world) may influence attachment bonds with God. How specifically these factors affect, if at all, attachment to God remains a question for future research.

GENERAL DISCUSSION

Assessing attachment to God

The main goal of the studies presented here was the development and validation of the Attachment to God Inventory. This scale was theoretically derived from and closely parallels currently used adulthood attachment measures. Specifically, the AGI has two subscales assessing the attachment dimensions of Anxiety (concerning potential abandonment and lack of intrinsic lovability) and Avoidance (avoidance of intimacy and compulsive self-reliance). These two dimensions seem to underlay most attachment classifications schemes, childhood and adult. We have, in this study, suggested that they also might describe attachment bonds to the Judeo-Christian Deity (i.e., God). Across the three samples examined in this series of studies, the AGI did demonstrate stable factor structure and internal consistency estimates. Psychometrics aside, however, does the AGI assess attachment to God? We expect that skeptical readers may suggest that attachment bonds with a Deity are simply too slippery to operationalize, if they exist at all. Specifically, are we certain that attachment theory can be generalized to this type of attachment bond? In our defense we can only refer the reader back to the theoretical and empirical evidence presented at the outset. We have tentatively concluded, based on that evidence, that relationship with God may be characterized as an attachment bond. And yet, this question demands continued theoretical and empirical attention. We do not wish to reify the AGI scores. However, as an aid to future research, the AGI was developed to

provide psychology of religion researchers a tool to more directly assess attachment to God.

Correspondence versus compensation?

A secondary goal of this series of studies, beyond the construction and validation of the AGI, was to use the AGI to address the correspondence versus compensation hypotheses. Do people seek out relationship with God to compensate for deficient caregiver and adulthood attachment bonds? Or do people, when in relationship with God, simply continue employing the same working-model they use for all attachment bonds? The results from Study 2 and Study 3, when comparing the AGI to adulthood attachment measures, were equivocal. However, if any trend was noted it was for a correspondence between the adulthood and God Anxiety dimensions. That is, in both Study 2 (a college sample) and Study 3 (a community sample), the more attachment anxiety the person reported in their love relationships, the greater their expressed attachment anxiety in relationship with God. Although our findings tend to lean toward the correspondence hypothesis, what are we to do with the literature cited earlier supporting the compensation hypothesis (Granqvist, 1998; Kirkpatrick, 1997, 1998)? We suggest that the data may be consistent with both hypotheses. Specifically, individuals with deficient childhood and attachment bonds may be attracted to or seek out an attachment to God to fill an attachment void (compensation). This idea is supported by Kirkpatrick's (1997) observation that insecure (anxious and avoidant) women were more likely over the span of four years to report having "found a new relationship with God" or to have had a conversion experience. However, once this relationship is initiated, previous working-models may begin to assert themselves in this new relationship. Our results tend to support this view and others have observed similar trends (e.g., Kirkpatrick, 1998). As noted earlier, this line of argument is also supported by work using Object Relations Theory to understand relationship with God (e.g., Brokaw & Edwards, 1994; Hall & Brokaw, 1995; Hall et al., 1998). Specifically, this evidence suggests that object relations development is related to God image. In short, the motives to seek out and establish a relationship with God may have compensatory goals. However, as we have just suggested, once the relationship is established, the person's working-models may tend to manifest themselves. Consequently, in the literature we may see evi-

dence for both compensation (the need to fill an attachment void with a relationship with God) and correspondence (the convergence of working-models across all attachment bonds: Caregiver, lover, God). Should this suggestion prove correct, future researchers should take care in how they frame and test the correspondence or compensation issue.

Avoidance of intimacy

Although the trends for correspondence regarding the attachment dimension of Anxiety were relatively clear, our findings for the dimension of Avoidance were much more equivocal. Specifically, in Study 2, AGI-Avoidance failed to converge on adulthood ratings of Avoidance. Since the Avoidance dimension, as framed in the attachment literature, corresponds to a "negative views of others," we might expect that Avoidance ratings would be qualitatively different across caregiver, lover, and spiritual attachment bonds. That is, we would expect extremely negative views of God to be relatively rare in Judeo-Christian populations. However, we do believe that Avoidance themes are present in relationships with God, specifically, discomfort with depending upon God and with emotional displays of affection toward God. In short, although we believe attachment Avoidance can describe facets of relationship with God, this relationship is unique enough in that demonstrating correspondence between working-models of others (positive or negative views of: God vs. caregivers vs. lover) may be difficult to establish.

Conclusions and future directions

An obvious limitation in this series of studies, which provides an interesting line of inquiry for future research, was our exclusive focus on Christianity. How well an attachment to God framework generalizes to other world religions is an open theoretical and empirical issue. From a theological stance, one prerequisite for an attachment bond to exist in a faith would be that the believer experiences God as "personal" in nature and that the relationship with the Deity approximates the criteria of an attachment bond as described by Ainsworth (1985). Of the major monotheistic world religions, Islam and Judaism appear to have many of the features required to explore attachments to God. It would be of interest to compare these and other religions to observe how they might differ in their attachment

bonds to God. We should also expect, depending upon the theological configuration of a particular faith, that attachment frameworks in many cases would be unsuitable in describing the experiences of certain groups of believers.

Returning to our Christian samples, it would also be of interest to continue exploring faith group differences for attachment to God. The comparisons in Study 3 suggest that some Christian groups may systematically differ in their attachment bonds with God. The causes for these differences we expect are complex but probably result from different theological worldviews which regulate how believers in a particular group view and interact with God. This suggests that attachment to God may proceed in a developmental fashion as the believer grows and interacts with a single faith group or, through the lifespan, different faith groups. We are particularly intrigued by how life events might affect the attachment bond to God. Traumatic life events tend to affect believers in unpredictable ways. Some (the Old Testament character Job comes to mind), tend to turn to God as a haven of safety during difficult life experiences. Others may view the traumatic life event as evidence of God's disinterest, malevolence, or nonexistence. We expect that the prior attachment bond may be predictive of how the believer would respond.

Finally, future research should also explore how early caregiver experiences affect or are related to attachment to God. In our studies we employed an adulthood love relationship inventory to assess an individual's general attachment style. However, God imagery appears to be driven by paternal and maternal caregiving images (Brokaw & Edwards, 1994; Hall & Brokaw, 1995; Hall et al., 1998). Consequently, comparing caregiver attachments, God imagery, and attachment to God may provide a better test of the correspondence and compensation hypotheses.

To conclude, due to work by Kirkpatrick and others, increasing attention is being given in the empirical literature to the attachment to God construct. Many interesting and, in some cases, longstanding, questions continue to be debated or have yet to be examined quantitatively. The Attachment to God Inventory is offered as a tool for researchers interested in exploring this intriguing area of research.

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APPENDIX

THE ATTACHMENT TO GOD INVENTORY

The following statements concern how you feel about your relationship with God. We are interested in how you generally experience your relationship with God, not just in what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree			Neutral/Mixed			Agree
Strongly						Strongly

1. I worry a lot about my relationship with God.
 2. I just don't feel a deep need to be close to God.
 3. If I can't see God working in my life, I get upset or angry.
 4. I am totally dependent upon God for everything in my life. (R)
 5. I am jealous at how God seems to care more for others than for me.
 6. It is uncommon for me to cry when sharing with God.
 7. Sometimes I feel that God loves others more than me.
 8. My experiences with God are very intimate and emotional. (R)
 9. I am jealous at how close some people are to God.
 10. I prefer not to depend too much on God.
 11. I often worry about whether God is pleased with me.
 12. I am uncomfortable being emotional in my communication with God.
 13. Even if I fail, I never question that God is pleased with me. (R)
 14. My prayers to God are often matter-of-fact and not very personal.*
 15. Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."
 16. I am uncomfortable with emotional displays of affection to God.*
 17. I fear God does not accept me when I do wrong.
 18. Without God I couldn't function at all. (R)
 19. I often feel angry with God for not responding to me when I want.
 20. I believe people should not depend on God for things they should do for themselves.
 21. I crave reassurance from God that God loves me.
 22. Daily I discuss all of my problems and concerns with God. (R)
 23. I am jealous when others feel God's presence when I cannot.
 24. I am uncomfortable allowing God to control every aspect of my life.
 25. I worry a lot about damaging my relationship with God.
 26. My prayers to God are very emotional. (R)
 27. I get upset when I feel God helps others, but forgets about me.
 28. I let God make most of the decisions in my life. (R)

Scoring:

Avoidance = sum of even numbered items

Anxiety = sum of odd numbered items

Items 4, 8, 13, 18, 22, 26, and 28 are reverse scored

* Researchers may want to consider dropping these items (14 and 16)

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