This study examines whether adult attachment, God attachment and gender are related to perceived stress. Based on the literature on these variables, it was expected that adult and God attachment would predict perceived stress, that God attachment would have incremental validity over adult attachment in predicting perceived stress and that gender would be a moderator in the relationship between attachment and perceived stress. Two hundred seventy-six participants from a private, Christian university in Southern California completed questionnaires assessing these variables. Multivariate regression analyses indicated that adult and God attachment anxiety as well as adult attachment avoidance significantly predicted perceived stress. Furthermore, God attachment anxiety had incremental validity over adult attachment. Interestingly, gender was a suppressor variable in the relationship between attachment anxiety and perceived stress. Therefore, attachment relationships with one’s partner and God are both important in explaining perceived stress level. Gender may also play an indirect role in this relationship, though this concept should be further validated with future research.

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Stress has been studied extensively, because of its impact on psychological well-being and other variables (Bergdahl & Bergdahl, 2002; Brummett, Babyak, Mark, Clapp-Channing, Siegler, & Barefoot, 2004; Cohen, Kamarck & Mermelstein, 1983). Its importance has resulted in a large body of literature addressing psychological theory, research, and practice (Mikulincer & Florian, 1998). Many studies have focused on objective methods of measuring stress such as using an inventory that measures the amount of stress-inducing factors that are present in one’s life (Cohen et al., 1983). Yet other researchers have argued that the level of objective stress is not as important as the level of stress that one feels and experiences, which can be very different for each individual, even with the same number of objective stressors. How individuals perceive their stress level is an important factor in susceptibility to psychological, emotional, and even physical illness (Cohen et al., 1983).

While numerous studies have been published on this topic, there is still a debate regarding the personal factors and context that may influence one’s perception of stress (Bergdahl & Bergdahl, 2002; Brummett et al., 2004). Individual differences, such as genetic differences, specific aspects of life history, or social stratification, seem to play a role in the process (Lazarus & Folkman, 1984). Mikulincer and Florian (1998) emphasized that future studies should examine various “inner resources and personality characteristics” (p. 161) that may make a difference in stress appraisal and coping, both of which have implications for perceived stress level. Previous studies have looked at various aspects of personality that affect stress appraisal (Hemenover & Zhang, 2004; Stoeber & Rennert, 2008), and this study hopes to expand this body of research. Attachment and gender seem to be promising areas of study in relation to perceived stress, as explored in the next sections.

Attachment

Attachment theory has been widely accepted as a model of psychosocial and emotional development (McDonald, Beck, Allison & Norworthy, 2005). It is one of the current leading relational paradigms in...
developmental, personality, and social psychology, and is also being extended to psychology of religion research (Granqvist, 2002). In the 1940s, John Bowlby proposed that “the disruption of the early mother-child relationship should be seen as a key precursor of mental disorder” (Fonagy & Target, 2003, p. 230). Bowlby’s work indicated that many individual differences are related to one’s early ties to one’s mother figure, especially during the first twelve months of life (Bowlby, 1958). These early emotional experiences “may be regulated or dysregulated, imprinting either secure or insecure attachments and thereby a resistance against or vulnerability to future psychopathologies” (Schore, 2003, p. 835). Secure attachments will tend to develop when attachment figures are receptive and available to address the needs of the infant, whereas insecure attachments are more likely to form when the interactions are negative or unpredictable (Rholes & Simpson, 2004). Insecure attachment typically leads to difficulty in regulating stressful emotions later in life, which is often seen in one’s later adult romantic or peer relationships.

The measurement of one’s attachment in adult relationships was first introduced by Hazan and Shaver (1987). Various inventories have since been developed to measure the quality of adult attachment relationships using self-report methodology. These tests focus on current feelings and behaviors in close relationships that a person is aware of and can describe, and typically measure anxiety and avoidance in relationships, as well as various attachment styles, such as secure, anxious-ambivalent, dismissing, and fearful (Crittenden, 1988).

A newer area of attachment research is attachment to God. The concept that an individual’s relationship with God can be described as an attachment bond has prompted an exciting body of research. Kirkpatrick (1988) emphasized that Christianity and other theistic religions have a fundamental basis in the idea of God as an attachment figure. The idea of God’s availability and responsiveness to humans, especially during times of stress, seems to fit within this relational framework and opens up the possible importance of studying God attachment. Various inventories, such as the Attachment to God Inventory (AGI; Beck & McDonald, 2004), have been formulated and validated and thus have improved the measurement of this variable. Pargament (1997) explained various ways that human attachment and God attachment can interact and support either the Correspondence or the Compensation hypotheses. The correspondence hypothesis refers to a similar relationship between attachment with others and with God. Pargament (1997) demonstrated that attachment to God is often every bit as anxious/ambivalent or avoidant as relationships with parents and others. This hypothesis suggests that one’s experience with other people often matches their experience with God. On the other hand, some individuals with insecure parent attachment may be able to develop a secure attachment to God through compensation. The compensation hypothesis suggests that God is able to heal attachment wounds through conversion (Clinton & Sibcy, 2002). God can function as a primary caregiver, “our secure base, our foundation from which we can face the world” (Clinton & Sibcy, 2002, p. 149).

As adult and God attachment often show correspondence, it is important to establish God attachment as a unique construct, instead of a reflection of one’s overall attachment style. Although existing research suggests that God attachment is distinct from adult attachment (Sim & Low, 2003), research showing that God attachment has incremental validity over adult attachment in the prediction of other variables would further demonstrate its status as a distinct predictive variable.

Attachment is one of the areas currently being studied in relation to an individual’s experience of stress. Due to the theoretical basis regarding one’s early need for emotional regulation and support during times of stress and separation that characterizes attachment theory, research in this area appears to yield important insights into understanding individuals’ subjective experience of stress. Many studies have shown a connection between adult attachment and stress (Birnbaum, Orr, Mikulincer & Florian, 1997; Solomon, Mikulincer & Avitzur, 1988). One study of HIV-positive individuals found that level of perceived stress was directly related to less secure and more anxious adult attachment (Koopman et al., 2000). Adult attachment has been shown to have an effect on appraisal and coping with stressful situations, such as war-related stress, interpersonal loss, personal failure, parenthood tasks and more (Mikulincer & Florian, 1998; Mikulincer, Florian & Weller, 1993). Two specific ways that these studies and others have indicated that attachment has an effect is in how one appraises one’s stress level and how one adapts to stressful situations.
Some research also suggests a relationship between God attachment and stress. Overall, it seems that a more positive, secure relationship with God is associated with lower levels of stress. Studies have shown positive implications of secure God attachment and negative connections with insecure attachment with God, especially concerning well-being variables such as coping with stress (Belavich & Pargament, 2002; Eurelings-Bontekoe, Hekman-Van Steeg & Verschuur, 2005; Kirkpatrick & Shaver, 1990). Therefore, God attachment also appears to be a possible predictor of perceived stress.

Gender

Another area that has been studied in connection to perceived stress is gender. Concerning gender as a predictor of stress, the research is mixed. Some studies indicate that women report more stress than men, even when facing the same stressor (Bergdahl & Bergdahl, 2002; Brummett et al., 2004; Day & Livingstone, 2003), but other studies have not found a significant gender difference (e.g., Cohen et al., 1983; Lee, Keough & Sexton, 2002). This inconsistency should be further explored to clarify whether there is indeed a relationship between gender and stress. Research has brought up the possibility that women may rely more on relationships than do men, especially for coping with stress. This is suggested by literature showing average gender differences in the utilization of relationships to deal with stress (Taylor, 2000) as well as differences between males and females in the seeming effect of relationship to parents, other adults, and God on well-being (Pargament, 1997; Shek, 1999). Furthermore, research has indicated that in certain ways, women tend to respond differently to stress than men, such as the tendency to ruminate or internalize blame (Gjerde, Block & Block, 1988; Nolen-Hoeksema, 1987). Therefore, it would seem that impaired attachment/relationship stress may be more detrimental for women’s level of perceived stress than men’s. If reliance on interpersonal relationships is more of a significant factor for women, then one possibility is that attachment theory could help explain why some studies have shown gender differences in stress and some have not. The quality of participants’ attachment may be a substantial factor determining whether gender plays a role in subjective stress. Therefore, it seems that studying attachment and gender together could clarify their relationships to subjective stress. It is possible that even if gender does not have a direct connection to perceived stress, it may interact with attachment in the prediction of stress.

The Current Study

In conclusion, it is apparent from the review of current literature that adult attachment and God attachment are significant factors when predicting perceived stress. The general connection between attachment and stress has been studied extensively, but many specifics of this relationship have not been adequately explored. This study sought to measure attachment anxiety and avoidance as predictors of perceived stress in addition to determining the differential impact of each on stress. The impact of both adult and God attachment on stress was studied as well as whether there was incremental validity of God attachment over adult attachment in predicting perceived stress. Furthermore, previous research has indicated that “there are important gender differences in the link between attachment dimensions and responses to stress” which are “poorly understood . . . and require clarification by future studies” (Feeney, 1998, p. 215; Rholes, Simpson & Stevens, 1998). Though past research has been mixed regarding whether gender alone predicts stress (an inconsistency that should be further explored), it seems to support the idea that gender may interact with attachment in predicting stress, given that women appear more likely to use relational support to deal with stress (Taylor, 2000) and possibly be more impacted by relational issues than men (Nolen-Hoeksema & Girgus, 1994; Wilhelm, Roy, Mitchell, Brownhill & Parker, 2002). Based upon the review of perceived stress, attachment and gender research, hierarchical regression analysis will be used to explore the following relationships: (a) whether the predictor variables of adult and God attachment (measured by anxiety and avoidance) predict perceived stress; (b) whether gender is a moderator of adult and God attachment (anxiety and avoidance) in the prediction of perceived stress; and (c) whether God attachment (anxiety and avoidance) have incremental validity above adult attachment (anxiety and avoidance). As research has been mixed concerning whether there are gender differences in perceived stress, this potential relationship will also be studied.
METHOD

Respondents and Procedures

This research study utilized archival data from a large research project conducted at a private Christian university in Southern California in the spring of 2004. The original data were obtained by recruiting from primarily freshman university classes, through communication with the professors. The students were given class credit for completing the Spiritual Experiences Questionnaire (SEQ), which is a large set of inventories including the three inventories analyzed in this present study.

Respondents were 276 participants, 90 male, and 186 female. The age of these undergraduate students ranged from 18 to 23 (M = 18.56, SD = .67). The ethnicity of the participants was as follows: European American = 81.2%, African American = 11%, American Indian = 2.5%, Asian/Asian American = 12.7%, Mexican/Mexican American = 7.6%, Puerto Rican American = .7%, Other Latino = 4%, and Other Ethnicity = 4.7% (some participants endorsed more than one ethnicity, thus the sum of percentages does not equal 100). Most of the participants were of middle/upper-class socioeconomic status and all identified with an Evangelical Christian religious orientation, although there was some variation in specific background (e.g., Presbyterian, Charismatic).

Measures

Measurement of perceived stress. To measure perceived stress, this study utilized the Perceived Stress Scale (PSS), a self-report inventory developed by Cohen, Kamarck and Mermelstein (1983), that measures the degree to which life situations are appraised as stressful. It is a 14-item scale that results in a measurement of one's overall level of stress. PSS scores can be obtained by reversing the Likert scores on the seven positive items and summing the 14 items. The PSS has shown evidence of internal reliability (alpha coefficient = .78) in studies that included college-age and community participants. Test-retest reliability was .85 for administrations two days apart in one study and .55 for administrations six weeks apart in a different study (Cohen et al., 1983). The PSS was initially used with community samples with a junior high education, thus it is appropriate and easy to understand for many samples. The questions are general in nature and free of specific content that would narrow its use to a certain population. PSS items are intended to tap the degree to which participants find their lives to be uncontrollable, overloading and unpredictable, issues that have been shown to be central components of the experience of stress. The PSS is a better predictor of health outcomes than a test of objective stressors because it provides a more direct measure of the level of actual stress being experienced as reported by the participant, as opposed to the objective occurrence of events.

Measurement of adult attachment. To measure adult attachment, the Experiences in Close Relationships questionnaire (ECR) was used. It is a 36 question self-report inventory that has been validated to be an effective measurement of this construct. The ECR was developed by Brennan, Clark and Shaver (1998) by combining all current self-report adult attachment inventories into a single questionnaire and conducting a factor analysis after administering the questionnaire to 1,086 undergraduates. From a pool of 323 items, 12 specific attachment-related dimensions were found, each with enough high loading items to produce reliable unit-weighted scales. A higher-order factor analysis revealed two underlying dimensions which, when rotated, corresponded to the familiar Avoidance and Anxiety constructs. These constructs underlie almost every adult romantic attachment inventory and seem to be crucial to understanding individual differences in adult attachment. An analysis of the ECR found an alpha of .94 for Avoidance and .91 for Anxiety.

Measurement of God attachment. To measure God attachment, this study utilized the Attachment to God Inventory (AGI). It is a 28 item self-report measure developed by Beck and McDonald (2004) and based upon the Experiences in Close Relationships (ECR; Brennan et al., 1998) scale, which assesses avoidance and anxiety in adult love relationships. The AGI assesses avoidance of intimacy with God and anxiety about abandonment by God. Avoidance involves certain themes such as “need for self-reliance, a difficulty with depending upon God, and unwillingness to be emotionally intimate with God” (Beck & McDonald, 2004, p. 94). Anxiety involves themes such as the fear of being abandoned by God, jealousy over God’s seemingly differential intimacy with others, anxiety over being lovable in God’s eyes, and overall worry concerning one’s relationship with God (Beck & McDonald, 2004). These subscales have been shown to have good internal consistency, with an alpha coefficient of .86 for Avoidance and .84 for Anxiety, with Avoidance and Anxiety sharing
only 6.1% of their variance \((r = .248)\) (Beck & McDonald, 2004). Therefore, the AGI’s two-dimensional scale of avoidance and anxiety displayed a simple factor structure, internal consistency, and minimal shared variance between its subscales. Theoretically, there is a balance of items within each subscale to be able to sample the various themes involved in the two dimensions.

**RESULTS**

For all statistics, gender was coded using effects coding. In light of inconsistencies in previous research on gender and perceived stress, a \(t\)-test was conducted to explore whether a gender difference in perceived stress existed in this sample. The \(t\)-test indicated that there was not a significant gender difference in perceived stress \((t = 1.19, p = .24)\).

To address the relationship between the attachment variables (adult attachment anxiety and avoidance, and God attachment anxiety and avoidance) and perceived stress, as well as the potential moderating role of gender, a series of four hierarchical regressions (theory-based step-wise) were utilized. Interaction terms were created by centering (converting to z-scores) the four attachment variables, then multiplying each one with gender. In all regressions, the attachment variable and gender were entered in the first step. The relevant interaction term was entered in the second step.

The first regression was conducted with adult attachment anxiety. In the correlation matrix, adult attachment anxiety had a significant \((r = .42, p < .001)\) zero-order correlation with perceived stress (see Table 1). In the linear regression (see Table 2), both adult attachment anxiety and gender had significant partial effects in the full model \((p < .001\) and \(p < .05\), respectively). The model was able to account for 18.8% of the variance in perceived stress, \(F(3,253) = 19.54, p < .001\). The interaction between adult attachment anxiety and gender was not significant, thus gender was not a moderator.

A second regression was conducted using God attachment anxiety instead of adult attachment anxiety (see Table 3). In the correlation matrix, God attachment anxiety had a significant \((r = .43, p < .001)\) zero-order correlation with perceived stress (see Table 1). Both God attachment anxiety and gender had significant partial effects in the full model \((p < .001\) and \(p < .05\), respectively). The model was able to account for 19.9% of the variance in perceived stress, \(F(3,267) = 22.07, p < .001\). The interaction between God attachment anxiety and gender was not significant, so gender was not a moderator in this relationship.

A third regression was conducted using adult attachment avoidance (see Table 4). In the correlation matrix, adult attachment avoidance had a significant \((r = .20, p < .01)\) zero-order correlation with perceived stress. In the linear regression, only adult attachment avoidance had a significant partial effect in the full model. The model was able to account for 4.6% of the variance in perceived stress, \(F(3,253) = 4.10, p < .01\). The interaction between adult attachment avoidance and gender was not significant, so gender was not a moderator in this relationship.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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<td>1. Perceived Stress</td>
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<td>6.62</td>
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<td>.20*</td>
<td>.43*</td>
<td>.08</td>
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<td>2. AA Anxiety</td>
<td>3.48</td>
<td>1.03</td>
<td>-</td>
<td>.18*</td>
<td>.56*</td>
<td>.25*</td>
</tr>
<tr>
<td>3. AA Avoidance</td>
<td>3.01</td>
<td>1.10</td>
<td>-</td>
<td>.31*</td>
<td>.17*</td>
<td></td>
</tr>
<tr>
<td>4. GA Anxiety</td>
<td>45.29</td>
<td>13.95</td>
<td>-</td>
<td>-</td>
<td>.37*</td>
<td></td>
</tr>
<tr>
<td>5. GA Avoidance</td>
<td>39.67</td>
<td>11.70</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

\*\(p < .05\) \*\*\(p < .01\)
A fourth regression was conducted using God attachment avoidance (see Table 5). In the correlation matrix, God attachment avoidance was not significantly related to perceived stress (see Table 1). In this regression, neither God attachment avoidance, nor gender, had a significant partial effect in the full model. The model was not able to significantly account for the variance in perceived stress, $F(3, 265) = 1.41$, $p = .24$. The interaction between God attachment anxiety and gender was also not significant, thus gender was not a moderator in this relationship.

To address whether God attachment variables would show incremental validity over adult attachment variables (anxiety and avoidance) in the prediction of perceived stress, two theory-based, step-wise regressions were conducted (see Tables 6 and 7). As mentioned previously, the correlation matrix indicated that adult and God attachment anxiety had significant zero-order correlations with perceived stress ($r = .42$ and .43, $p < .001$, respectively). It also indicated that adult attachment avoidance had a significant zero-order correlation with perceived stress ($r = .20$, $p < .01$), though God attachment avoidance did not.

The first regression was conducted with adult attachment anxiety in the first step, followed by God attachment anxiety in the second step. In this model predicting perceived stress, adult attachment anxiety was a significant predictor when entered on the first step ($p < .001$, see table 6) and God attachment anxiety showed incremental variance when entered on the second step ($p < .001$). The $R^2$ change when God attachment anxiety was added to the regression model with adult attachment anxiety

### Table 2
Hierarchical Regression Analysis Summary for Adult Attachment Anxiety and Gender Predicting Perceived Stress (N = 256)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
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<th>$B$</th>
<th>$R^2$</th>
<th>$\triangle R^2$</th>
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<tbody>
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<td>Step 1</td>
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</tr>
<tr>
<td>AA Anxiety</td>
<td>2.73</td>
<td>.37</td>
<td>.43**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.82</td>
<td>.40</td>
<td>.12*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety by</td>
<td>-.37</td>
<td>.40</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05 **p < .01

### Table 3
Hierarchical Regression Analysis Summary for God Attachment Anxiety and Gender Predicting Perceived Stress (N = 270)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$B$</th>
<th>$R^2$</th>
<th>$\triangle R^2$</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA Anxiety</td>
<td>.21</td>
<td>.03</td>
<td>.44**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.74</td>
<td>.39</td>
<td>.11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety by</td>
<td>-.04</td>
<td>.03</td>
<td>-.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05 **p < .01
was .05 (p < .01). This overall model accounted for 22.8% of the variance in perceived stress, $F(2, 254) = 37.41$, $p < .001$. Therefore, God attachment anxiety exhibited incremental validity over and above adult attachment anxiety.

The second regression predicted perceived stress from adult attachment avoidance entered in the first step, followed by God attachment avoidance in the second step. In this model of adult attachment avoidance and God attachment avoidance predicting perceived stress, adult attachment avoidance had a significant partial effect in the model when entered on the first step (p < .01, see table 7). God attachment avoidance did not show incremental variance when entered on the second step. The overall model was able to account for 4% of the variance in perceived stress, $F(2, 253) = 5.33$, p < .01. Therefore, God attachment avoidance did not have incremental validity over and above adult attachment avoidance.

**DISCUSSION**

The results of the present study confirmed past research showing an overall connection between adult attachment and stress, as there was a significant statistical relationship between adult attachment anxiety and perceived stress (Birnbaum et al., 1997; Solomon et al., 1988). As past research has shown, attachment does seem to predict stress level (Birnbaum et al., 1997; Solomon et al., 1988), especially anxious attachment (Koopman et al., 2000). Furthermore, God attachment anxiety was also significantly connected to stress, as suggested by prior research (Belavich & Pargament, 2002). Gender was a significant predictor of stress when included with
adult or God attachment anxiety; however it was not a moderating variable. The fact that gender was a significant predictor of stress (when included with either adult attachment anxiety or God attachment anxiety) is notable, especially since a t-test indicated no significant gender differences in perceived stress.

One possibility that would help explain these seemingly contradictory findings, is that gender is a suppressor variable. As Horst explained:

A suppressor variable may be defined as those predictor variables which do not measure variance in the criterion measures, but which do measure some of the variance in the predictor measures which is not found in the criterion measure. They measure invalid variance in the predictor measures and serve to suppress this invalid variance. (1966, p. 363)

Conger (1974) gave another definition of a suppressor variable as, "...a variable which increases the predictive validity of another variable (or set of variables) by its inclusion in a regression equation" (pp. 36-37). In actuality, a suppressor variable appears to act as a cleansing agent for the predictor variable's variance. Thus, the predictor variable is able to explain more of the variance of the dependent variable due to the fact that the suppressor variable removes the variance in the predictor variable (Woolley, 1997). In this study, gender acts as a "pure" suppressor variable. A "pure" suppressor is when a variable is not correlated with the dependent variable, but still improves the $R^2$ when it is used. An "impure" suppressor variable is one that is only slightly correlated with the dependent variable and is able to improve $R^2$ both by directly predicting some of the variance in the dependent variable and indirectly by "cleansing" one or more of the other predictors (Woolley, 1997). The data show that gender seems to be functioning as a pure suppressor variable because it is not correlated with perceived stress, but it still improves the $R^2$ when entered with either adult attachment anxiety or God attachment anxiety. Therefore, focusing on not only anxiety or avoidance seen in relation to a romantic partner or God, but also considering gender, seems to explain stress better than utilizing any of these variables alone. Though the variance explained by gender was relatively small compared to overall attachment, it did contribute significantly to the explained variance.

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$R^2$</th>
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<tr>
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</tr>
<tr>
<td>AA Anxiety</td>
<td>2.66</td>
<td>.37</td>
<td>.42</td>
<td>.17**</td>
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<td>Step 2</td>
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<td>.03</td>
<td>.28</td>
<td>.22**</td>
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*p < .05 **p < .01

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<tr>
<th>Variable</th>
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<th>$B$</th>
<th>$R^2$</th>
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<td>.20</td>
<td>.04**</td>
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<td>Step 2</td>
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<td></td>
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<tr>
<td>GA Avoid.</td>
<td>.03</td>
<td>.04</td>
<td>.05</td>
<td>.04**</td>
<td>.002**</td>
</tr>
</tbody>
</table>

*p < .05 **p < .01

**Table 6**
Hierarchical Regression Analysis Summary for Adult Attachment Anxiety and God Attachment Anxiety Predicting Perceived Stress (N = 256)

**Table 7**
Hierarchical Regression Analysis Summary for Adult Attachment Avoidance and God Attachment Avoidance Predicting Perceived Stress (N = 255)
The results also supported the idea that adult attachment avoidance predicts perceived stress. Yet, even though adult attachment avoidance was a significant predictor, the model was only able to account for 4.6% of the variance in perceived stress, which was much lower than the variance of adult attachment anxiety (18.5%) or God attachment anxiety (19.3%) in predicting perceived stress. Overall, the results suggest that attachment anxiety is a better predictor of stress than attachment avoidance. This finding is commensurate with past research that emphasized anxiety as a significant predictor of stress, rather than avoidance (Koopman et al., 2000). Future research should be conducted to further explore this difference between attachment anxiety and attachment avoidance, and possible reasons why these variables do not seem to affect stress level in the same manner.

The incremental validity of God attachment was explored in the present study due to the controversy concerning whether God attachment is a unique factor, or if it is basically measuring the same construct as other types of attachment (Sim & Loh, 2003). The present results indicated that God attachment anxiety does have significant incremental validity over adult attachment in the prediction of perceived stress. God attachment anxiety increased the overall $R^2$ by 5.2%. Thus, it is apparent that in this study, God attachment anxiety accounts for a unique amount of variance, and is different from adult attachment anxiety. Therefore, if an individual is experiencing anxiety in both relationships, his or her predicted perceived stress level would be elevated. Conversely, the less anxious he or she is in these relationships, the lower he or she will perceive his or her stress level.

This study suggests that, on average, women who have impaired adult or God attachment, as evidenced by higher levels of anxiety, may have a slightly higher subjective stress level than men with similar levels of attachment anxiety. Past research has indicated that women seem to be differentially affected by attachment, or variables that are similar to attachment, such as relationship to parent, dysfunctional parenting or childhood abuse (Shek, 1999; Wilhelm et al., 2002). Moreover, some research has also supported that women, on average, report greater amounts of subjective stress than men, however other studies do not support this difference, as mentioned earlier in the discussion. Though the direct relationship between gender and stress was not supported in this study (which was not surprising given the aforementioned mixed findings in past research), it appears that gender may indirectly impact stress through suppressing attachment’s effect. Though the level of variance explained by gender was small, it was still significant and should be further studied. From the significant results of this exploratory study, it is apparent that there is much to glean from bringing the variables of attachment, gender and stress together in this manner.

Nevertheless, the topic of gender can be a sensitive area, due to a history of inequality between genders, and negative assumptions about female deficiency. This research study, by no means, intends to make such statements. Instead, the goal was to determine whether gender is a valuable construct to include with attachment variables in the prediction of perceived stress. Furthermore, the majority of differences shown in research between males and females are average differences, instead of categorical differences. This means that women, on average, may be higher on a certain trait than the average of men, but not every man or women will exhibit this difference. This distinction is important to note, as some studies make concrete conclusions about all men or women being a certain way, when “we are all a product of many interacting forces, including our genes, our personalities, our environment and chance,” not merely biological categories that determine our destiny (Barnett & Rivers, 2004, p. 12).

Some limitations of the study should be noted. First, as the sample was from a college-age population of primarily European American ethnicity, the results may not necessarily be generalized to other ages or ethnicities. Also, the sample was from an Evangelical Christian group, thus results might be different if individuals of other Christian backgrounds or even other theistic religions were tested. In addition, the current study employed self-report measures. Though each measure has been proven to be a valid indicator of adult and God attachment, it is still different from other tests, such as the interview method as seen in the Adult Attachment Inventory (Kaplan & Main, 1996). While self-report measures address feelings and behaviors that the individual is aware of and can describe (Hazan & Shaver, 1987), interview methods seem to grasp the deeper, unconscious, underlying qualitative nature of each attachment style (Kaplan & Main, 1996). Future studies may benefit from the use of other methodologies to further explore the relationships between these variables.
Future research should continue to investigate the discrepant pattern of findings for gender in predicting stress, as research continues to be inconsistent. Furthermore, gender as a suppressor variable when included with attachment anxiety should be further explored and validated. In addition, it is suggested that variables related to gender be used as a comparison to gender. For example, though gender was a significant predictor of stress when included with attachment anxiety, the overall model might become stronger if a measure of femininity-masculinity was included. By separating the groups based upon continuous internal personality factors, instead of just external, physical, categorical factors, there might be a greater connection with perceived stress, when included with attachment anxiety.

Overall, with more validation from future research, it is possible to use this information to be aware of a greater potentiality for higher subjective stress in certain individuals. With the knowledge gained from this study, clinicians and clergy can better understand how crucial one’s attachment experiences with God and other people can be for one’s stress level, and how gender may play an indirect role in this relationship. With more knowledge and understanding, therapy and other interventions can be more focused upon addressing these issues.

References


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