Effortful Control as a Moderator of Attachment Insecurity’s Association with Generalized Anxiety Disorder Symptoms

Undergraduate Research Thesis

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by

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Abstract

Recent research has demonstrated that effortful control (EC; an index of self-regulatory capacity) moderates the association between vulnerability factors and anxiety symptoms. One vulnerability for anxiety symptoms for which EC’s moderating impact has not yet been tested is insecure attachment. This study tested the hypothesis that attachment insecurity (both anxious and avoidant) should be more strongly associated with anxiety symptoms when EC was low versus high. Specifically this hypothesis was tested in the context of symptoms of generalized anxiety disorder (GAD). Well-established questionnaire measures of EC, anxiety, GAD symptoms, and attachment insecurity were collected from a sample of 301 undergraduates (ages 18 – 29, \( M = 19.3, \) \( SD = 1.49, \) 51% female). Regression analyses revealed that, for the most part, both anxious and avoidant attachment insecurity interacted significantly with EC in relation to both anxiety symptoms and GAD symptoms. The one exception was that avoidant attachment did not interact with EC to predict GAD symptoms. The general pattern was such that insecurity significantly predicted anxiety symptoms and GAD symptoms only when EC was low. These results suggest that self-regulatory capacity can help offset vulnerability for GAD symptoms associated with insecure (especially anxious) attachment.
Effortful Control as a Moderator of Insecure Attachment’s Association with Generalized Anxiety Disorder Symptoms

Humans are social creatures. The foundation of our success lays in the ability to effectively communicate our needs to others and to establish positive interpersonal relationships. Whenever this ability is compromised, it leaves us vulnerable to psychopathology (Carson, 1982; Safran, 1984). The eventual development of a mental disorder, however, hinges on the interaction between interpersonal tendencies, such as attachment style, and intrapersonal factors, such as the capacity for self-regulation. Only by studying and delineating these complex interactions can we hope to understand risk for psychopathology.

A helpful framework for thinking about interpersonal tendencies is attachment theory. Attachment style is the pattern of relational expectations, emotions, and behavior learned throughout one’s lifetime (Hazan & Shaver, 1987). Originating in the developmental psychology literature, the study of attachment styles has expanded to adult relationships in clinical psychology. Attachment styles develop early on in childhood, through interactions with primary caregivers, i.e. attachment figures. According to Bowlby (1980), human beings are born with an innate biological drive to seek support from attachment figures when distressed. Therefore, children experience varying levels of anxiety depending on how certain they are that their attachment figures will be there in times of need.

Interactions with attachment figures that are available in times of need, as well as sensitive and responsive to bids for support, lead to low uncertainty and thus low anxiety (Bowlby, 1980). This type of interaction pattern promotes a secure attachment style (Ainsworth, Blehar, Waters, & Wall, 1978). Children learn that their emotional signals will be responded to
sensitively and that expressing emotions leads to the attainment of goals. Thus they develop a
tendency towards open and flexible emotional expression, which are constructive and effective
strategies for dealing with threats and distress (Thompson, 1994, Mikulincer & Shaver, 2012).

Interactions with attachment figures that are unreliably and/or unsupportive, however,
can lead to chronic anxiety over the attachment figure’s unavailability/unresponsiveness
(Bowlby, 1980). This type of interaction pattern promotes an insecure attachment style
(Ainsworth et al., 1978). If attachment figures are unreliably available or responsive when the
child signals need for support, the child is at risk to develop an anxious attachment style. The
caregiver only pays attention to the child when the child seems extremely upset. Through this
type of interaction, individuals learn that exaggerating emotional distress leads to proximity and
the attainment of goals (Thompson, 1994). Mikulincer and Shaver (2012) propose that adults
with anxious attachment style rely on hyperactivating emotions and distress. When anxious,
anxiously attached individuals tend to exaggerate their anxiety in order to elicit reassurance from
attachment figures.

If attachment figures consistently neglect or reject an infant’s bids for attention and
support, the child is at risk to develop an avoidant attachment style. The caregiver only pays
attention to the child when the child is calm and avoids the child when he/she expresses
emotional arousal. Through this type of interaction, individuals learn that expressing emotions
leads to rejection and that suppressing emotions leads to proximity and the attainment of goals
(Thompson, 1994). Mikulincer and Shaver (2012) propose that adults with avoidant attachment
style rely on deactivating emotions and distress. When anxious, avoidantly attached individuals
tend to suppress their emotional displays in order to keep attachment figures at an emotional
distance. Thus insecure attachment styles are not only prompted by anxiety, but they also lead to the mismanagement of anxiety through either hyperactivation or deactivation.

Insecure attachment tends to be positively correlated with anxiety symptoms, although inconsistently. A meta-analysis by Madigan, Atkinson, Laurin, and Benoit (2013) found a significant, small to medium effect size linking insecure attachment relationships in early childhood, particularly avoidant attachment, to subsequent internalizing problems such as anxiety disorders ($d = .19$, 95% CI = [.09,.29]). Another meta-analysis by Groh, Roisman, van Ijzendoorn, Bakersman-Kranenburg, and Fearon (2012) found a small yet significant effect size between insecurity, particularly avoidant attachment, in early childhood and internalizing problems ($d = .15$). Both of these studies utilized only observational measures of attachment style and only looked at parent-child attachment. A study by Brumariu and Kerns, 2010, however, examined a wide range of attachment measures, including behavioral, observational, and questionnaires. They found that insecurely attached children endorse more symptoms of anxiety and depression than securely attached children and insecurely attached adolescents endorse more depression and anxiety than securely attached adolescents. A meta-analysis by Colonnesi et al. (2011) examined parent-child and peer-child attachment and a range of attachment measures and found that anxious attachment showed the strongest association between attachment insecurity and anxiety in childhood and adolescence ($r = .37$). However, they also found a moderate overall effect size of $r = .30$ for general insecurity. These variable findings indicate inconsistency across studies.

Elevated anxiety symptoms found in individuals who are insecurely attached have the potential to develop into anxiety disorders. Insecure attachment has been linked to the development of generalized anxiety disorder (GAD) (Warren, Huston, Egeland, & Sroufe, 1997,
GAD is characterized by excessive and uncontrollable worry for at least 6 months and at least three of the following symptoms: feeling tense, easily becoming fatigued, concentration problems, irritability, tension in muscles, or difficulty sleeping (APA, 2000). GAD is a debilitating affliction with serious consequences. The daily impairment of GAD patients is equivalent to that of individuals with chronic medical conditions such as arthritis and autoimmune diseases (Alonso et al., 2011). Unfortunately, our current understanding of the disorder is limited at best. Compared to all the other anxiety disorders, psychologists have had the least amount of success in treating GAD (Newman, Llera, Erickson, Prweorski, & Castonguay, 2013). Therefore it is important to examine the correlates of the disorder (as well as their interactions) carefully so that we can treat it more effectively and perhaps eventually prevent it.

Like the research on insecure attachment and anxiety, research on insecure attachment and GAD has been inconsistent. Bifulco and colleagues (2006) found that angry-dismissive attachment style, a subdivision of avoidant attachment style, was significantly correlated with GAD and that other attachment styles were not. Mickelson, Kessler, and Shaver (1997), on the other hand, found both avoidant and anxious attachment styles to correlate with GAD. Additionally, Brown and Whiteside (2008) also failed to find a significant difference between worry scores for avoidantly and ambivalently/anxiously attached children, indicating that both types of insecure attachment styles correlated with similarly high levels of anxiety. These inconsistencies among studies, found both in anxiety symptoms and anxiety disorders, signifying a possible moderator.
A plausible candidate for the moderator is effortful control (EC). EC is a broad measure of self-regulatory ability, including attentional, inhibitory, and activation control. Attentional control is the ability to shift and maintain attention on relevant factors while ignoring irrelevant ones. Inhibitory control is the ability to suppress an inappropriate action, especially when there is a strong urge to perform the action. Activation control is the capacity to perform an action when there is low motivation and/or a strong urge to avoid the action (Rothbart, Ahadi, Hershey, & Fisher, 2001, Evans & Rothbart 2007). EC more generally encompasses the ability to “inhibit a dominant response and/or to activate a subdominant response, to plan, and to detect errors” (Rothbart & Bates, 2006).

Studies show that EC provides the ability to overcome vulnerabilities and thus decrease the likelihood of experiencing maladjustment. For example, according to Lengua, Bush, Long, Kovacs, & Trancik (2008), maternal risk and environmental risk were related to higher internalizing and externalizing problems (respectively) in children only when the child had low EC but not when the child had high EC. For children high on EC, inconsistent discipline was unrelated to externalizing problems while for children low on EC it predicted increases in externalizing problems. In other words, interpersonal and environmental risks contributed to maladjustment only if the child had low capacity for self-regulation.

EC interacts not only with risk factors, but also with vulnerability factors. The contribution of fearfulness and frustration to risk for internalizing and externalizing disorders (respectively) in adolescents was weakened by high levels of EC (Oldehinkel, Hartman, Ferdinand, Verhurst, & Ormel, 2007). Similarly, low positive affectivity and high negative affectivity were associated with higher levels of depressive symptoms only when EC was low (Verstraeten, Vasey, Raes, & Bijdertbier, 2009). This result highlights the fact that an individual
with low capacity for positive emotions and high tendency to experience negative emotions is more likely to develop depression when his/her capacity for self-regulation is low versus high. Furthermore, positive affectivity and attentional control, a facet of EC, moderate the link between negative affectivity and depressed mood, such that negative affectivity predicts increases in depressed mood over time only when both positive affectivity and EC are low (Vasey, Harbaugh, Mikolich, Firestone, & Bijebeier, 2013). Thus the relationship between vulnerability factors and maladjustment (internalizing and externalizing problems) was mitigated by higher levels of the protective factor (EC).

Evidence suggests EC is similarly protective against vulnerability to anxiety. For example, Derryberry and Reed (2002) reported difficulty disengaging from threatening stimuli only in individuals with high trait anxiety and low attentional control. Individuals with high trait anxiety and high attentional control were able to override their bias towards threat when given sufficient time for control of attention.

Although these studies demonstrating EC’s protective potential, none of them examine attachment insecurity as the vulnerability factor. Furthermore, much of the EC literature is done on children and adolescents. Thus I would like to examine this interaction using attachment insecurity as the vulnerability factor and adult samples. The question I seek to answer is whether EC can moderate the relationship between attachment insecurity and GAD symptoms in adults.

I propose that the severity of GAD symptoms will depend on EC and type of insecure attachment. Given EC’s potential to protect against vulnerability, I predict that the association between attachment insecurity (both anxious and avoidant) and GAD symptoms will be moderated by EC such that risk will be higher when EC is low versus high. The purpose of this
correlational study is to examine whether EC can act as a moderator of the association between adult attachment insecurity and GAD symptoms.

**Method**

**Participants and Procedure:**

I recruited participants through the OSU Psychology Department’s Research Experience Program (REP). There were a total of 302 participants. 52.1% of the sample self-identified as female and the age range was 18 – 29 ($M = 19.3, SD = 1.5$). The sample was mostly Caucasian (80.2%, African American: 1.7%, Asian American: 6.6%, Latino: 2.6%, Mixed Ethnicity: 2.3%, Other Ethnicity: 6.3%). The participants earned credit in their Introductory Psychology course for their participation. Participants filled out a series of questionnaires during a 30 minute session through Survey Monkey, a secure web-based data collection service. The order of the questionnaires was randomized between participants. They accessed this survey online from their own computers. I did not collect any identifying information during this online session. However, in order to compensate all participants, I gave each participant an individualized link to the survey. Once participants accessed these individualized links, I gave them credit regardless of whether they completed the study. All compensation was delivered online through the REP website.

**Materials:**

**Generalized Anxiety Disorder Questionnaire – IV (GAD-Q-IV).** GAD symptom severity was measured through the GAD-Q-IV, a 9-item self-report diagnostic measure based on the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition. The questionnaire consists of 4 Yes or No questions (e.g. “Do you experience excessive worry?”), two Likert scale ratings ranging from 0 (none) to 8 (very severe) (e.g. “How much do worry and physical
symptoms interfere with your life, work, social activities, family, etc.?”), a space to list frequent worry topics, and a checklist of physiological symptoms such as restlessness and irritability. In scoring the questionnaire, I used the method detailed in Newman et al. (2002). I also used their suggested cutoff of 5.7 as an indicator of clinical severity. This cutoff provides the optimal balance between sensitivity (83%) and specificity (89%). The GAD-Q-IV demonstrates test-retest reliability, convergent and discriminant validity, and kappa agreement of .67 with structured clinical interviews (Newman et al., 2002).

Effortful Control Scale – Persistence/Low Distractibility subscale (ECS-P/LD). I measured effortful control through the ECS-P/LD subscale, a 12-item self-report scale used to assess a person’s capacity for attentional control and activation control (Lonigan & Phillips, 2001). I only used the P/LD subscale from the ECS because it encompasses facets of EC that are most relevant to anxiety. Lack of attentional control is linked to internalizing symptoms. The other subscale of the ECS, the Impulsivity subscale, encompasses inhibitory control, which is more clearly linked to externalizing symptoms (Muris & Ollendick, 2005). Furthermore, the P/LD is more commonly used in studies and there is scant research on the psychometric properties of the other subscale. Respondents rate the items on a Likert scale ranging from 1 (not at all) to 5 (very much). All of the items on the P/LD subscale are reversely scored, meaning that a lower score indicates higher effortful control. Examples of questions found on the ECS P/LD subscale include: “I do not complete my homework” and “When I don’t get what I want, it’s hard to enjoy something else” (Lonigan & Phillips, 2001). The ECS-P/LD subscale possesses adequate internal consistency ($\alpha = .82$) (Vasey et al., 2013).

Experience in Close Relationships Questionnaire – Short form (ECR-S). I measured attachment style through the ECR-S, a 12-item self-report questionnaire adapted from the long-
form 36-item version. This questionnaire assesses a general pattern of adult attachment. Respondents use a 7-point Likert scale, ranging from 1 (disagree strongly) to 7 (agree strongly). The questionnaire is divided into anxious and avoidant subscales. The avoidant subscale includes questions like: “I prefer not to show a partner how I feel deep down.” It also includes reversely scored questions: “I am very comfortable being close to romantic partners.” The anxious subscale includes questions such as: “I need a lot of reassurance that I am loved by my partner.” It also includes reversely scored questions: “I do not often worry about being abandoned.” Researchers found validity to be equivalent for the short and the original versions of the ECR across studies. Additionally, correlations between the anxiety subscale and the avoidance subscale were $r = .19$ for the short version, indicating that these two measures reflect distinct dimensions of attachment. Furthermore, the test-retest reliability of the short version was $r = .80$ over a 1-month interval (Wei, Russell, Mallinckrodt, & Vogel, 2007).

**Depression, Anxiety, and Stress Scales — Anxiety subscale (DASS-A).** I also included the DASS-A as a measure of anxiety. It is a 14 item subscale of the larger 42 item self-report questionnaire. The DASS questionnaire is meant to measure the negative emotional states of depression, anxiety, and stress, hence the three subscales. The questions are Likert scales, ranging from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). Examples of questions from the anxiety subscale include: “I was aware of dryness of mouth” (autonomic arousal), “I had a feeling of shakiness, i.e. legs going to give way” (skeletal musculature), “I feared that I would be “thrown” by trivial but unfamiliar task” (situational anxiety), and “I felt terrified” (subjective experience of anxious affect). The DASS –A shows satisfactory psychometric properties, including a coefficient alpha of .84 (Lovibond & Lovibond, 1995). I expected DASS-A to behave the same way as the GAD-Q-IV.
Results

Preliminary Analyses

All analyses reflect complete data from 292 participants (96.7% of the original sample). Data were missing completely at random (Little’s MCAR test: $p = .89$), showing that participants with incomplete data were not significantly different from participants with complete data on any variable. Table 1 presents the descriptive statistics and correlations for all measures.

Data Analytic Strategy

I tested study hypotheses through multiple linear regression (MLR) analyses. All predictor continuous variables in the regression models were zero centered through standardization. Each MLR analysis involved two hierarchical steps. For example, in the model predicting GAD symptoms from anxious attachment and EC, in Step 1 I included Anxious Attachment and EC, as well as Gender and Avoidant Attachment, which were included as covariates. In Step 2 I added the Anxious Attachment x EC interaction. All models were tested through the PROCESS utility for SPSS, which was also used to probe and interpret interactions. In order to be more conservative, I used the heteroscedasticity-consistent standard error estimator in PROCESS (Hayes, 2013).

Prediction 1: Anxious Attachment x EC Predicts Anxiety Symptoms

GAD-Q-IV.

The overall model was significant ($R^2 = .27$, $p < .001$), meaning that EC, gender, attachment avoidance, and attachment anxiety explain a significant portion of the variability in GAD-Q-IV scores. Consistent with the hypothesis, the interaction between EC and anxious attachment was significant ($p = .04$), meaning that the correlation between anxious attachment
and GAD symptoms depended on EC. As displayed in Figure 1, when EC was high, there was not a significant relationship between anxious attachment and GAD symptoms and the GAD-IV-Q scores did not cross the Newman threshold \((B = .20, p = .43)\). When EC was low, however, there was a significant positive relationship between insecurity and GAD symptoms. This is in agreement with the prediction. As insecurity increased so did GAD symptom severity \((B = .83, p < .001)\). The coefficient for the interaction term was significantly positive for EC < .22 SDs. Table 2 presents the statistics for all anxious attachment MLR models.

**DASS-Anxiety.**

The overall model was significant \((R^2 = .25, p < .001)\), meaning that EC, gender, attachment avoidance, and attachment anxiety explain a significant portion of the variability in DASS-A scores. Although not significant, there was a trend for EC and anxious attachment to interact in the predicted manner \((p = .08)\). When EC was high, there was not a significant relationship between anxious attachment and DASS-A symptoms \((B = .12, p = .60)\). When EC was low, however, there was a significant positive relationship between anxious insecurity and anxiety \((B = .78, p < .01)\) (Figure 2). The coefficient for the interaction term was significantly positive for EC < .23 SDs.

**Prediction 2: Avoidant Attachment x EC Predicts Anxiety Symptoms**

**GAD-Q-IV.**

Contrary to expectation, the interaction between avoidant attachment and EC was not significant \((p = .66)\), indicating that the correlation between avoidant attachment and GAD symptom severity did not depend on EC. The correlation between attachment avoidance and GAD symptoms was not significant, regardless of level of EC. Table 3 displays all the statistics for the avoidant attachment MLR models.
DASS-Anxiety.

As expected, the interaction between avoidant attachment and EC was significant \((p = .01)\), indicating that the correlation between avoidant attachment and DASS anxiety did depend on EC. When EC was high, there was not a significant relationship between avoidant attachment and DASS-A symptoms \((B = -.23, p = .30)\). When EC was low, however, there was a significant positive relationship between avoidant insecurity and anxiety. As avoidant insecurity increased so did GAD symptom severity \((B = .64, p < .01)\) (Figure 3). The coefficient for the interaction term was significantly positive for EC < -.24 SDs and significantly negative for EC > 2.14 SDs.

Discussion

Insecure attachment, the uncertainty that an attachment figure will be there in times of need, fosters not only anxiety but also the mismanagement of anxiety symptoms (Ainsworth et al., 1978, Bowlby, 1980). Individuals with anxious attachment tend to hyperactivate anxiety when distressed while those with avoidant attachment tend to deactivate anxiety when distressed (Mikulincer & Shaver, 2012). While some studies find a relationship between both styles of insecure attachment and anxiety symptoms, the conclusions are far from conclusive, as evidenced by small effect sizes in meta-analyses and inconsistent findings regarding which style of insecure attachment is most relevant to anxiety disorders (Brumariu & Kerns, 2010, Colonnesi et al., 2011, Groh et al., 2012, Madigan et al., 2013).

Elevated levels of anxiety can lead to the development of anxiety disorders. The least understood and successfully treated of the anxiety disorders is GAD (Newman et al., 2013). The research on the relationship between insecure attachment and GAD is also inconsistent, especially with regard to which style of insecure attachment is most associated with the disorder (Mickelson et al., 1997, Warren et al., 1997, Muris et al., 2001, Bifulco et al., 2006, Brown &
Whiteside, 2008, Cassidy et al., 2009). The inconsistent findings across these studies, as well as the anxiety studies previously mentioned, suggest the influence of a moderator. EC is a good candidate for that role due to its well-established influence as a modulator of the link between other risk factors/vulnerabilities and maladjustment (Oldehinkel et al., 2007, Lengua et al., 2008, Verstraeten et al., 2009, Vasey et al., 2013). Thus, I predicted that EC would moderate the association between anxious attachment and anxiety symptoms, such that it is significant and positive only when EC is low. I also predicted the same pattern for avoidant attachment.

Results were largely consistent with these hypotheses. Both anxious and avoidant attachment interacted with EC in predicting anxiety symptoms as measured by the DASS-Anxiety scale, although the interaction was only marginally significant in the case of anxious attachment. In both cases, attachment insecurity was significantly associated with anxiety symptoms when EC was low but not when it was high. However, only anxious attachment interacted significantly with EC in relation to GAD symptom severity. High levels of anxious attachment predicted GAD symptom severity above the clinical cutoff only when EC was low. Unexpectedly, EC did not moderate the association between avoidant attachment and GAD symptoms.

These results suggest that EC does indeed have the potential to mitigate risk for anxiety symptoms due to both anxious and avoidant styles of attachment insecurity. However, it is important to consider why the interaction between attachment insecurity and EC was weaker and only marginally significant when predicting anxiety symptoms in the case of anxious attachment (compared to avoidant attachment). Although used to capture anxiety broadly construed, DASS-A emphasizes autonomic arousal (Brown, Chorpita, Korotitsch, & Barlow, 1997). When experiencing autonomic arousal, avoidantly attached individuals are motivated to deactivate the
arousal. The relationship between avoidant attachment and DASS-A symptoms started to reverse when EC was high (and reached significance when EC was above 2 standard deviations). One interpretation of this finding is that higher EC enables more successful deactivation of autonomic arousal in avoidantly attached individuals. Those who are low on EC, however, have a difficult time deactivating autonomic arousal, leading to frustration and increases in arousal due to failed attempts. Anxiously attached individuals, on the other hand, tend to hyperactivate autonomic arousal. Those who are low on EC will resort to hyperactivating while those who are high on EC will be able to overcome the tendency to hyperactivate. However, there is no trend for the relationship to reverse with higher EC for anxiously attached individuals. Thus it appears that high EC is more protective to avoidantly attached individuals than anxiously attached individuals, at least in regards to autonomic arousal; possibly due to the fact that avoidantly attached individuals use their increased capacity for self-regulation to deactivate autonomic arousal while anxiously attached individuals must use it to prevent themselves from hyperactivating.

It is also important to consider why the interaction between avoidant insecurity and EC was not significant in predicting GAD symptoms. While EC had a main effect, avoidant attachment did not predict GAD symptoms. This is surprising because one of the major characteristics of GAD is experiential avoidance (Borkevec, Alcaine, & Behar, 2004). In fact, one could argue that, instead of serving as a protective factor, higher EC could lead to more avoidance and in turn more severe GAD symptoms. However, this does not appear to be the case in this study. The association between avoidant attachment and anxiety appears to be limited to autonomic arousal and not necessarily generalizable to other aspects of GAD.

Limitations
Although intriguing, these results should be interpreted with caution for several reasons. Interactions are notoriously difficult to find in such small samples, especially in unselected samples (McLelland & Judd, 1992). With only a sample size of 292, the study most likely did not have enough power to detect certain interactions. Since this is a cross-sectional correlational study, we cannot draw conclusions about causality or determine direction of influence.

Furthermore, generalizability is limited. The age range was small and the sample was not particularly ethnically diverse. Moreover, the data were collected online and I did not include a measure to ensure that the participants were not randomly responding. Patterns, in particular unexpected ones, must be replicated before they can be taken seriously. All in all, these interactions warrant further investigation, with larger, more diverse samples and in the more stringent context of an experiment. This study adds support for EC serving as a protective factor when it comes to anxious attachment and avoidant attachment. It extends the study of EC to attachment insecurity and adult samples.
References


Table 1

**Correlations and descriptive statistics for all measures**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>-</td>
<td>.21</td>
<td>.11</td>
<td>-.12</td>
<td>.03</td>
<td>-.01</td>
<td>-</td>
<td>-</td>
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<tr>
<td>2. GAD-Q-IV</td>
<td>.80</td>
<td>.28</td>
<td>.07</td>
<td>-.44</td>
<td>.60</td>
<td>4.72</td>
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<td>3. ECR-S-Anx</td>
<td>.74</td>
<td>.10</td>
<td>-.27</td>
<td>.26</td>
<td>20.98</td>
<td>6.54</td>
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<tr>
<td>4. ECR-S-Av</td>
<td>.77</td>
<td>-.21</td>
<td>.16</td>
<td>19.04</td>
<td>6.69</td>
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<td></td>
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<tr>
<td>5. ECS-PLD</td>
<td>.86</td>
<td>-.46</td>
<td>44.77</td>
<td>7.04</td>
<td></td>
<td></td>
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<tr>
<td>6. DASS-A</td>
<td>.90</td>
<td>3.45</td>
<td>3.40</td>
<td></td>
<td></td>
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</tbody>
</table>

*Note: N = 302. Bold correlations are significant at p < .05. Cronbach’s alphas are shown on the diagonal, GAD-Q-IV = Generalized Anxiety Disorder Questionnaire-IV total score, ECR-S-Anx = Experience in Close Relationships – Short form anxious subscale, ECR-S-Av = Experience in Close Relationships – Short form avoidant subscale, ECS-PLD = Effortful Control Scale – Persistence/Low Distractibility subscale, DASS-A = Depression, Anxiety, and Stress Scales – Anxiety subscale*
Table 2

*Predicting GAD symptoms and DASS anxiety from anxious attachment and effortful control*

<table>
<thead>
<tr>
<th></th>
<th>( R^2 )</th>
<th>( B ) (SE)</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DV: GAD-Q-IV</strong></td>
<td>( .27 )</td>
<td></td>
<td>(&lt; .001 )</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>3.84 (.27)</td>
<td>(&lt; .001 )</td>
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<tr>
<td>ECS-PLD</td>
<td></td>
<td>-1.55 (.18)</td>
<td>(&lt; .001 )</td>
</tr>
<tr>
<td>ECR-S-Anx</td>
<td></td>
<td>.52 (.20)</td>
<td>.01</td>
</tr>
<tr>
<td>ECR-S-Av</td>
<td></td>
<td>.02 (.19)</td>
<td>.91</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>1.53 (.39)</td>
<td>(&lt; .001 )</td>
</tr>
<tr>
<td>ECR-S-Anx x ECS-PLD</td>
<td></td>
<td>-.32 (.15)</td>
<td>.04</td>
</tr>
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</table>

| **DV: DASS-A**       | \( .25 \) |             | \(< .001 \)   |
| Constant             |           | 3.38 (.27)  | \(< .001 \)   |
| ECS-PLD              |           | -1.41 (.21) | \(< .001 \)   |
| ECR-S-Anx            |           | .45 (.17)   | .01           |
| ECR-S-Av             |           | .25 (.15)   | .10           |
| Gender               |           | -.04 (.35)  | .91           |
| ECR-S-Anx x ECS-PLD  |           | -.34 (.19)  | .08           |

*Note: GAD-Q-IV = Generalized Anxiety Disorder Questionnaire-IV total score, ECR-S-Anx = Experience in Close Relationships – Short form anxious subscale, ECR-S-Av = Experience in Close Relationships – Short form avoidant subscale, ECS-PLD = Effortful Control Scale – Persistence/Low Distractibility subscale*
Table 3

*Predicting GAD symptoms and DASS anxiety symptoms from avoidant attachment and effortful control*

<table>
<thead>
<tr>
<th>DV: GAD-Q-IV</th>
<th>$R^2$</th>
<th>B (SE)</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Constant</td>
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<td>3.93 (.27)</td>
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</tr>
<tr>
<td>ECS-PLD</td>
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<td>-1.54 (.18)</td>
<td>&lt;.001</td>
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<td>ECR-S-Anx</td>
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<td>.01</td>
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<td>ECR-S-Av</td>
<td></td>
<td>-.02 (.19)</td>
<td>.91</td>
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<tr>
<td>Gender</td>
<td></td>
<td>1.49 (.39)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>ECR-S-Av x ECS-PLD</td>
<td></td>
<td>-.07 (.17)</td>
<td>.66</td>
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<table>
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<tr>
<th>DV: DASS-A</th>
<th>$R^2$</th>
<th>B (SE)</th>
<th>p-value</th>
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<td>.21 (.15)</td>
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<td>Gender</td>
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<td>ECR-S-Av x ECS-PLD</td>
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<td>-.44 (.17)</td>
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*Note: GAD-Q-IV = Generalized Anxiety Disorder Questionnaire-IV total score, ECR-S-Anx = Experience in Close Relationships – Short form anxious subscale, ECR-S-Av = Experience in Close Relationships – Short form avoidant subscale, ECS-PLD = Effortful Control Scale – Persistence/Low Distractibility subscale*
Figure 1. Anxious attachment predicting GAD-Q-IV total scores at different levels of EC.

Figure 2. Anxious attachment predicting DASS-A scores at different levels of EC.
Figure 3. Avoidant attachment predicting DASS-A scores at different levels of EC.