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# Effects of Personality and Situation upon Appraisal and Coping

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# EFFECTS OF PERSONALITY AND SITUATION UPON APPRAISAL AND COPING

A Dissertation submitted to  
the Graduate College of  
Marshall University

In partial fulfillment of  
the requirements for the degree of  
Doctor of Psychology

Department of Psychology

by  
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## ABSTRACT

Effects of personality and situation upon appraisal and coping

by Daniel H. McGrath

Stress and coping represent one of the most studied areas in the field of psychology. There is little agreement regarding the proper conceptualization of coping. Cognitive processes and personality traits have been proposed as important determinants of coping responses. Low correlations have been consistently found between personality traits, appraisal, and coping. Many studies in the stress and coping literature suffer from methodological issues. This study was designed to improve upon typical methodology, determine the relative predictive utility of personality cluster approaches over dimensional approaches, and determine the effect of personality and situation upon appraisal and coping. Participants read hypothetical stressor scenarios. Primary and secondary appraisals were assessed. The Cybernetic Coping Scale (CCS) was used to assess coping responses. The CCS has demonstrated reliability and greater factor stability superior to other coping measures. Participants were drawn from the Marshall University undergraduate population. Clusters of personality traits were less effective predictors of appraisal and coping responses than were domains of personality traits. Situation was superior to personality for the prediction of appraisal responses. Situation was a superior predictor than were personality traits or appraisals for coping responses. There was greater variance across situations than between participants, but stable relationships between personality, appraisal, and coping variables were observed.

## **Effects of Personality and Situation upon Appraisal and Coping**

Why do some individuals successfully adapt to stressors, whereas others experiencing the same stressor fail to successfully adapt? Individual responses to stressors have long been linked to both mental and physical illness (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Responses intended to manage stress are referred to as coping (Lazarus, 1990). Coping with stress is one of the most widely studied phenomena in all of psychology (DeLongis & Holtzman, 2005; Somerfield & McCrae, 2000.) Although there is consensus that coping is vital to determining differential stressor outcomes (Skinner, Edge, Altman, & Sherwood, 2003), there is vast disagreement regarding both how to conceptualize coping responses and how to measure these responses, as revealed by extensive literature reviews performed by both Skinner and colleagues (2003) and Duhachek and Oakley (2007).

### **Stress**

Psychological stress refers to an aversive state that results when a motive state is thwarted or threatened (Lazarus, Baker, Broverman, & Mayer, 1957), when environmental demands exceed or tax individual resources (Lazarus, 1990), or when an individual experiences a discrepancy between her current state and her desired state (Edwards & Baglioni, 1993). A stressor is something that causes stress (Schwarzer & Schwarzer, 1996). Stressors can occur in any life domain (e.g., health, interpersonal, work, or intrapersonal). Definitions of stress and stressors are relatively settled in the literature (Skinner et al, 2003; Connor-Smith & Flachsbart, 2007). However, a definitive taxonomy of stressor domains remains elusive (Weyers, Ising, & Janke, 2005).

## **Coping**

Coping responses have been conceptualized in many different ways over the years as traits, as responses to stimuli, as determined by cognitive process, and as determined by personality processes (Connor-Smith & Flachsbart, 2007; Lazarus, 2006). Coping has also been categorized in a number of different ways. In their literature review, Skinner and colleagues (2003) found over 100 different systems of categorizing coping responses and over 400 different descriptions of the categories. By far, separating lower order coping strategies into higher order dichotomous categories is the most common approach (though some approaches have as many as 28 higher order categories). Among the most common of the dichotomous approaches are the problem/emotion and approach/avoid distinctions (Stanton, Kirk, Cameron, & Danoff-Burg, 2000; Franks & Roesch, 2006).

Skinner and colleagues (2003) offered the following definitions. Problem focused coping refers to attempts to influence the source of the stressor. Emotion focused coping refers to attempts to manage negative affectivity. Approach coping refers to activity directed toward the stressor without distinguishing between emotions, cognitions, or behaviors. Avoidant coping refers to attempts to distance oneself from the stressor also without distinguishing between emotions, cognitions, or behaviors.

Some of the lower order coping strategies more commonly recognized in the stress and coping literature include information seeking (gather and analyze information), helplessness (give up/don't make attempt to control), escape (disengage from stressor mentally or behaviorally, distraction), self-reliance (constructively regulate/express emotion), support seeking (seek outside intervention friend, family, God, etc.), delegation (self-pity, complain), isolation (conceal stressful event or related emotions), accommodation (adjust

expectations/preferences to meet the situation), negotiation (compromise between individual desires and situational constraints), submission (focus on negative situational features), and opposition (project cause of stress on to others, adopt aggressive stance).

### **Person Variables**

Debates within the coping literature, regarding the extent to which coping responses are the result of stable person variables and/or ever-changing situation variables, echo the debate regarding the predictive utility of these variables that has raged within psychology among researchers for generations (Suls, David, & Harvey, 1996). Some researchers focus upon the merits of cognitive variables (i.e., transactional model; Lazarus, 2006), and some upon the merits of temperamental variables (i.e., the five-factor model; Costa & McCrae, 1990).

**Cognitive processes.** The transactional model represents a cognitive mediational approach, which proposes appraisal mediates between situation and coping response (Lazarus, 2006). Transaction refers to the fact that stress is a product of the relationship between person and environment and implies an ongoing process, whereby any change in the person or environmental variables will change the stress variable (Lazarus, 1990). The process continues to unfold in this manner as coping efforts influence subsequent appraisals and coping attempts.

The first iteration of the transactional model proposed two cognitive processes, primary and secondary appraisal, which were related to the two broad categories of coping responses, problem-focused coping and emotion-focused coping (Suls, David, & Harvey, 1996). Primary appraisal refers to the process by which an individual determines what is personally at stake relative to the stressor. Secondary appraisal refers to the process by which an individual determines his ability to cope with the stressor. Stressors appraised as controllable will typically lead to problem-focused coping, and stressors that are appraised as uncontrollable will typically

lead to emotion-focused coping (Roussi, Miller, & Shoda, 2000). In recognition of the fact that individuals do not approach every stressful situation anew, recent iterations of the transactional model allow for relatively stable cross-situational cognitive variables (beliefs, goals, and personal resources), behavioral tendencies (Lazarus, 1991, 2006), and appraisal-emotion relationships (Smith & Lazarus, 2001).

**Personality traits.** Stable patterns of thoughts, feelings, and behaviors over time and across situations are representative of personality (Connor-Smith & Flachsbart, 2007).

Proponents of the transactional approach to stress and coping (i.e., Lazarus, 2006) promote a social-cognitive personality approach to the investigation of coping traits with the goal of elucidating stable situation-response patterns (Wright & Mischel, 1987). In this view, these stable situation-response patterns are mediated by the cognitive affective personality system (CAPS; Mischel & Shoda, 1995). The CAPS specifies processes that comprise the personality system: encoding (perception/analysis), expectancies/beliefs, affect, goals/values, and self-efficacy/self-regulation.

Costa and McCrae (1990) assert that the transactional model is incomplete owing to the fact that the transactional model does not include trait based personality in its conceptualization of stress and coping. McCrae and Costa's (2008) five-factor (FFM) personality model recognizes five personality traits. The five-factors include extraversion (active, assertive, energetic, enthusiastic, outgoing, talkative), agreeableness (appreciative, forgiving, generous, kind, sympathetic, trusting), conscientiousness (efficient, organized, deliberative, reliable, responsible, thorough), neuroticism (anxious, self-pitying, tense, touchy, unstable, worrying), and openness (artistic, curious, imaginative, insightful, original, wide interests; McCrae & John, 1992). The five-factor model places the five personality traits on the biological end of the spectrum with

traits influencing cognitive processes (McCrae & Costa, 2008). McCrae and Costa (2008) propose that the interactions between the situation and cognitive processes (rooted in personality) facilitate behaviors that represent the observable expression of traits. Costa and McCrae have previously demonstrated the predictive value of personality traits, such as extraversion and neuroticism. For example, neuroticism has been found to influence coping strategies, stress perceptions (i.e., appraisals), well-being (Costa & McCrae, 1981; McCrae, 1990; Smith, Pope, Rhodewalt, & Poulton, 1989), and somatic complaints (Costa & McCrae, 1987). Conscientiousness, extraversion, and neuroticism have been consistently linked to coping (Watson & Hubbard, 1996; Connor-Smith & Flachsbart, 2007).

### **Previous Research**

**Personality and coping.** Connor-Smith and Flachsbart (2007) conducted a meta-analysis of 165 personality and coping studies. Generally, they found a weak, but consistent relationship between personality traits and the broad engagement (actively manage situation and associated emotions) and disengagement (distance oneself from the stressor and associated feelings) coping categories. Neuroticism a positive correlation ( $r = .27$ ) with broad disengagement. Those higher on neuroticism were more likely to disengage from stressors. Extraversion had a positive correlation ( $r = .15$ ) with engagement and a negative correlation ( $r = -.04$ ) with disengagement. Those higher on extraversion were more likely to engage and less likely to disengage from stressors. Conscientiousness had a positive correlation ( $r = .11$ ) with engagement and a negative correlation ( $r = -.15$ ) with disengagement. Participants higher on conscientiousness were more likely to engage the stressor and less likely to disengage. Agreeableness had a positive correlation ( $r = .05$ ) with engagement and a negative correlation ( $r = -.13$ ) with disengagement. Those higher on agreeableness were more likely to engage stressors and less likely to disengage.

Openness had a positive correlation ( $r = .10$ ) with engagement and a negative correlation ( $r = -.02$ ) correlation with disengagement. Those higher on openness were more likely to engage and less likely to disengage a stressor.

Connor-Smith and Flachsbart (2007) reported that personality traits also predicted lower level coping strategies. Conscientiousness ( $r = .30$ ,  $r = .20$ ) and extraversion ( $r = .20$ ,  $r = .22$ ) were associated with greater use of problem-solving (active stressor focused coping) and cognitive restructuring (positive reappraisal), whereas neuroticism was negatively associated with the use of these coping strategies ( $r = -.13$ ,  $r = -.16$ ). Those higher on conscientiousness and those higher on extraversion were more likely to engage in problem-solving and positive reappraisal, but those higher on neuroticism were less likely to engage in problem-solving and positive reappraisal. Neuroticism was associated with wishful thinking ( $r = .35$ ; hoping for rescue from the situation and fantasizing about unlikely outcomes), withdrawal ( $r = .29$ ; isolating and hiding problems), substance use ( $r = .28$ ; using drugs and alcohol to escape), negative emotion-focused coping ( $r = .41$ ; emotional expression suggesting loss of control), and mixed emotion-focused coping ( $r = .22$ ; both controlled and uncontrolled emotion expression), all of which are generally considered maladaptive coping strategies. Those higher on neuroticism were more likely to engage in maladaptive coping responses and less likely to engage in adaptive responses. Extraversion was associated with support seeking ( $r = .24$ ). Those higher on extraversion were more likely to seek help in dealing with stressors.

**Personality and appraisal.** Bouchard, Guillemette, and Landry-Léger (2004) studied the relationship between personality, appraisal, and coping. They asked participants to recall a recent academic stressor. They found that neuroticism was positively correlated with the severity of primary appraisals (threat to wellbeing,  $r = .54$ ) and negatively correlated with secondary



appraisals (perceived ability to cope,  $r = -.37$ ). Participants higher on neuroticism were more likely to report greater distress and less perceived ability to manage the stressor. Extraversion was negatively correlated with primary appraisal severity ( $r = -.18$ ) and positively correlated with secondary appraisals ( $r = .19$ ). Those higher on extraversion tended to report less subjective distress and more perceived ability to cope with the stressor. Openness was negatively correlated with primary appraisal severity ( $r = -.21$ ) and positively correlated with secondary appraisals ( $r = .20$ ). Those higher on openness were more likely to report less distress and more ability to manage the stressor. Conscientiousness was negatively correlated with primary appraisal severity ( $r = -.25$ ) and positively correlated with secondary appraisals ( $r = .31$ ). Those higher on conscientiousness were more likely to report less perceived distress and greater ability to manage the stressor. Agreeableness did not have a statistically significant relationship with any of the appraisal variables.

**Appraisal and coping.** Portello and Long (2001) studied appraisal and coping responses to interpersonal stressors. Portello and Long found a positive correlation ( $r = .31$ ) between primary (threat) appraisal and disengagement coping. When a situation was more stressful, participants were more likely to disengage from the stressor. They found a positive correlation ( $r = .04$ ) between primary appraisal and engagement coping, indicating that sometimes participants were more likely to engage with a situation perceived to be stressful. Secondary (controllability) appraisals were negatively correlated ( $r = -.29$ ) with disengagement coping and had a positive correlation ( $r = .12$ ) with engagement coping. Participants were less likely to disengage from stressors perceived as controllable and more likely to engage with stressors perceived as controllable.

## **Criticism of Past Research Methodologies**

The aforementioned findings represent both the success and failure of the coping literature. Though a glimpse is offered into the coping process, the picture is neither clear nor complete. Progress has been slow. The entire field of coping research has been described as stagnant (Somerfield & McCrae, 2000), mostly attributable to the predominance of psychometrically questionable coping checklists (Ways of Coping Questionnaire and COPE most commonly) and retrospective stressor reports (Connor-Smith & Flachsbart, 2007; Coyne & Gottlieb, 1996; Coyne & Racioppo, 2000; DeLongis & Holtzman, 2005). Both the Ways of Coping (WOC) questionnaire and COPE have psychometric issues (confounded items, low reliability, unstable coping factor structures; Coyne & Gottlieb, 1996; Edwards & Baglioni, 1993; Guppy et al., 2004; Brough, O'Driscoll, & Kalliath, 2005a; Brough, O'Driscoll, & Kalliath, 2005b).

Additionally, the items themselves are problematic. Stanton, Kirk, Cameron, and Danoff-Burg (2000) cited one example, "I get angry and blow up," from the WOC. It is unclear whether the item is a coping response or a simply the result of a failed attempt at coping. Additionally, the response is not of a volitional nature, and there are no automatic coping scales in the WOC. Edwards and Baglioni (1993) cite a COPE item, "I prayed about it," as an example of the item ambiguity common to popular coping measures. The function of prayer is unclear. Any number of requests can be made through prayer. An individual endorsing this item could just as easily be asking a higher power for assistance in managing negative emotions as asking for Zeus to send a lightning bolt to strike down someone who has wronged them.

In addition to the methodological issues with the measurement of participants' responses to stressors, there is also evidence that the "stressors" themselves, from which coping efforts are

thought to result, are methodologically flawed, as evidenced by the fact that the use of retrospective stressors leads to different results from recently recalled daily stressors and experimenter selected stressors (Connor-Smith & Flachsbart, 2007). Some of the discrepancy is likely attributable to personality and mood congruent processing and recall (Hemenover, 1999; Rusting, 1998). Both retrospective and daily stressors may lead participants to conflate the stress-coping process with the outcome of the event (Schwarzer & Schwarzer, 1996). For example, stressors that had been dealt with effectively could easily be recalled as less threatening, and failed coping attempts could be forgotten in favor of successful coping attempts.

Of the 165 studies included in the Connor-Smith and Flachsbart (2007) meta-analysis, 69 did not assess any specific stressor and relied solely upon coping checklists (mostly the WOC or COPE). Thirty studies used participant selected retrospective stressors. In effect, 60 percent of the studies relied upon suspect methodology. The remaining 66 studies incorporated daily measurements of stressors, laboratory stressors, or hypothetical stressors. Although many of the remaining 66 studies utilized coping checklists, these studies had a method of measuring or controlling for stressors, allowing for more accurate comparisons between participants. Unfortunately, Connor-Smith and Flachsbart (2007) do not provide any analyses that compare and contrast results based upon methodology. However, to illustrate this potential difference, Friedman-Wheeler, Haaga, Gunthert, Ahrens, and McIntosh (2008) investigated the relationship between neuroticism and coping responses to hypothetical stressor scenarios. They found neuroticism was positively correlated with disengagement ( $r = .53$ ) and negatively correlated with engagement ( $r = -.29$ ). The Connor-Smith and Flachsbart (2007) meta-analysis indicated that neuroticism had the highest ( $r = .27$ ) correlation with broad disengagement and no correlation ( $r = .00$ ) with engagement.

In addition to methodological issues with stressor selection and the measurement of coping, the majority of studies fail to account for important participant variables such as gender and socially desirable response bias (Connor-Smith & Flachsbart, 2007). Results from a study conducted by Eaton and Bradley (2008) suggest that gender can influence primary appraisals and emotion-focused coping efforts. Female participants were more likely to appraise situations as more stressful than male participants and engage in greater use of emotion-focused coping strategies (Eaton & Bradley, 2008). Some researchers have called for the inclusion of items that assess a participant's tendency to provide socially desirable responses (Connor-Smith & Flachsbart, 2007), others have observed participant willingness to provide socially undesirable and norm-violating responses (Weber, 2003), but even they caution that certain situations may elicit a greater frequency of norm congruent responses.

In addition to the aforementioned attention to methodological issues, the stress and coping field has been criticized for failure to embrace new data analysis methods (Connor-Smith & Flachsbart, 2007; Coyne & Racioppo, 2000). The majority of those who investigate the role of personality in the coping process persist in relying mostly upon a "variable-centered" approach, which examines only the relationship between personality variables and stress processes, despite the demonstrable utility of a "person-centered" approach to personality (referring to a statistical clustering method), as evidenced by the relationship between individual trait profiles and political beliefs (Roth & von Collani, 2007), coping behaviors (Vollrath & Torgersen, 2000) and risky health behaviors (Vollrath & Torgersen, 2008; Rush, Becker, & Curry, 2009). The Vollrath and Torgersen (2000) study demonstrated that participants with combined low neuroticism and high conscientiousness scores were less vulnerable to the negative effects of stress, more likely to report lower distress, and more likely to have an effective and adaptive style of coping.

Participants with the opposite personality typology, high neuroticism and low conscientiousness, were more likely to experience significant vulnerability to the negative effects of stress, to report high levels of distress, and to engage in passive and dysfunctional coping styles. Rush and colleagues (2009) found that students with a personality profile characterized by high neuroticism and low conscientiousness were more likely to engage in binge eating and binge drinking than would have been predicted by neuroticism or conscientiousness scores using a variable centric approach.

### **Present Study**

As with the studies discussed previously, the general goal of this study was the investigation of the relationships between personality, appraisal process, and coping responses. However, the present study was designed to improve upon the methodology of previous studies. Exposing the participants to the same stressors (hypothetical scenarios) was intended to control for participant bias in the selection and recall of stressors and the conflation of coping responses with outcomes. Coping responses were assessed using an instrument, the Cybernetic Coping Scales (CCS), which has consistently demonstrated psychometric properties superior to other similar coping measures (i.e. the WOC and the COPE; Edwards & Baglioni, 1993; Guppy et al., 2004; Brough, O'Driscoll, & Kalliath, 2005a; Brough, O'Driscoll, & Kalliath, 2005b). To better elucidate the relationship between personality, appraisal, and coping, items were included to assess both primary and secondary appraisal. Finally, items were included to control for age, gender, mood, and stress level.

This study aimed to answer three main questions. Will the methodology used in this study yield different results, with respect to personality-appraisal-coping patterns, when compared to studies relying upon more typical methodology? Can combinations of personality

traits demonstrate predictive power and/or explanatory utility over and above the typical dimensional variable approach? Will there be different patterns of interactions among personality, coping, and appraisal variables depending upon the scenario? It was expected that appraisals would vary as a function of personality and situation and that coping responses would vary as a function of situation, personality, and appraisal.

## **Method**

### **Participants**

Two hundred Marshall University undergraduate psychology students participated in the study. They were compensated with extra-credit in their psychology courses for their participation. Participants were 143 females, 56 males, and one individual who declined to indicate a gender. Their mean age was 19.94 ( $SD = 3.64$ ).

### **Materials**

The study was presented in an online survey format using the SONA system, Marshall University's online research participant pool. Potential participants reviewed a statement about the study, potential risks, and terms of participation. Next, participants answered questions that requested demographic, mood, and stress information. These questions included: "What is your gender (male, female, decline)? What is your age (input age in years)? How would you describe your current mood (1 = awful, 7 = great)? How does your current mood compare to your typical mood (1 = much worse, 7 = much better)? How would you rate your current stress level (1 = no stress, 7 = extreme stress)? How does your current stress level relate to your typical stress level (1 = much lower, 7 = much higher)?" The mood and stress questions used seven point Likert scales.

Next, personality was assessed using the Big Five Inventory (BFI; John, Naumann, & Soto, 2008). The BFI consists of 44 items, which are rated on a scale of one (disagree strongly) to five (agree strongly). It yields five personality domain scores (i.e. extraversion, agreeableness, conscientiousness, neuroticism, and openness).

Participants were then instructed to read each of the four hypothetical stressor scenarios while imagining that they were in each of the scenarios. The first scenario involved a minor unspecified illness (adapted from Prohaska, Keller, Leventhal, & Leventhal, 1987). “For the past two days you’ve felt achy, had a mild headache, and bit of a dry cough. You don’t think you’ve run a fever, but you can only guess because you don’t have a thermometer to take your temperature. You just feel tired and run-down, like you don’t have the energy to do much.”

The second stressor scenario was an academic stressor (adapted from Day & Livingstone, 2003). “You’ve had a number of things going on this semester, and haven’t been keeping up with your school work. Now it’s the end of the semester and you’re worried that you may fail some of your courses. It’s Tuesday evening and you have two final exams on Wednesday. Unfortunately, everything seems to be working against you. Some of your neighbors down the hall in your dorm are making a lot of noise. They’ve finished their exams, and now they’re celebrating the end of the semester. To make matters worse, you lent a classmate some of your notes that you need for one of the exams, but the classmate didn’t return the notes to you like they had promised. It’s getting later in the evening and you still can’t get a hold of the notes.”

The third scenario was a leisure time stressor. It was created based upon common daily hassles (Holm & Holroyd, 1992). “You and a friend are going to see a movie that you’ve both been wanting to see, but you’re running late. You’re definitely going to miss the previews, and both of you are worried about missing the beginning of the movie. Your friend doesn’t have a

car, so you had to drive. Now your friend is trying to get you to drive faster and more aggressively through heavy traffic.”

The final scenario was a family conflict stressor (adapted from Day and Livingstone, 2003). “You haven’t been home in a while, and are looking forward to spending a weekend at home with your family. However, when you get home you find your family in a state of chaos. Your parents are screaming at each other in their bedroom, and your nine year-old brother is out in the living room crying hysterically because your parents are fighting. It’s not clear what they’re fighting about, but you find yourself getting angry with your parents for yelling at each other and upsetting your little brother. You take your brother outside to get away from your parents’ yelling. As you’re trying to comfort him, you begin to wonder what will happen. You have to leave to go back to school in two days.”

Each stressor scenario was followed by four face-valid appraisal questions (Smith & Lazarus 2001). Participants were asked, “How stressful would you find this situation [primary appraisal]?” “How well would you be able to change the situation [secondary appraisal - problem]?” “How well would you be able to manage your emotions [secondary appraisal - emotion]?” “How do you think things will turn out [secondary appraisal - expectation]?” Responses were coded onto seven point Likert scales. For primary appraisal, secondary appraisal - problem, and secondary appraisal - emotion, one was “not at all” and seven was “extremely.” For secondary appraisal - expectation, one was “awful” and seven was “just fine.”

Coping responses to each of the stressor scenarios were assessed using a slightly modified version of the 15 item Cybernetic Coping Scale (CCS; Guppy et al., 2004). “I” was changed to “I’d” due to the prospective nature of the coping responses for this study. Use of the CCS in relation to a specific stressor is consistent with Lecomte and Mercier’s (2005) prior use



of the scale. The CCS consists of five scales (Edwards & Baglioni, 1993): situation modification (change the situation), accommodation (adjust personal standards to better fit with the situation), devaluation (convince yourself the problem is not important), avoidance (shift attention away from the problem), and symptom reduction (let off steam). Each scale contains three items. Participants indicated on a seven point scale how likely they were to engage in each style of coping. One indicated that the participant was “not at all likely,” and five indicated “very likely.”

### **Procedure**

Participants’ responses were recorded using the SONA system. The data were downloaded from SONA in a comma delimited Microsoft Excel spreadsheet. The Excel data were imported into an SPSS data sheet.

Next, the personality and coping variables were computed. The five personality domains were computed in accordance with the procedure described in Soto and John (2009), using SPSS syntax obtained via personal correspondence with Dr. Soto. A hierarchical cluster analysis was completed in SPSS using the “Ward’s Method” option to create five “clusters.” Each participant was placed in a cluster group based upon the relative similarity of their scores on the five BFI domains (extraversion, agreeableness, conscientiousness, neuroticism, and openness) to that of other members of each cluster group. Five groups were created and coded into a new “cluster” variable. Next, the Cluster variable was coded into four binary “Dummy” variables (cluster dummy 1, cluster dummy 2, cluster dummy 3, and cluster dummy 4) to represent the five Clusters. Coping responses were calculated by adding the three items for each of the five coping scales together and then dividing the sum for each scale by three. All appraisal and coping responses were analyzed for normality. All appraisal and coping variables were normal, so no corrections were required.

“Broad” coping and appraisal variables were created by splitting the 200 participants’ appraisal and coping responses across the four situations into 800 “cases” of appraisal and coping response pairs (cf. Lorch & Myers, 1990). For example, one participant with primary appraisal health stressor, primary appraisal academic stressor, primary appraisal leisure stressor, and primary appraisal family conflict stressor scores would become four cases with the same personality, control, and demographic variables and one primary appraisal score, with each case representing a different situation. Cases were labeled by the new “situation” variable, and then each situation variable was coded into three binary “situation dummy” variables to represent the four situations.

## **Results**

### **Predictive Utility of the Cluster Model for Broad Appraisal and Broad Coping**

Descriptive statistics for personality domains are located in Table 1. Personality domain means for cluster groups can be found in Table 2. Descriptive statistics for broad appraisal and broad coping variables can be found in Table 3. Correlations between all BFI domains, broad appraisal, and broad coping can be found in Table 4.

A series of regression analyses was conducted to determine the ability of the cluster model (consisting of the four cluster dummy variables) to predict broad appraisal (broad primary appraisal, broad secondary appraisal - problem, broad secondary appraisal - emotion, and secondary appraisal - expectation) and broad coping (broad situation modification, broad accommodation, broad devaluation, broad avoidance, and broad symptom reduction). The predictive utility of the cluster model was compared to the predictive utility of the BFI domain model (extraversion, agreeableness, conscientiousness, neuroticism, and openness). The cluster model was then added to the BFI domain model and the combined model was evaluated based

upon the relative improvement in predictive utility over the BFI domain model alone. Results can be found in Tables 5-13.

The cluster model was not a statistically significant predictor of broad primary appraisal, nor was the combined model ( $R^2 = .03, p < .001$ ) an improvement over the BFI domain model alone ( $R^2 = .03, p < .01$ ). The cluster model was a predictor ( $R^2 = .02, p < .01$ ) for broad secondary appraisal - problem, but the BFI domain model was a superior predictor ( $R^2 = .05, p < .001$ ). Compared to the BFI domain model, the combined model ( $R^2 = .05, p < .001$ ) offered no added predictive utility for broad secondary appraisal - problem. The cluster model was a predictor for broad secondary appraisal - emotion ( $R^2 = .06, p < .001$ ), but it was an inferior predictor, when compared to the BFI domain model ( $R^2 = .10, p < .001$ ). The combined model ( $R^2 = .10, p < .001$ ) offered no added predictive utility over the BFI domain model for broad secondary appraisal - emotion. The cluster model was a predictor for broad secondary appraisal - expectation ( $R^2 = .05, p < .001$ ), but the BFI domain model was a superior predictor ( $R^2 = .05, p < .001$ ). The combined model ( $R^2 = .05, p < .001$ ) was not an improvement over the BFI domain model for broad secondary appraisal - expectation.

For broad situation modification, the cluster model was a statistically significant predictor ( $R^2 = .03, p < .001$ ). However, the cluster model accounted for less variance in broad situation modification than did the BFI domain model ( $R^2 = .06, p < .001$ ), and the combined model ( $R^2 = .06, p < .001$ ) failed to add statistically significant predictive utility beyond the BFI domain model. The cluster model was not a statistically significant predictor for broad accommodation. The BFI domain model was a predictor of broad accommodation ( $R^2 = .03, p < .001$ ). The combined model ( $R^2 = .06, p < .001$ ) represented a statistically significant improvement in predictive ability over the BFI domain model for broad accommodation. None of the models

were statistically significant predictors of broad devaluation. The cluster model was not a statistically significant predictor of broad avoidance, nor did the combined model ( $R^2 = .03, p < .01$ ) represent a statistically significant improvement in predictive utility over the BFI domain model ( $R^2 = .02, p < .01$ ) for broad avoidance. The cluster model ( $R^2 = .02, p < .01$ ) was a statistically significant predictor of broad symptom reduction, and was approximately as effective a predictor as the BFI domain model ( $R^2 = .02, p < .01$ ). When the cluster model was added to the BFI domain model, the combined model ( $R^2 = .05, p < .001$ ) was a statistically significant improvement in predictive utility over the BFI domain model as a predictor of broad symptom reduction.

The BFI domain model was superior to the cluster model for all dependent variables except devaluation, for which none of the models was a predictor, and symptom reduction, for which both models were effectively tied. The cluster model was effective in providing additional predictive utility for accommodation and symptom reduction, as evidenced by the superiority of the combined model over the BFI domain model.

### **Effect of Situation and Personality upon Broad Appraisal**

A series of regression analyses was conducted with the BFI domain model (consisting of extraversion, agreeableness, conscientiousness, neuroticism, and openness) and the situation model (situation dummy variables) entered as predictors for each of the broad appraisal and broad coping variables. Broad appraisal variables were also entered as predictors for broad coping. Results are presented in Tables 14 - 22. The effect size descriptor “small” refers to  $R^2$  of .01 to .08. The effect size descriptor “medium” refers to  $R^2$  of .09 to .24. The effect size descriptor “large” refers to  $R^2$  of .25 and above.

The BFI domain model accounted for a small ( $R^2 = .05, p < .001$ ) amount of the variance in broad primary appraisal. The situation model accounted for a large ( $R^2 = .26, p < .001$ ) amount of variance in broad primary appraisal. Combined, the two Models accounted for a large ( $R^2 = .29, p < .001$ ) portion of the variance in broad primary appraisal.

The BFI domain model accounted for a small ( $R^2 = .05, p < .001$ ) amount of the variance in broad secondary appraisal - problem. The situation model accounted for a moderate ( $R^2 = .09, p < .001$ ) amount of variance in broad secondary appraisal - problem. Combined, the two models accounted for a moderate ( $R^2 = .13, p < .001$ ) portion of the variance in broad secondary appraisal - problem.

The BFI domain model accounted for a moderate ( $R^2 = .10, p < .001$ ) amount of the variance in broad secondary appraisal - emotion. The situation model accounted for a moderate ( $R^2 = .21, p < .001$ ) amount of variance in broad secondary appraisal - emotion. Combined, the two models accounted for a large ( $R^2 = .31, p < .001$ ) portion of the variance in broad secondary appraisal - emotion.

The BFI domain model accounted for a small ( $R^2 = .05, p < .001$ ) amount of the variance in broad secondary appraisal - expectation. The situation model accounted for a large ( $R^2 = .34, p < .001$ ) amount of variance in broad secondary appraisal - expectation. Combined, the two models accounted for a large ( $R^2 = .38, p < .001$ ) portion of the variance in broad secondary appraisal - expectation.

The BFI domain model was a weak to moderate predictor of all four broad appraisal variables. The situation model was a moderate to strong predictor of all broad appraisal variables. When the BFI domain and situation models were combined, the combined model accounted for a statistically significant greater proportion of the variance in broad coping than

did either model individually, indicating that appraisals did vary as a function of person and situation.

### **Effect of Situation, Personality, and Broad Appraisal on Broad Coping**

The BFI domain model accounted for a small ( $R^2 = .06, p < .001$ ) amount of the variance in broad situation modification. The broad appraisal model accounted for a moderate ( $R^2 = .22, p < .001$ ) amount of the variance in the dependent variable. The situation model accounted for a small ( $R^2 = .03, p < .001$ ) amount of variance in broad situation modification. Combined, the three models accounted for a large ( $R^2 = .26, p < .001$ ) portion of the variance in broad situation modification.

The BFI domain model accounted for a small ( $R^2 = .03, p < .001$ ) amount of the variance in broad accommodation. The broad appraisal model accounted for a small ( $R^2 = .02, p < .01$ ) amount of the variance in the dependent variable. The situation model accounted for a small ( $R^2 = .01, p < .05$ ) amount of variance in broad accommodation. Combined, the three models accounted for a small ( $R^2 = .06, p < .001$ ) portion of the variance in broad accommodation.

The BFI domain model was not a statistically significant predictor for broad devaluation. The broad appraisal model accounted for a large ( $R^2 = .36, p < .001$ ) amount of the variance in the dependent variable. The situation model accounted for a large ( $R^2 = .39, p < .001$ ) amount of variance in broad devaluation. Combined, the three models accounted for a large ( $R^2 = .49, p < .001$ ) portion of the variance in broad devaluation.

The BFI domain model accounted for a small ( $R^2 = .02, p < .01$ ) amount of the variance in broad avoidance. The broad appraisal model accounted for a moderate ( $R^2 = .19, p < .001$ ) amount of the variance in the dependent variable. The situation model accounted for a moderate

( $R^2 = .22, p < .001$ ) amount of variance in broad avoidance. Combined, the three models accounted for a large ( $R^2 = .28, p < .001$ ) portion of the variance in broad avoidance.

The BFI domain model accounted for a small ( $R^2 = .02, p < .01$ ) amount of the variance in broad symptom reduction. The broad appraisal model accounted for a small ( $R^2 = .05, p < .001$ ) amount of the variance in the dependent variable. The situation model accounted for a small ( $R^2 = .06, p < .001$ ) amount of variance in symptom reduction. Combined, the three models accounted for a moderate ( $R^2 = .11, p < .001$ ) portion of the variance in symptom reduction.

The BFI domain model was weak predictor of four of the five broad coping variables, but at least one BFI domain model component variable was a statistically significant predictor for all five broad coping variables. The broad appraisal model was a weak to strong predictor for all five broad coping variables. The situation model was a weak to strong predictor for all five broad coping variables. A combination of these three models, the combined model, predicted a greater proportion of the variance in all five broad coping variables than did any of the three models individually. Coping varied as a function of situation, personality, and appraisal.

### **Predictors of appraisal and Coping by Situation**

**Health stressor.** Descriptive statistics for control variables can be found in Tables 23 and 24. Correlations for Control and BFI domain variables are located in Table 25. Descriptive statistics are provided for all health stressor appraisals (see Table 26). Descriptive statistics, including Chronbach's alpha, are provided for all health stressor coping responses (see Table 27). Chronbach's Alpha scores were within acceptable ranges for all coping responses. Correlations between control, BFI domain, appraisal, and coping variables for the health stressor can be found in Table 28.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness) predicted appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) for the health stressor. See Tables 29 – 32.

Current stress predicted a small ( $R^2 = .04, p < .01$ ) amount of the variance in primary appraisal for the health stressor. Participants who reported more current stress were more likely to report that the health stressor was more stressful.

Extraversion and current mood predicted a small ( $R^2 = .08, p < .01$ ) amount of the variance in secondary appraisal - problem for the health stressor. Participants high in extraversion and those in a more positive mood tended to report more perceived ability to change the stressor.

Neuroticism predicted a moderate ( $R^2 = .13, p < .001$ ) amount of the variance in secondary appraisal - emotion for the health stressor. Individuals reporting more neuroticism tended to report less ability to manage their emotions in response to the health stressor.

Neuroticism and agreeableness predicted a moderate ( $R^2 = .09, p < .001$ ) amount of the variance in secondary appraisal - expectation for the health stressor. As neuroticism increased, the expected outcome tended to be less favorable for the health stressor. As agreeableness increased, participants tended to report increased optimism in regard to the outcome of the health stressor.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness), and appraisal scores (primary appraisal, secondary appraisal -



problem, secondary appraisal - emotion, and secondary appraisal - expectation) predicted coping responses (situation modification, accommodation, devaluation, avoidance, and symptom reduction) to the health stressor. See Tables 33 – 37.

Secondary appraisal - problem, extraversion, secondary appraisal - expectation, and conscientiousness, predicted a large ( $R^2 = .31, p < .001$ ) amount of the variance in situation modification. As secondary appraisal - problem, extraversion, secondary appraisal - expectation, and conscientiousness increased, situation modification tended to increase.

Current mood predicted a small ( $R^2 = .02, p < .05$ ) amount of the variance in accommodation for the health stressor. As current mood increased, accommodation tended to increase.

Secondary appraisal - expectation and primary appraisal predicted a moderate ( $R^2 = .09, p < .001$ ) amount of the variance in devaluation for the health stressor. Secondary appraisal - expectation had a positive relationship with devaluation. Primary appraisal had a negative relationship with devaluation.

Secondary appraisal - emotion predicted a small ( $R^2 = .02, p < .05$ ) amount of the variance in avoidance for the health stressor. As perceived ability to control emotions increased, participants were more likely to report engaging in avoidance.

Extraversion predicted a small ( $R^2 = .02, p < .05$ ) amount of the variance in symptom reduction for the health stressor. Extraversion had a positive relationship with symptom reduction.

**Academic stressor.** Descriptive statistics are provided for all academic stressor appraisals (see Table 38). Descriptive statistics, including Chronbach's alpha, are provided for all academic stressor coping responses (see Table 39). Chronbach's Alpha scores were within

acceptable ranges for all coping responses. Correlations between control, BFI domain, appraisal, and Coping for the academic stressor can be found in Table 40.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness) predicted appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) for the academic stressor. See Tables 41 – 44.

Openness and Gender predicted a small ( $R^2 = .07, p < .01$ ) amount of the variance in primary appraisal for the academic stressor. As openness increased, subjective distress tended to decrease. Females tended to report more subjective distress than did males.

Neuroticism and current mood predicted a moderate ( $R^2 = .13, p < .001$ ) amount of the variance in secondary appraisal - problem for the academic stressor. Neuroticism had a negative relationship with perceived control. As mood improved, participants tended to report that the academic stressor was increasingly amenable to change.

Neuroticism, Gender, and conscientiousness predicted a large ( $R^2 = .32, p < .001$ ) amount of the variance in secondary appraisal - emotion. As neuroticism and conscientiousness increased, perceived control of emotions tended to decrease. Females tended to report less ability to manage emotional responses to the academic stressor.

Neuroticism and current mood predicted a moderate ( $R^2 = .15, p < .001$ ) amount of the variance for secondary appraisal - expectation for the academic stressor. Neuroticism was negatively related to expected outcome. As mood became increasingly positive, optimism regarding the outcome for the academic stressor tended to increase.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness), and appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) predicted coping responses (situation modification, accommodation, devaluation, avoidance, and symptom reduction) to the academic stressor. See Tables 45 – 49.

Secondary appraisal - problem and mood predicted a moderate ( $R^2 = .18, p < .001$ ) amount of the variance in situation modification for the academic stressor. As secondary appraisal - problem and mood increased, attempts to change the academic stressor were likely to increase.

Secondary appraisal - emotion, conscientiousness, and current mood predicted a moderate ( $R^2 = .10, p < .001$ ) amount of the variance in accommodation for the academic stressor. As conscientiousness increased, participants tended to become less likely to adjust their standards. Mood and secondary appraisal - emotion were positively related to accommodation.

Secondary appraisal - emotion, conscientiousness, secondary appraisal - expectation, and secondary appraisal - problem predicted a large ( $R^2 = .29, p < .001$ ) amount of the variance in devaluation for the academic stressor. As conscientiousness and secondary appraisal - problem increased, participants were less likely to devalue the importance of the academic stressor. As neuroticism, secondary appraisal - emotion, and secondary appraisal - expectation increased, participants reported they were more likely to devalue the importance of the academic stressor.

Secondary appraisal - expectation, conscientiousness, secondary appraisal - problem, and secondary appraisal - emotion predicted a moderate ( $R^2 = .18, p < .001$ ) amount of the variance in avoidance for the academic stressor. As conscientiousness and secondary appraisal - problem

increased, participants were less likely engage in avoidance for the academic stressor. As secondary appraisal - emotion and secondary appraisal - expectation increased, participants reported they were more likely to avoid thinking about the academic stressor. Secondary appraisal - expectation and current stress predicted a small ( $R^2 = .07, p < .001$ ) amount of the variance in symptom reduction for the academic stressor. As participants reported greater pre-existing stress and more optimistic expectations, symptom reduction increased.

**Leisure stressor.** Descriptive statistics are provided for all leisure stressor appraisals (see Table 50). Descriptive statistics, including Chronbach's alpha, are provided for all leisure stressor coping responses (see Table 51). Chronbach's Alpha scores were within acceptable ranges for all coping responses. Correlations between control, BFI domain, appraisal, and coping for the leisure stressor can be found in Table 52.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness) predicted appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) for the leisure stressor. See Tables 53 – 56.

Neuroticism predicted a small ( $R^2 = .06, p < .001$ ) amount of the variance in primary appraisal for the leisure stressor. As neuroticism increased, the perceived stressfulness of the leisure stressor tended to increase.

Current mood predicted a small ( $R^2 = .07, p < .001$ ) amount of the variance in secondary appraisal - problem for the leisure stressor. As mood became more positive, the problem tended to appear more amenable to change.

Neuroticism and conscientiousness predicted a moderate ( $R^2 = .11, p < .001$ ) amount of the variance in secondary appraisal - emotion for the leisure stressor. Increased neuroticism was associated with less perceived ability to manage emotional responses. Conscientiousness was positively associated with perceived emotional control.

Agreeableness predicted a small ( $R^2 = .06, p < .01$ ) amount of the variance in secondary appraisal - expectation for the leisure stressor. As agreeableness increased, optimism regarding the outcome of the leisure stressor tended to increase.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness), and appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) predicted coping responses (situation modification, accommodation, devaluation, avoidance, and symptom reduction) to the leisure stressor. See Tables 57 - 61.

Secondary appraisal - problem predicted a moderate ( $R^2 = .18, p < .001$ ) amount of the variance in situation modification for the leisure stressor. Those who reported greater perceived ability to deal with the problem tended to report that they were more likely to attempt to change the stressor.

Current mood predicted a small ( $R^2 = .02, p < .05$ ) amount of the variance in accommodation for the leisure stressor. Mood was positively related to accommodation.

Secondary appraisal - emotion and secondary appraisal - expectation predicted a moderate ( $R^2 = .13, p < .001$ ) amount of the variance in devaluation for the leisure stressor. Increases in perceived control of emotions and optimistic expectations were associated with increased devaluation.

Secondary appraisal - expectation predicted a small ( $R^2 = .05, p < .01$ ) amount of the variance in avoidance for the leisure stressor. Participants who were optimistic regarding the outcome of the leisure stressor, tended to try not to think about the situation.

Primary appraisal and secondary appraisal - problem predicted a moderate ( $R^2 = .10, p < .001$ ) amount of the variance in symptom reduction for the leisure stressor. As subjective distress and perceived ability to change the situation increased, symptom reduction tended to increase.

**Family conflict stressor.** Descriptive statistics are provided for all family conflict stressor appraisals (see Table 62). Descriptive statistics, including Chronbach's alpha, are provided for all family conflict stressor coping responses (see Table 63). Chronbach's Alpha scores were within acceptable ranges for all coping responses. Correlations between control, BFI domain, appraisal, and coping for the family conflict stressor can be found in Table 64.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress) and BFI domain (extraversion, agreeableness, conscientiousness, neuroticism, and openness) predicted appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) for the family conflict stressor. See Tables 65 – 68.

Current stress and current mood predicted a small ( $R^2 = .06, p < .01$ ) amount of the variance in primary appraisal for the family conflict stressor. As mood became more positive and stress increased, participants tended to report more subjective distress for the family conflict stressor.

Extraversion and age predicted a small ( $R^2 = .07, p < .01$ ) amount of the variance in secondary appraisal - problem for the family conflict stressor. Older participants and those who

endorsed greater extraversion tended to report that the family conflict stressor was more amenable to change.

Neuroticism predicted a small ( $R^2 = .07, p < .01$ ) amount of the variance in secondary appraisal - emotion for the family conflict stressor. Neuroticism was negatively associated with perceived emotional control.

Neuroticism and conscientiousness predicted a small ( $R^2 = .07, p < .01$ ) amount of the variance in secondary appraisal - expectation for the family conflict stressor. Those higher in neuroticism tended to report more pessimistic predictions regarding the outcome of the family conflict stressor. Participants higher in conscientiousness tended to report more positive expectations.

A series of regression analyses was conducted to determine which control variables (age, gender, mood, and stress), BFI domains (extraversion, agreeableness, conscientiousness, neuroticism, and openness), and appraisal scores (primary appraisal, secondary appraisal - problem, secondary appraisal - emotion, and secondary appraisal - expectation) predicted coping responses (situation modification, accommodation, devaluation, avoidance, and symptom reduction) to the family conflict stressor. See Tables 69 – 73.

Secondary appraisal - problem, primary appraisal, neuroticism, secondary appraisal - expectation, and secondary appraisal - emotion predicted a large ( $R^2 = .31, p < .001$ ) amount of the variance in situation modification for the family conflict stressor. Higher rates of extraversion, conscientiousness, perceived ability to change the situation, and optimistic expectations were associated with greater rates of situation modification.

Secondary appraisal - emotion and current mood predicted a small ( $R^2 = .05, p < .01$ ) amount of the variance in accommodation for the family conflict stressor. Those participants

who reported greater perceived ability to manage emotions and those who reported more pre-existing stress were more likely to endorse higher rates of accommodation.

Secondary appraisal - emotion, secondary appraisal - problem, primary appraisal, and conscientiousness predicted a moderate ( $R^2 = .24, p < .001$ ) amount of the variance in devaluation for the family conflict stressor. Those participants who were lower on conscientiousness, reported less subjective distress, and less perceived ability to change the situation were more likely to engage in devaluation. Those who reported more perceived ability to manage emotions were likely to endorse greater use of devaluation.

Conscientiousness, secondary appraisal - emotion, secondary appraisal - problem, and current mood predicted a moderate ( $R^2 = .16, p < .001$ ) amount of the variance in avoidance for the family conflict stressor. Conscientiousness and secondary appraisal - problem were negatively associated with avoidance. Secondary appraisal - emotion and mood were positively associated with avoidance.

Primary appraisal predicted a small ( $R^2 = .04, p < .01$ ) amount of the variance in symptom reduction for the family conflict stressor. As subjective distress increased, symptom reduction tended to increase.

**Interactions between variables across stressor scenarios.** Many interactions between variables were not stable. They were present at a statistically significant level for one or two situations but did not reach statistical significance for the other situations. Only one predictor variable was observed to change the direction of its relationship with one of the dependent variables types across situations. Conscientiousness had a negative relationship with secondary appraisal - emotion for the academic stressor, but it had a positive relationship with secondary appraisal - emotion for the leisure stressor. Consistent relationships between variables were observed across



all or most of the Stressor Situations. Neuroticism was a predictor of secondary appraisal - emotion across all four situations. Secondary appraisal - problem was a predictor of situation modification across all four situations. Mood was a predictor for secondary appraisal - problem for three situations. Neuroticism was a predictor of secondary appraisal - expectation for three situations. Mood was a predictor for accommodation in three situations. Both secondary appraisal - emotion and secondary appraisal - expectation were predictors for devaluation in three situations. Secondary appraisal - emotion was a predictor of avoidance for three situations. Current stress predicted primary appraisal in two situations. Primary appraisal predicted symptom reduction in two situations.

All three secondary appraisal variables were positively related with one another across all situations. Situation modification had positive relationships with accommodation and symptom reduction across all four situations. Devaluation and avoidance had a positive relationship across all four situations. Avoidance and symptom reduction had a positive relationship across all four situations.

### **Discussion**

Coping has long been recognized as an important area of study for both mental and physical health (cf. Folkman et al., 1986). In particular, emotion-focused coping has been observed to be associated with increased anxiety and depression (cf. Brough, et al. 2005b). Though the stress-coping process has been studied extensively, there are methodological concerns regarding a significant portion of past research. The present study was designed to address, and ideally improve upon, the most obvious methodological shortcomings. The utility of personality trait clusters for the prediction of appraisal and coping responses was addressed. The relationships between variables (i.e. situations, age, gender, mood, stress level, personality,

appraisals, and coping) considered relevant to the coping process were investigated. Participants reported appraisal and coping responses for the same four situations (as opposed to self-selected retrospective stressors). Coping responses were reported using an instrument with greater factor stability than scales (i.e. the WCQ and COPE) employed in the majority of previous studies.

### **Clusters versus domains**

A primary goal of the present study was to evaluate the relative predictive utility of personality domains versus personality clusters. Of the five BFI Clusters observed in the current study, two were similar to those observed in Roth and von Collani (2007). Cluster five in the present study was very similar to the “resilient type” reported by Roth and von Collani. Cluster one in the present study was very similar to the “undesirable type” reported by Roth and von Collani. The present study found clusters of personality traits to be less effective predictors of appraisal and coping responses than were individual personality traits. The results of the current study were similar to Roth and Von Collani, who found clusters of personality traits were predictors of political beliefs, but were less effective than were individual personality traits for scale format dependent variables. In the present study, personality clusters provided added predictive utility when combined with individual personality traits for two classes of coping variables, accommodation (adjust personal standards to meet situation) and symptom reduction (venting, catharsis).

### **Situation, Personality, appraisal, and Coping**

Another aim of the present study was to evaluate the ability of personality and situation to predict appraisal, and to evaluate the ability of personality, situation, and appraisal to predict coping. Situation was superior to personality for the prediction of appraisal responses. The academic stressor was judged to be the most stressful (primary appraisal), followed by the family

conflict stressor, the health stressor, and the leisure stressor. The leisure scenario was judged to be the situation most amenable to change (secondary appraisal - problem), followed by the health stressor, the academic stressor, and the family conflict stressor. Emotional reactions to the leisure stressor were judged to be the most manageable (secondary appraisal - emotion), followed by the health stressor, family conflict stressor, and the academic stressor. The outcome of the leisure stressor was expected to be the most favorable (secondary appraisal - expectation), followed by the health stressor, the family conflict stressor, and the academic stressor

Situation was superior to personality traits and appraisals for the prediction of three coping variables, devaluation (tell yourself the stressor is not that important), avoidance (attempt to think about something else), and symptom reduction (catharsis). Participants were most likely to engage in devaluation for the leisure and health stressors. They were least likely to engage in devaluation for the academic and family conflict stressors. Participants reported that they were most likely to engage in avoidance for the leisure stressor, followed by the health stressor, and the family conflict stressor. Participants were least likely to avoid thinking about the academic stressor. Participants reported that they were most likely to attempt to relieve their tension (symptom reduction) for the family conflict stressor, followed by the health stressor, and the academic stressor. Participants reported the lowest rate of symptom reduction for the leisure stressor. Appraisal was the best predictor for situation modification. All three secondary appraisal variables were predictors of situation modification, but secondary appraisal - problem was the best predictor for situation modification. It was positively associated with situation modification. Personality was the best predictor for accommodation. Conscientiousness was the best predictor. It was negatively associated with accommodation.

Given that appraisals varied more based upon situation than person, it appears that situation was more influential than was personality. As such, the results of the present study are similar to those of De Ridder and Kerssens (2003), who reported that coping styles varied more from situation to situation than from person to person.

### **Interactions between Variables**

Determining the relationships between variables for each situation and their relative stability across situations was the final aim of the present study. In the present study, neuroticism had a positive relationship with primary appraisal for the academic stressor, consistent with Bouchard, Guillemette, and Landry-Léger (2004). Bouchard, Guillemette, and Landry-Léger reported that neuroticism had a negative relationship with secondary appraisal (general controllability). For the present study, which unlike Bouchard et al. broke secondary appraisal into three separate variables, neuroticism had a negative relationship with secondary appraisal - problem for the academic stressor. Neuroticism had a negative relationship with perceived ability to manage emotions across all four situations in the present study. Neuroticism was negatively related to expected outcome for all situations except for the leisure stressor.

Bouchard, Guillemette, and Landry-Léger (2004) reported extraversion had a negative relationship with primary appraisal. In the current study the relationship was not significant for any of the situations. Bouchard, Guillemette, and Landry-Léger reported that extraversion had a positive relationship with secondary appraisal. The present study observed a positive relationship between extraversion and perceived problem solving ability for the health and the family conflict stressors, but did not find a relationship with perceived emotional control or expected outcome.

Bouchard, Guillemette, and Landry-Léger (2004) reported that openness had a negative relationship with primary appraisal. This relationship was observed in the academic stressor for

the present study. Bouchard, Guillemette, and Landry-Léger reported openness had a positive relationship with secondary appraisal. For the present study, openness was not a predictor of secondary appraisals for any situation.

Bouchard, Guillemette, and Landry-Léger reported conscientiousness had a negative relationship with primary appraisal. There was no significant relationship between conscientiousness and primary appraisal in the present study. Bouchard, Guillemette, and Landry-Léger reported conscientiousness had a positive relationship with secondary appraisals. In the present study, conscientiousness was a predictor of secondary appraisal - emotion for the academic stressor (negative relationship) and leisure stressor (positive relationship), and conscientiousness had a positive relationship with expected outcome for the family conflict stressor.

Bouchard, Guillemette, and Landry-Léger reported agreeableness had a negative relationship with primary appraisal. No significant relationship was observed in the present study. Bouchard, Guillemette, and Landry-Léger reported agreeableness had a negative relationship with secondary appraisal. In the present study, agreeableness was positively related to secondary appraisal - expectation for the health and leisure stressors.

Connor-Smith and Flachsbart (2007) reported a positive relationship between extraversion and attempts to deal with the stressful situation. The present study observed the same positive relationship between extraversion and attempts to change the situation for the health stressor, but not for the other situations. Connor-Smith and Flachsbart observed a positive relationship between extraversion and emotion regulation. The current study observed a positive relationship between extraversion and symptom reduction, a coping style comparable to emotion regulation, for the health stressor.

Bouchard et al. (2004) reported a negative correlation between agreeableness and avoidance. Connor-Smith and Flachsbart (2007) reported a positive relationship between agreeableness and acceptance (compare to accommodation in the current study). Agreeableness and coping styles were not related in the current study.

Connor-Smith and Flachsbart (2007) observed a positive relationship between conscientiousness and problem solving. Bouchard et al. (2004) reported a positive relationship between conscientiousness and problem focused coping. The current study did not find a relationship between conscientiousness and attempts to change the situation. Connor-Smith and Flachsbart (2007) observed a positive relationship between conscientiousness and acceptance. The current study observed a negative relationship between conscientiousness and accommodation for the academic stressor. Bouchard et al. (2004) reported a positive correlation between conscientiousness and avoidance. The current study found a negative correlation between conscientiousness and avoidance for the Academic and family conflict situations.

Connor-Smith and Flachsbart (2007) observed a negative correlation between neuroticism and problem solving. Bouchard et al. (2004) reported a negative relationship between neuroticism and problem focused coping. The results of the current study were similar for the family conflict stressor. Neuroticism negatively associated with attempts to change the situation for the family conflict stressor. Neuroticism had a positive correlation with avoidance in the Connor-Smith and Flachsbart (2007) study. In the current study neuroticism was not a predictor of avoidance.

Connor-Smith and Flachsbart (2007) found a positive correlation between openness and problem solving. Bouchard et al. reported a positive relationship between openness and problem focused coping. Openness was not a predictor of situation modification for the current study.

Portello and Long (2001) found a positive correlation between primary (threat) appraisal and disengagement coping. The present study did not observe a relationship between primary appraisal and avoidance but did find a negative relationship between primary appraisal and devaluation for the health and family conflict stressor. Portello and Long found a positive correlation between primary appraisal and engagement coping. The present study found a similar relationship for the family conflict stressor. Portello and Long reported that secondary appraisal (controllability, not broken into problem or emotion) had a negative correlation with disengagement coping. In the present study perceived emotional control (secondary appraisal - emotion) had a positive relationship with avoidance for all situations with the exception of the leisure situation. Portello and Long reported that secondary appraisal had a positive correlation with engagement coping. For the present study secondary appraisal - problem had a positive relationship with situation modification for all situations. Perceived emotional control was negatively associated with attempts to change the family conflict stressor.

Stable relationships were observed, but only two predictors remained stable across all four situations for a dependent variable. Neuroticism was a predictor of secondary appraisal - emotion across all four situations. Secondary appraisal - problem was a predictor of situation modification across all four situations. Mood was a predictor for secondary appraisal - problem for three situations. Neuroticism was a predictor of secondary appraisal - expectation for three situations. Mood was a predictor for accommodation in three situations. Both secondary appraisal - emotion and secondary appraisal - expectation were predictors for devaluation in three situations. Secondary appraisal - emotion was a predictor of avoidance for three situations. Current stress predicted primary appraisal in two situations. Primary appraisal predicted symptom reduction in two situations.

All three secondary appraisal variables were positively related with one another across all situations. Situation modification had positive relationships with accommodation and symptom reduction across all four situations. Devaluation and avoidance had a positive relationship across all four situations. Avoidance and symptom reduction had a positive relationship across all four situations.

There was only one instance of instability in the direction of the relationship between predictor and dependent variable. Conscientiousness had a negative relationship with secondary appraisal - emotion for the academic stressor, but had a positive relationship with secondary appraisal - emotion for the leisure stressor. The remainder of the instability was related to the magnitude of the relationship changing across situations. For example, gender was a predictor of subjective distress and perceived emotional control for the academic stressor, but was not a significant predictor in any of the other situations.

Of the four control variables, stress and mood were the most reliable predictors of appraisal and coping. While a certain demographic variable, such as gender, may be a predictor of coping or appraisal response for a certain situation, the relationship is not stable across situations. This finding was consistent with De Ridder and Kerssens (2003).

### **Limitations**

There were a number of limitations for the present study. Participants were college students. The majority of the sample would likely be considered “well-adjusted,” thus making it more difficult to obtain extreme personality types/clusters. Extreme personality types/clusters may have had greater predictive utility than the clusters/types observed in the present study.



Questions were not included to assess for random responding. Due to the format in which the study was completed (i.e. online self-report), this would have been an important step to ensure validity.

There was no appraisal item to assess the relative importance of the stressor for participants. Though primary appraisal is likely influenced by the importance of the stressor to the individual, the explicit evaluation of the relative importance of the stressor to individual participants would have likely provided additional insight into coping responses, such as accommodation and devaluation, which relate to personal standards and importance.

The coping instrument assessed only general styles, rather than more situation specific responses. One of the coping styles, accommodation, did not appear to vary much in magnitude as a function of appraisal, personality, or situation. This suggests, that either the stressor situations did not provide an opportunity to engage in this type of behavior or that a significant number of participants misunderstood the items. Symptom reduction may have been confounded by attempts to change the stressor situation. For example, it is possible that venting to the friend in the leisure stressor or the parents in the family conflict stressor could be construed as an attempt to change the situation. A question assessing participants' opinion of which coping strategy would be most effective for each situation was not included. Such a question would be particularly helpful in overcoming neutral rating tendencies and linking each situation with a preferred coping strategy.

Finally and perhaps most importantly, the study involved coping intentions rather than actual observed behaviors. Individuals often form intentions, but fail to follow through or change their plans.

## Conclusion

The failure of personality clusters to outperform personality domains observed in the present study may have implications for the assessment of personality in clinical settings. The Minnesota Multiphasic Personality Inventory – Second Edition (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) has long relied upon code types. However, there is very little research that compares the relative utility of code types to scales for the purposes of predicting phenomena. An EBSCO database search for search terms “MMPI-2” and “code type” in the “abstract” field yielded 93 studies matching the search criteria. Only one article (Senior & Douglas, 2001) offered a critique of the MMPI-2 code type approach. No studies were found that reported an explicit intent to compare the relative predictive utility of scales to that of code types. Future research into MMPI-2 code types could provide clarification with respect to their relative predictive utility versus scales, and provide an opportunity to examine extreme personality types.

For accommodation and symptom reduction, personality clusters provided added predictive utility versus personality domains alone. In the present study, extraversion was positively associated with symptom reduction and conscientiousness was negatively associated with symptom reduction. That certain phenomena draw upon two personality traits is one possible explanation for this observation. Future studies could explore this possibility

The results from the present study indicated that type of situation was the most important predictor of appraisal and the most reliable predictor of coping. A common system for categorizing situations (e.g., social situation or achievement situation; see De Ridder and Kerssens, 2003) would be helpful in determining the aspects of situations that impact coping. Such a system could potentially shed light on the link between personality and situations. For example, the present study observed that conscientiousness was associated with less perceived

ability to cope with emotions for the academic stressor, but greater perceived ability to cope with emotions for the leisure stressor. A system for classifying qualities of situations could potentially clarify whether this change in perceived emotional control was related to situation domain (e.g., academic vs. leisure) and/or other aspects of the situation (e.g. presence of other people).

As reported earlier, previous studies have reported a consistent link between neuroticism and emotion-focused coping. In the present study, neuroticism was consistently associated with lower perceived emotional control. Both of these facts make the failure of the present study to find a clear link between neuroticism and emotion-focused coping strategies very curious. It is conceivable that the hypothetical stressors and the prospective nature of coping in the current study captured the initial phase of coping, whereas the retrospective stressors employed in previous studies captured the entire process. If this is the case, it is possible that if neurotic individuals engage in lower rates of problem solving (as reported in the current study), the stressor may remain unresolved, leaving them dealing with the associated stress for a longer of period of time, ultimately resulting in more emotion-focused coping in the long run. This begs the question. What are neurotic individuals doing with their time if not dealing with the problem? Are they engaging in stress reducing activities? Are they procrastinating? Are they focusing on another activity that they prioritize higher? The current study provided no clear answer. Based upon the present study, it appears that mood and neuroticism affect secondary appraisals. These appraisals (overall efficacy and predicted outcome) affect coping responses. If this is the case, clinical interventions could target this lack of efficacy with problem-solving and emotion-regulation skills.

Finally, future studies must address the limitations of self-report measures of stress and coping. Methods for assessing stress and coping responses independent of self-report scales must

be developed in order to better evaluate the reliability of self-report data and validity of constructs. For example, biometric markers for stress could be included in research designs, and behavioral observations could provide data for coping responses.

## Appendix A



Office of Research Integrity  
Institutional Review Board  
401 11th St., Suite 1300  
Huntington, WV 25701

FWA 00002704

IRB1 #00002203  
IRB2 #00003206

March 26, 2010

Marty Amerikaner, Ph.D.  
Psychology Department

RE: IRBNet ID# 158550-1  
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Amerikaner:


Protocol Title:	[158550-1] Effects of Personality and Situation upon Appraisal and Coping		
Expiration Date:	March 26, 2011		
Site Location:	MU		
Type of Change:	New Project	APPROVED	
Review Type:	Exempt Review		

In accordance with 45CFR46.101(b)(2), the above study and informed consent were granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire March 26, 2011. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Daniel McGrath.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, CIP at (304) 696-4303 or [day50@marshall.edu](mailto:day50@marshall.edu). Please include your study title and reference number in all correspondence with this office.

## Appendix B

	Marshall University IRB	
	Approved on:	3/26/10
	Expires on:	3/26/11
	Study number:	158550

**Anonymous Online Survey Consent**

You are invited to participate in a research project entitled “Effects of Personality and Situation upon Appraisal and Coping” designed to analyze the relationship between personality, stressor appraisal, and coping responses. The study is being conducted by Dr. Marty Amerikaner and Daniel McGrath from Marshall University and has been approved by the Marshall University Institutional Review Board (IRB). This research is being conducted as part of the dissertation requirements for Daniel McGrath.

This survey is comprised of four stressor narratives and a series of questions. Your replies will be anonymous. It should take between 45 minutes and 1 ½ hours to complete the survey. Your replies will be anonymous, so do not type your name anywhere on the form. There are no known risks involved with this study. Participation is completely voluntary and there will be no penalty or loss of benefits if you choose to not participate in this research study or to withdraw. If you choose not to participate you may either return the blank survey or you may discard it. You may choose to not answer any question by simply leaving it blank. Once you complete the survey you can delete your browsing history for added confidentiality. Completing the on-line survey indicates your consent for use of the answers you supply. If you have any questions about the study or in the event of a research related injury, you may contact Dr. Amerikaner at (304) 696-2783 or Daniel McGrath at (304) 696-2782.

If you have any questions concerning your rights as a research participant you may contact the Marshall University Office of Research Integrity at (304) 696-4303.

By completing this survey and returning it you are also confirming that you are 18 years of age or older.

Please print this page for your records.

If you choose to participate in the study you will find the survey at [http://marshall.sona-systems.com/all\\_exp.asp](http://marshall.sona-systems.com/all_exp.asp)

## Appendix C

Table 1

*Descriptive Statistics Personality (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>α</i>
Extraversion	.29	.80	-1.73	1.84	.86
Agreeableness	.84	.62	-1.31	1.98	.78
Conscientiousness	.71	.63	-1.07	1.87	.82
Neuroticism	-.11	.74	-2.05	1.79	.81
Openness	.23	.60	-1.39	1.59	.77

Table 2  
*Descriptive Statistics BFI Clusters (N=200)*

Cluster	<i>N</i>	BFI Domain	<i>M</i>	<i>SD</i>
1	33	Extraversion	-.67	.48
		Agreeableness	.64	.51
		Conscientiousness	.47	.42
		Neuroticism	.75	.53
		Openness	.24	.53
2	31	Extraversion	.06	.64
		Agreeableness	.14	.62
		Conscientiousness	.14	.63
		Neuroticism	-.17	.49
		Openness	.47	.35
3	36	Extraversion	.89	.47
		Agreeableness	.60	.52
		Conscientiousness	.78	.54
		Neuroticism	.12	.43
		Openness	.36	.53
4	60	Extraversion	.23	.68
		Agreeableness	1.22	.38
		Conscientiousness	.81	.64
		Neuroticism	-.13	.65
		Openness	-.30	.43
5	40	Extraversion	.80	.65
		Agreeableness	1.18	.44
		Conscientiousness	1.15	.44
		Neuroticism	-.93	.43
		Openness	.72	.49



Table 3

*Descriptive Statistics Broad Appraisal and Coping (N = 800)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Primary Appraisal	4.66	1.96	1	7
Secondary Appraisal - Problem	4.37	1.63	1	7
Secondary Appraisal - Emotion	4.37	1.75	1	7
Secondary Appraisal - Expectation	4.96	1.85	1	7
Situation Modification	5.31	1.40	1	7
Accommodation	3.99	1.60	1	7
Devaluation	3.44	2.03	1	7
Avoidance	3.64	1.89	1	7
Symptom Reduction	4.47	1.66	1	7

Table 4

*Correlations between Personality, Broad Coping, and Broad Appraisal (N=800)*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. A	.14 <sup>*</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
3. C	.13	.34 <sup>***</sup>	-	-	-	-	-	-	-	-	-	-	-	-
4. N	-.27 <sup>***</sup>	-.28 <sup>***</sup>	-.16 <sup>*</sup>	-	-	-	-	-	-	-	-	-	-	-
5. O	.14 <sup>*</sup>	-.04	.01	-.16 <sup>*</sup>	-	-	-	-	-	-	-	-	-	-
6. PA	.05	.01	.05	.12 <sup>**</sup>	-.05	-	-	-	-	-	-	-	-	-
7. SA-P	.14 <sup>**</sup>	.08 <sup>*</sup>	.08 <sup>*</sup>	-.18 <sup>**</sup>	.08 <sup>*</sup>	-.19 <sup>***</sup>	-	-	-	-	-	-	-	-
8. SA-EM	.11 <sup>**</sup>	.06	.04	-.32 <sup>**</sup>	.11 <sup>**</sup>	-.50 <sup>***</sup>	.41 <sup>***</sup>	-	-	-	-	-	-	-
9. SA-EX	.09 <sup>**</sup>	.12 <sup>**</sup>	.08 <sup>*</sup>	-.20 <sup>**</sup>	.05	-.50 <sup>***</sup>	.43 <sup>***</sup>	.61 <sup>***</sup>	-	-	-	-	-	-
10. SI	.18 <sup>**</sup>	.08 <sup>*</sup>	.12 <sup>**</sup>	-.16 <sup>**</sup>	.10 <sup>**</sup>	.04	.44 <sup>***</sup>	.13 <sup>***</sup>	.21 <sup>***</sup>	-	-	-	-	-
11. AC	.08 <sup>*</sup>	.05	-.10 <sup>**</sup>	-.09 <sup>*</sup>	.00	.00	.11 <sup>**</sup>	.12 <sup>**</sup>	.09 <sup>*</sup>	.17 <sup>***</sup>	-	-	-	-
12. D	-.01	-.02	-.09 <sup>**</sup>	-.05	-.01	-.48 <sup>***</sup>	.15 <sup>***</sup>	.50 <sup>***</sup>	.50 <sup>***</sup>	-.10 <sup>**</sup>	.21 <sup>***</sup>	-	-	-
13. AV	.03	.04	-.09 <sup>**</sup>	-.08 <sup>*</sup>	.03	-.31 <sup>***</sup>	.06	.35 <sup>***</sup>	.38 <sup>***</sup>	-.13 <sup>***</sup>	.22 <sup>***</sup>	.68 <sup>***</sup>	-	-
14. SY	.11 <sup>**</sup>	.04	-.04	.04	.03	.20 <sup>***</sup>	.00	-.13 <sup>***</sup>	-.06	.14 <sup>***</sup>	.07 <sup>*</sup>	-.10 <sup>**</sup>	.12 <sup>**</sup>	-

\*p &lt; .05. \*\*p &lt; .01. \*\*\*p &lt; .001.

E = Extraversion, A = Agreeableness, C = Conscientiousness, N = Neuroticism, O = Openness, PA = Primary Appraisal,

SA-P = Secondary Appraisal - Problem Focused Coping Potential,

SA-EM = Secondary Appraisal Emotion Focused Coping Potential, SA-EX = Secondary Appraisal Expectancy,

SI = Situation Modification, AC = Accommodation, D = Devaluation, AV = Avoidance, SY = Symptom Reduction

Table 5

*Summary of Hierarchical Regression Analysis for Variables Predicting Primary Appraisal*

*(N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.48	.15		4.50	.13		4.19	.32	
Cluster Dummy 1	.39	.23	.07				.44	.40	.08
Cluster Dummy 2	.13	.23	.02				.51	.33	.09
Cluster Dummy 3	.23	.22	.04				-.05	.28	-.01
Cluster Dummy 4	.18	.20	.04				-.08	.30	-.02
Extraversion				.20	.09	.08*	.32	.12	.13**
Agreeableness				.06	.12	.02	.18	.15	.06
Conscientiousness				.18	.12	.06	.27	.13	.09*
Neuroticism				.39	.10	.15***	.35	.13	.13**
Openness				-.13	.12	-.04	-.24	.15	-.07
$R^2$		.00			.03**			.03**	
<i>F</i>		.76			4.25**			3.03**	
<i>F</i> for change in $R^2$								.20	

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

Table 6

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Problem (N =800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.68	.13		4.15	.11		3.74	.26	
Cluster Dummy 1	-.81	.19	-.19***				.48	.33	.11
Cluster Dummy 2	-.35	.19	-.08				.35	.27	.08
Cluster Dummy 3	-.31	.18	-.07				.20	.23	.05
Cluster Dummy 4	-.24	.16	-.07				.58	.25	.16*
Extraversion				.19	.07	.09*	.27	.10	.13**
Agreeableness				.03	.10	.01	-.04	.12	-.02
Conscientiousness				.10	.10	.04	.17	.11	.07
Neuroticism				-.30	.08	-.14***	-.39	.11	-.18***
Openness				.12	.10	.04	.29	.12	.11*
$R^2$		.02**			.05***			.05***	
<i>F</i>		4.78**			7.49***			4.83***	
<i>F</i> for change in $R^2$								1.49	

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

Table 7

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Emotion (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.01	.13		4.31	.11		4.37	.28	
Cluster Dummy 1	-1.42	.20	-.30***				-.21	.35	-.05
Cluster Dummy 2	-.55	.20	-.11**				-.14	.28	-.03
Cluster Dummy 3	-.65	.20	-.14**				.11	.24	.02
Cluster Dummy 4	-.66	.17	-.17***				.17	.26	.04
Extraversion				.05	.08	.02	-.02	.10	-.01
Agreeableness				-.10	.10	-.03	-.15	.13	-.05
Conscientiousness				.01	.10	.00	-.02	.11	-.01
Neuroticism				-.74	.09	-.31***	-.72	.12	-.30***
Openness				.17	.10	.06	.26	.13	.09
$R^2$		.06***			.10***			.10***	
<i>F</i>		12.54***			18.55***			10.65***	
<i>F</i> for change in $R^2$								.79	

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

Table 8

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Expectation (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.47	.14		4.67	.12		4.89	.30	
Cluster Dummy 1	-1.23	.21	-.25***				-.62	.38	-.13
Cluster Dummy 2	-.57	.22	-.11**				-.12	.31	-.02
Cluster Dummy 3	-.52	.21	-.11*				-.05	.26	-.01
Cluster Dummy 4	-.40	.19	-.10*				-.08	.28	-.02
Extraversion				.08	.08	.03	-.05	.11	-.02
Agreeableness				.16	.11	.05	.18	.14	.06
Conscientiousness				.10	.11	.03	.06	.12	.02
Neuroticism				-.42	.09	-.17***	-.29	.13	-.12*
Openness				.07	.11	.02	.10	.14	.03
$R^2$		.04***			.05***			.05***	
$F$		8.57***			7.85***			4.93***	
$F$ for change in $R^2$								1.26	

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

Table 9

*Summary of Hierarchical Regression Analysis for Variables Predicting Situation Modification (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.60	.11		5.05	.09		4.64	.23	
Cluster Dummy 1	-.71	.16	-.19***				.49	.28	.13
Cluster Dummy 2	-.40	.17	-.10*				.34	.23	.09
Cluster Dummy 3	-.07	.16	-.02				.42	.20	.12
Cluster Dummy 4	-.32	.14	-.11**				.41	.21	.13
Extraversion				.23	.06	.13***	.27	.08	.15**
Agreeableness				.01	.09	.01	.02	.11	.01
Conscientiousness				.17	.08	.08*	.23	.09	.10*
Neuroticism				-.20	.07	-.10**	-.32	.10	-.17**
Openness				.16	.08	.07	.24	.11	.10*
$R^2$		.03***			.06***			.06***	
$F$		6.00***			9.51***			5.88***	
$F$ for change in $R^2$								1.33	

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

Table 10

*Summary of Hierarchical Regression Analysis for Variables Predicting Accommodation (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.80	.13		4.06	.11		2.98	.26	
Cluster Dummy 1	.07	.19	.02				1.29	.32	.30***
Cluster Dummy 2	.49	.19	.11*				1.21	.27	.27***
Cluster Dummy 3	.20	.18	.05				.72	.22	.17**
Cluster Dummy 4	.21	.16	.06				.64	.24	.18**
Extraversion				.15	.07	.07*	.33	.09	.16***
Agreeableness				.15	.10	.06	.30	.12	.12*
Conscientiousness				-.34	.09	-.14***	-.14	.10	-.06
Neuroticism				-.16	.08	-.08*	-.40	.11	-.19***
Openness				-.06	.10	-.02	-.02	.12	-.01
$R^2$		.01			.03***			.06***	
<i>F</i>		1.86			4.64***			5.14***	
<i>F</i> for change in $R^2$								5.64***	

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



Table 11

*Summary of Hierarchical Regression Analysis for Variables Predicting Devaluation (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.23	.16		3.67	.14		3.13	.33	
Cluster Dummy 1	.19	.24	.03				.70	2.00	.13
Cluster Dummy 2	.35	.24	.06				.41	.34	.07
Cluster Dummy 3	.32	.23	.06				.64	.29	.12*
Cluster Dummy 4	.22	.21	.05				.46	.31	.10
Extraversion				-.02	.09	-.01	.01	.12	.01
Agreeableness				.00	.13	.00	.02	.16	.01
Conscientiousness				-.33	.12	-.10**	-.27	.13	-.08*
Neuroticism				-.20	.11	-.07	-.39	.14	-.14**
Openness				-.06	.12	-.02	.02	.16	.01
$R^2$		.00			.01			.02	
<i>F</i>		.68			2.17			1.78	
<i>F</i> for change in $R^2$								1.30	

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

Table 12

*Summary of Hierarchical Regression Analysis for Variables Predicting Avoidance (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.51	.15		3.70	.13		3.23	31.00	
Cluster Dummy 1	-.10	.22	-.02				.43	.39	.09
Cluster Dummy 2	.20	.23	.04				.33	.32	.06
Cluster Dummy 3	.22	.22	.05				.59	.27	.12*
Cluster Dummy 4	.26	.19	.06				.65	.29	.16
Extraversion				.05	.09	.02	.04	.11	.02
Agreeableness				.19	.12	.06	.15	.15	.05
Conscientiousness				-.38	.11	-.13**	-.34	.12	-.11**
Neuroticism				-.18	.10	-.07	-.30	.13	-.12*
Openness				.05	.11	.02	.24	.15	.08
$R^2$		.01			.02**			.03**	
<i>F</i>		1.07			3.37**			2.69**	
<i>F</i> for change in $R^2$								1.83	

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

Table 13  
*Summary of Hierarchical Regression Analysis for Variables Predicting Symptom Reduction*  
 (N = 800)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.19	.13		4.35	.11		3.69	.27	
Cluster Dummy 1	-.08	.19	-.02				.30	.34	.07
Cluster Dummy 2	.47	.20	.10				.80	.28	.17**
Cluster Dummy 3	.43	.19	.10*				.43	.23	.10
Cluster Dummy 4	.48	.17	.13**				.81	.25	.22**
Extraversion				.28	.08	.13***	.30	.10	.14**
Agreeableness				.19	.10	.07	.20	.13	.07
Conscientiousness				-.16	.10	-.06	-.04	.11	-.02
Neuroticism				.20	.09	.09*	.17	.11	.08
Openness				.08	.10	.03	.32	.13	.11*
$R^2$		.02**			.02**			.05***	
<i>F</i>		4.29**			3.98**			4.60***	
<i>F</i> for change in $R^2$								5.27***	

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

Table 14

*Summary of Hierarchical Regression Analysis for Variables Predicting Primary Appraisal (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.50	.13		5.42	.12		5.26	.15	
Situation Dummy 1				-1.56	.17	-.34***	-1.56	.17	-.34***
Situation Dummy 2				.44	.17	.10**	.44	.17	.10**
Situation Dummy 3				-1.93	.17	-.43***	-1.93	.17	-.43***
Extraversion	.20	.09	.08*				.20	.08	.08*
Agreeableness	.06	.12	.02				.06	.10	.02
Conscientiousness	.18	.12	.06				.18	.10	.06
Neuroticism	.39	.10	.15***				.39	.09	.15***
Openness	-.13	.12	-.04				-.13	.10	-.04
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.03**			.26***			.29***	
$F$		4.25***			95.09***			40.36***	
$F$ for change in $R^2$								5.81***	

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

Table 15

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Problem (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.15	.11		3.71	.11		3.50	.14	
Situation Dummy 1				.81	.16	.22***	.81	.15	.22***
Situation Dummy 2				.50	.16	.13**	.50	.15	.13**
Situation Dummy 3				1.31	.16	.35***	1.31	.15	.35***
Extraversion	.19	.07	.09*				.19	.07	.09**
Agreeableness	.03	.10	.01				.03	.10	.01
Conscientiousness	.10	.10	.04				.10	.09	.04
Neuroticism	-.30	.08	-.14*				-.30	.08	-.14***
Openness	.12	.10	.04				.12	.09	.04
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.05***			.09***			.13***	
$F$		7.49***			24.67***			14.79***	
$F$ for change in $R^2$								8.19***	

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

Table 16

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Emotion (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.31	.11		4.01	.11		3.95	.13	
Situation Dummy 1				.56	.16	.14***	.56	.15	.14***
Situation Dummy 2				-.65	.16	-.16***	-.65	.15	-.16***
Situation Dummy 3				1.54	.16	.38***	1.54	.15	.38***
Extraversion	.05	.08	.02				.05	.07	.02
Agreeableness	-.10	.10	-.03				-.10	.09	-.03
Conscientiousness	.01	.10	.00				.01	.09	.00
Neuroticism	-.74	.09	-.31***				-.74	.08	-.31***
Openness	.17	.10	.06				.17	.09	.06
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.10***			.21***			.31***	
<i>F</i>		18.55***			70.50***			45.37***	
<i>F</i> for change in $R^2$								24.14***	

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

Table 17

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Expectation (N = 800)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.67	.12		4.24	.11		3.95	.13	
Situation Dummy 1				1.66	.15	.39***	1.66	.15	.39***
Situation Dummy 2				-.63	.15	-.15***	-.63	.15	-.15***
Situation Dummy 3				1.89	.15	.44***	1.89	.15	.44***
Extraversion	.08	.08	.03				.08	.07	.03
Agreeableness	.16	.11	.05				.16	.09	.05
Conscientiousness	.10	.11	.03				.10	.09	.03
Neuroticism	-.42	.09	-.17***				-.42	.08	-.17***
Openness	.07	.11	.02				.07	.09	.02
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.05***			.34***			.38***	
$F$		7.85***			134.35***			61.43***	
$F$ for change in $R^2$								12.08***	

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

Table 18

*Summary of Hierarchical Regression Analysis for Variables Predicting Situation Modification (N = 800)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.05	.09		2.76	.25		4.91	.10		2.61	.27	
SituationDummy1							.47	.14	.15**	.14	.13	.04***
SituationDummy2							.70	.14	.22***	.55	.13	.17***
SituationDummy3							.42	.14	.13**	-.04	.14	-.01**
Extraversion	.23	.06	.13***							.14	.06	.08*
Agreeableness	.01	.09	.01							-.03	.08	-.01
Conscientiousness	.17	.08	.08*							.11	.07	.05
Neuroticism	-.20	.07	-.10*							-.10	.07	-.05
Openness	.16	.08	.07							.12	.07	.05
Primary Appraisal				.12	.03	.17***				.09	.03	.13**
SA - Problem				.37	.03	.43***				.33	.03	.38***
SA - Emotion				-.04	.03	-.05				-.04	.04	-.05
SA - Expectation				.11	.03	.14**				.14	.04	.18***
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.06***			.22***			.03***			.26***	
$F$		9.51***			55.42***			8.90***			23.22***	
$F$ for change in $R^2$											27.11***	

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



Table 19

*Summary of Hierarchical Regression Analysis for Variables Predicting Accommodation (N = 800)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.06	.11		2.76	.32		3.78	.11		2.68	.35	
SituationDummy1							.51	.16	.14**	.53	.17	.14**
SituationDummy2							.16	.16	.04	.17	.16	.05
SituationDummy3							.15	.16	.04	.07	.18	.02
Extraversion	.15	.07	.07*							.11	.07	.06
Agreeableness	.15	.10	.06							.15	.10	.06
Conscientiousness	-.34	.09	-.14***							-.37	.09	-.15***
Neuroticism	-.16	.08	-.08*							-.09	.09	-.04
Openness	-.06	.10	-.02							-.07	.09	-.03
Primary Appraisal				.07	.03	.09*				.09	.04	.11*
SA - Problem				.06	.04	.07				.06	.04	.06
SA - Emotion				.10	.04	.11*				.12	.05	.13**
SA - Expectation				.03	.04	.04				.00	.04	.00
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.03***			.02**			.01*			.06***	
<i>F</i>		4.64 ***			4.84**			3.65**			4.36***	
<i>F</i> for change in $R^2$											4.55***	

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

Table 20

*Summary of Hierarchical Regression Analysis for Variables Predicting Devaluation (N = 800)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.67	.14		2.46	.33		2.49	.11		2.20	.32	
SituationDummy1							1.60	.16	.34***	1.14	.16	.24***
SituationDummy2							-.49	.16	-.11**	-.09	.15	-.02
SituationDummy3							2.69	.16	.58***	1.98	.17	.42***
Extraversion	-.02	.09	-.01							.01	.07	.00
Agreeableness	.00	.13	.00							.01	.09	.00
Conscientiousness	-.33	.12	-.10**							-.31	.09	-.10***
Neuroticism	-.20	.11	-.07							.06	.08	.02
Openness	-.06	.12	-.02							-.11	.09	-.03
Primary Appraisal				-.25	.04	-.24***				-.11	.03	-.11**
SA - Problem				-.15	.04	-.12***				-.16	.04	-.12***
SA - Emotion				.29	.04	.25***				.27	.04	.23***
SA - Expectation				.30	.04	.28***				.15	.04	.14***
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.01			.36***			.39***			.49***	
<i>F</i>		2.17			112.45***			171.187***			62.90***	
<i>F</i> for change in $R^2$											16.69***	

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

Table 21

*Summary of Hierarchical Regression Analysis for Variables Predicting Avoidance (N = 800)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.70	.13		2.61	.35		3.41	.12		2.82	.36	
SituationDummy1							.88	.17	.20***	.66	.18	.15***
SituationDummy2							-1.12	.17	-.26***	-.84	.17	-.19***
SituationDummy3							1.15	.17	.26***	.80	.19	.18***
Extraversion	.05	.09	.02							.06	.08	.02
Agreeableness	.19	.12	.06							.19	.10	.06
Conscientiousness	-.38	.11	-.13**							-.38	.10	-.13***
Neuroticism	-.18	.10	-.07							-.03	.09	-.01
Openness	.05	.11	.02							.03	.10	.01
Primary Appraisal				-.10	.04	-.10**				-.01	.04	-.01
SA - Problem				-.18	.04	-.16***				-.15	.04	-.13***
SA - Emotion				.20	.05	.19***				.17	.05	.16***
SA - Expectation				.28	.04	.28***				.14	.05	.13**
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.02**			.19***			.22***			.28***	
$F$		3.37**			47.24***			75.04***			25.42***	
$F$ for change in $R^2$											7.14***	

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

Table 22

*Summary of Hierarchical Regression Analysis for Variables Predicting Symptom Reduction (N = 800)*

[illegible]

Table 23  
*Descriptive Statistics Control Variables (N = 200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Mood	4.83	1.19	1	7
Stress	4.50	1.39	1	7
Age	19.94	3.64	17	47

Table 24  
*Descriptive Statistics Categorical Variables (N=200)*

<i>Gender</i>	<i>N</i>	<i>Percentage</i>
Female	143	71.50
Male	56	28.00
Other	1	.50

Table 25

*Correlations between Control Variables and Personality (N=200)*

Variables	1	2	3	4	5	6	7	8	9
1. Age	-	-	-	-	-	-	-	-	-
2. Gender	-.05	-	-	-	-	-	-	-	-
3. Mood	.03	-.03	-	-	-	-	-	-	-
4. Stress	.01	-.20**	-.32***	-	-	-	-	-	-
5. Extraversion	-.03	.00	.12	-.02	-	-	-	-	-
6. Agreeableness	.04	-.03	.22**	-.06	.14*	-	-	-	-
7. Conscientiousness	.07	.06	.10	-.04	.13	.34***	-	-	-
8. Neuroticism	.08	-.29***	-.25**	.29***	-.27***	-.28***	-.16*	-	-
9. Openness	.04	.11	.04	-.08	.14*	-.04	.01	-.16*	-

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

Table 26

*Descriptive Statistics Appraisal Health Stressor (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Primary Appraisal	3.87	1.53	1	7
Problem Focused Coping Potential	4.52	1.38	1	7
Emotion Focused Coping Potential	4.57	1.46	1	7
Outcome expectancy	5.90	1.38	1	7

Table 27

*Descriptive Statistics Health Stressor Coping Responses (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i><math>\alpha</math></i>
Situation Modification	5.39	1.29	1	7	.91
Accommodation	4.29	1.37	1	7	.79
Devaluation	4.09	1.64	1	7	.91
Avoidance	4.29	1.60	1	7	.93
Symptom Reduction	4.61	1.41	1	7	.83

Table 28

*Correlations between Personality, Coping, and Appraisal - Health Stressor (N=200)*

Variables	10	11	12	13	14	15	16	17	18
1. Age	-.01	.06	.01	-.03	.02	.10	.07	-.02	-.02
2. Gender	-.04	.05	.16*	.10	.06	-.01	.05	-.01	-.03
3. Mood	-.12	.21**	.13	.20**	.16*	.15*	.12	.06	.07
4. Stress	.21**	-.11	-.03	-.11	-.09	-.10	-.04	.00	.01
5. Extraversion	.00	.23**	.07	.11	.33**	.07	-.04	.10	.16*
6. Agreeableness	-.03	.07	.06	.22**	.10	.08	.05	.13	.08
7. Conscientiousness	.12	.00	.02	.01	.16*	-.08	-.09	.04	.03
8. Neuroticism	.10	-.10	-.36**	-.25**	-.22**	-.04	-.13	-.14	.08
9. Openness	-.02	.11	.17*	.02	.08	-.02	-.01	.07	.04
10. Primary Appraisal	-	-	-	-	-	-	-	-	-
11. SA - Problem	-.13	-	-	-	-	-	-	-	-
12. SA - Emotion	-.28***	.42***	-	-	-	-	-	-	-
13. SA - Expectations	-.24**	.31***	.48***	-	-	-	-	-	-
14. Situation Modification	-.01	.47***	.30***	.31***	-	-	-	-	-
15. Accommodation	.05	.13	.05	.03	.20**	-	-	-	-
16. Devaluation	-.23**	.06	.19**	.24**	-.04	.15*	-	-	-
17. Avoidance	-.02	-.06	.14*	.12	.01	.13	.58***	-	-
18. Symptom Reduction	.04	.15*	-.04	.04	.18**	.07	.08	.21**	-

\*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001.



Table 29  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Primary Appraisal, Health Stressor  
 (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.83	.36	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Age			
Gender			
Current Mood			
Current Stress	.23	.08	.21**
$R^2$		.04**	
$F$ for change in $R^2$		8.95**	

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

Table 30

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Problem, Health Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.41	.10		3.41	.39	
Extraversion	.39	.12	.23**	.35	.12	.20**
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Age						
Gender						
Current Mood				.21	.08	.18**
Current Stress						
$R^2$		.05**			.08***	
$F$ for change in $R^2$		10.64**			6.87**	

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

Table 31  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Secondary Appraisal - Emotion,  
 Health Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.49	.10	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism	-.72	.13	-.36***
Openness			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.13***	
$F$ for change in $R^2$		29.88***	

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

Table 32

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Expectation, Health Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.85	.10		5.55	.16	
Extraversion						
Agreeableness				.37	.16	.17*
Conscientiousness						
Neuroticism	-.46	.13	-.25***	-.37	.13	-.20**
Openness						
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.06***			.09***	
$F$ for change in $R^2$		12.67***			5.53*	

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

Table 33

*Summary of Hierarchical Regression Analysis for Variables Predicting Situation Modification, Health Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.42	.28		3.53	.27		2.81	.38		2.62	.38	
Extraversion				.38	.10	.24***	.37	.10	.23***	.34	.10	.21**
Agreeableness												
Conscientiousness										.26	.12	.13*
Neuroticism												
Openness												
Primary Appraisal												
SA- Problem	.44	.06	.47***	.39	.06	.41***	.34	.06	.36***	.34	.06	.37***
SA - Emotion												
SA -Expectation							.16	.06	.17**	.16	.06	.17**
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.22***			.27***			.30***			.31***	
$F$ for change in $R^2$		54.86***			14.15***			7.30**			4.48*	

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

Table 34  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Accommodation, Health Stressor  
 (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.48	.40	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem			
SA - Emotion			
SA -Expectation			
Age			
Gender			
Current Mood	.17	.08	.15*
Current Stress			
$R^2$		.02*	
$F$ for change in $R^2$		4.32*	

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

Table 35  
*Summary of Hierarchical Regression Analysis for Variables Predicting  
 Devaluation, Health Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.41	.50		3.46	.64	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal				-.19	.08	-.18*
SA- Problem						
SA - Emotion						
SA -Expectation	.28	.08	.24**	.23	.08	.20**
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.06**			.09***	
$F$ for change in $R^2$		12.01**			6.59*	

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

Table 36  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Avoidance, Health Stressor  
 (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.58	.37	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem			
SA - Emotion	.16	.08	.14*
SA -Expectation			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.02*	
$F$ for change in $R^2$		4.12*	

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



Table 37  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Symptom Reduction, Health Stressor  
 (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.53	.10	
Extraversion	.28	.12	.16*
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem			
SA - Emotion			
SA -Expectation			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.02*	
$F$ for change in $R^2$		5.03**	

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

Table 38

*Descriptive Statistics Appraisal Academic Stressor (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Primary Appraisal	5.87	1.65	1	7
Problem Focused Coping Potential	4.22	1.51	1	7
Emotion Focused Coping Potential	3.36	1.58	1	7
Outcome expectancy	3.61	1.79	1	7

Table 39

*Descriptive Statistics Academic Stressor Coping Responses (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i><math>\alpha</math></i>
Situation Modification	5.61	1.22	1	7	.91
Accommodation	3.94	1.65	1	7	.87
Devaluation	2.00	1.29	1	7	.95
Avoidance	2.29	1.41	1	7	.93
Symptom Reduction	4.48	1.63	1	7	.89

Table 40

*Correlations between Personality, Coping, and Appraisal – Academic Stressor (N=200)*

Variables	10	11	12	13	14	15	16	17	18
1. Age	.04	-.09	.03	.00	.01	.06	.09	.08	-.04
2. Gender	-.19**	.15*	.29**	.19**	.11	.03	.05	-.01	-.08
3. Mood	.01	.24**	.12	.26**	.24**	.17*	-.04	-.01	-.04
4. Stress	.07	-.14	-.09	-.13	-.17*	-.14*	.03	.05	.18*
5. Extraversion	.03	.07	.13	.16*	.11	.07	.03	.01	.09
6. Agreeableness	.11	.04	.05	.10	.13	-.02	-.07	-.03	.04
7. Conscientiousness	.12	.09	-.06	.03	.13	-.19**	-.29**	-.25**	-.07
8. Neuroticism	.15*	-.32**	-.52**	-.35**	-.21**	-.13	-.01	-.02	.09
9. Openness	-.21**	.09	.21**	.18*	.15*	.07	.14	.09	.04
10. Primary Appraisal	-	-	-	-	-	-	-	-	-
11. SA - Problem	-.14*	-	-	-	-	-	-	-	-
12. SA - Emotion	-.32***	.47***	-	-	-	-	-	-	-
13. SA - Expectations	-.31***	.56***	.58**	-	-	-	-	-	-
14. Situation Modification	.00	.40***	.21**	.30***	-	-	-	-	-
15. Accommodation	-.03	.13	.19**	.12	.09	-	-	-	-
16. Devaluation	-.23**	.06	.38***	.31***	-.22**	.29***	-	-	-
17. Avoidance	-.13	.02	.27***	.28***	-.20**	.32***	.76***	-	-
18. Symptom Reduction	.07	.04	.01	.19**	.14	.08	.17*	.26***	-

\*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001.

Table 41

*Summary of Hierarchical Regression Analysis for Variables Predicting Primary Appraisal, Academic Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	6.00	.12		6.16	.14	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness	-.58	.19	-.21**	-.52	.19	-.19**
Age						
Gender				-.60	.24	-.17*
Current Mood						
Current Stress						
$R^2$		.04**			.07**	
$F$ for change in $R^2$		9.10**			6.01*	

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

Table 42

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Problem, Academic Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.14	.10		3.08	.43	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism	-.66	.14	-.32***	-.57	.14	-.28***
Openness						
Age						
Gender						
Current Mood				.22	.09	.17*
Current Stress						
$R^2$		.10***			.13***	
$F$ for change in $R^2$		22.89***			6.49*	

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

Table 43

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Emotion, Academic Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	$\frac{SE}{B}$	$\beta$
Constant	3.23	0.1		3.10	.11		3.35	.15	
Extraversion									
Agreeableness									
Conscientiousness							-.36	.15	-.15*
Neuroticism	-1.12	0.13	-.52***	-1.03	.13	-.48***	-1.07	.13	-.50***
Openness									
Age									
Gender				.50	.21	.15*	.51	.21	.15*
Current Mood									
Current Stress									
$R^2$		.27***			.29***			.32***	
$F$ for change in $R^2$		74.95***			5.67*			5.88*	

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

Table 44

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Expectation, Academic Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.52	.12		2.22	.50	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism	-.84	.16	-.34***	-.73	.16	-.30***
Openness						
Age						
Gender						
Current Mood				.27	.10	.18**
Current Stress						
$R^2$		.12***			.15***	
$F$ for change in $R^2$		26.67***			7.05**	

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

Table 45

*Summary of Hierarchical Regression Analysis for Variables Predicting Situation Modification, Academic Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.26	.23		3.66	.36	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal						
SA- Problem	.32	.05	.40***	.29	.05	.36***
SA - Emotion						
SA -Expectation						
Age						
Gender						
Current Mood				.15	.07	.15*
Current Stress						
$R^2$		.16***			.18***	
$F$ for change in $R^2$		37.45***			4.82*	

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



Table 46

*Summary of Hierarchical Regression Analysis for Variables Predicting Accommodation, Academic Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.27	.27		3.64	.30		2.62	.51	
Extraversion									
Agreeableness									
Conscientiousness				-.47	.18	-.18**	-.52	.18	-.20**
Neuroticism									
Openness									
Primary Appraisal									
SA- Problem									
SA - Emotion	.20	.07	.19**	.19	.07	.18**	.17	.07	.16*
SA -Expectation									
Age									
Gender									
Current Mood							.23	.09	.17*
Current Stress									
$R^2$		.04**			.07**			.10***	
$F$ for change in $R^2$		7.67**			6.96**			6.07*	

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

Table 47

*Summary of Hierarchical Regression Analysis for Variables Predicting Devaluation, Academic Stressor*  
( $N = 200$ )

Variable	Model 1			Model 2			Model 3		
	$B$	$SE\ B$	$\beta$	$B$	$SE\ B$	$\beta$	$B$	$SE\ B$	$\beta$
Constant	0.94	0.2		1.36	0.22		1.05	0.24	
Extraversion									
Agreeableness									
Conscientiousness				-.54	.13	-.26***	-.46	.13	-.23
Neuroticism							.36	.13	.20
Openness									
Primary Appraisal									
SA- Problem									
SA - Emotion	.32	.05	.38***	.30	.05	.37***	.39	.06	.48
SA -Expectation									
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.15***			.22***			.25***	
$F$ for change in $R^2$		34.30***			17.38***			7.40**	

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

Table 47 Continued  
*Summary of Hierarchical Regression Analysis for Variables Predicting  
 Devaluation, Academic Stressor (N = 200)*

Variable	Model 4			Model 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	0.87	0.25		1.25	0.28	
Extraversion						
Agreeableness						
Conscientiousness	-.48	.13	-.24	-.45	.13	-.22
Neuroticism	.37	.13	.21	.35	.13	.20
Openness						
Primary Appraisal						
SA- Problem				-.18	.06	-.21
SA - Emotion	.31	.07	.38	.35	.07	.42
SA -Expectation	.13	.05	.17	.19	.06	.26
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.27***			.29***	
$F$ for change in $R^2$		5.33*			7.49**	

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

Table 48

*Summary of Hierarchical Regression Analysis for Variables Predicting Avoidance, Academic Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	1.50	.22		1.88	.23		2.25	.29		2.07	.30	
Extraversion												
Agreeableness												
Conscientiousness				-.57	.15	-.26***	-.54	.15	-.24***	-.51	.15	-.23**
Neuroticism												
Openness												
Primary Appraisal												
SA- Problem							-.15	.07	-.16***	-.19	.08	-.21*
SA - Emotion										.17	.07	.19*
SA -Expectation	.22	.05	.28***	.23	.05	.29***	.30	.06	.38*	.23	.07	.29**
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.08***			.14***			.16***			.18***	
$F$ for change in $R^2$		16.57***			15.09***			4.24*			5.12*	

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

Table 49

*Summary of Hierarchical Regression Analysis for Variables Predicting Symptom Reduction, Academic Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.87	.26		2.71	.47	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal						
SA- Problem						
SA - Emotion						
SA -Expectation	.17	.06	.19**	.19	.06	.21**
Age						
Gender						
Current Mood						
Current Stress				.24	.08	.20**
$R^2$		.03**			.07***	
$F$ for change in $R^2$		7.06**			8.64**	

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

Table 50

*Descriptive Statistics Appraisal Leisure Stressor (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Primary Appraisal	3.49	1.83	1	7
Problem Focused Coping Potential	5.02	1.67	1	7
Emotion Focused Coping Potential	5.55	1.41	1	7
Outcome expectancy	6.12	1.33	1	7

Table 51

*Descriptive Statistics Leisure Stressor Coping Responses (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i><math>\alpha</math></i>
Situation Modification	5.33	1.46	1	7	.90
Accommodation	3.94	1.68	1	7	.88
Devaluation	5.18	1.70	1	7	.94
Avoidance	4.56	1.69	1	7	.93
Symptom Reduction	3.85	1.77	1	7	.85

Table 52

*Correlations between Personality, Coping, and Appraisal - Leisure Stressor (N=200)*

Variables	10	11	12	13	14	15	16	17	18
1. Age	.07	-.07	-.03	.06	.04	.02	-.05	-.02	.00
2. Gender	-.17*	.03	.10	.09	.00	-.12	.03	.02	-.09
3. Mood	-.01	.27**	.06	.10	.18**	.15*	.08	.06	.11
4. Stress	.09	-.16*	.03	-.04	-.15*	-.10	-.04	-.11	.00
5. Extraversion	.06	.10	.16*	.05	.06	.05	.01	.10	.15*
6. Agreeableness	-.14*	.11	.19**	.24**	.00	.06	.08	.11	.00
7. Conscientiousness	-.02	.08	.24**	.21**	-.01	-.08	.06	.00	-.07
8. Neuroticism	.24**	-.19**	-.27**	-.17*	-.01	-.05	-.13	-.14	.02
9. Openness	.01	.08	.05	.00	.07	-.02	-.06	.05	.04
10. Primary Appraisal	-	-	-	-	-	-	-	-	-
11. SA - Problem	-.09	-	-	-	-	-	-	-	-
12. SA - Emotion	-.51***	.29***	-	-	-	-	-	-	-
13. SA - Expectations	-.35***	.28***	.63***	-	-	-	-	-	-
14. Situation Modification	.00	.43***	.20**	.23**	-	-	-	-	-
15. Accommodation	.12	.04	.05	.00	.21**	-	-	-	-
16. Devaluation	-.22**	.01	.33***	.32***	-.02	.21**	-	-	-
17. Avoidance	-.06	.13	.13	.23**	-.01	.11	.52***	-	-
18. Symptom Reduction	.25***	.17*	-.05	-.06	.20**	.14*	-.07	.17*	-

\*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001.

Table 53  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Primary Appraisal, Leisure Stressor  
 (N = 200)*

Variable	Model 1		$\beta$
	<i>B</i>	<i>SE B</i>	
Constant	3.55	.13	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism	.59	.17	.24**
Openness			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.06***	
$F$ for change in $R^2$		11.85***	

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



Table 54  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Secondary Appraisal - Problem,  
 Leisure Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.22	.48	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Age			
Gender			
Current Mood	.37	.10	.27***
Current Stress			
$R^2$		.07***	
$F$ for change in $R^2$		15.18***	

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

Table 55

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Emotion, Leisure Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.49	.10		5.17	.14	
Extraversion						
Agreeableness						
Conscientiousness				.46	.15	.20**
Neuroticism	-.52	.13	-.27***	-.46	.13	-.24**
Openness						
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.07***			.11***	
$F$ for change in $R^2$		15.68***			9.10**	

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

Table 56  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Secondary Appraisal - Expectation,  
 Leisure Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	5.69	.15	
Extraversion			
Agreeableness	.52	.15	.24**
Conscientiousness			
Neuroticism			
Openness			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.06**	
$F$ for change in $R^2$		12.35***	

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

Table 57  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Situation Modification, Leisure  
 Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.46	.30	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem	.37	.06	.43***
SA - Emotion			
SA -Expectation			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.18***	
$F$ for change in $R^2$		44.243***	

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

Table 58  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Accommodation, Leisure Stressor  
 (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.91	.49	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem			
SA - Emotion			
SA -Expectation			
Age			
Gender			
Current Mood	.21	.10	.15*
Current Stress			
$R^2$		.02*	
$F$ for change in $R^2$		4.63*	

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

Table 59

*Summary of Hierarchical Regression Analysis for Variables Predicting Devaluation,  
Leisure Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.96	.46		2.29	.55	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal						
SA- Problem						
SA - Emotion	.40	.08	.33***	.26	.10	.22*
SA -Expectation				.24	.11	.19*
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.11***			.13***	
$F$ for change in $R^2$		24.58***			4.68*	

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

Table 60

*Summary of Hierarchical Regression Analysis for  
Variables Predicting Avoidance, Leisure Stressor  
(N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.75	.55	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal			
SA- Problem			
SA - Emotion			
SA -Expectation	.29	.09	.23**
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.05**	
$F$ for change in $R^2$		11.29**	

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

Table 61

*Summary of Hierarchical Regression Analysis for Variables Predicting Symptom Reduction, Leisure Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.01	.26		1.93	.46	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal	.24	.07	.25***	.26	.07	.27***
SA- Problem				.20	.07	.19**
SA - Emotion						
SA -Expectation						
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.06***			.10***	
$F$ for change in $R^2$		13.08***			8.11**	

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



Table 62

*Descriptive Statistics Appraisal Family Conflict Stressor (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Primary Appraisal	5.42	1.71	1	7
Problem Focused Coping Potential	3.71	1.65	1	7
Emotion Focused Coping Potential	4.01	1.78	1	7
Outcome expectancy	4.24	1.49	1	7

Table 63

*Descriptive Statistics Family Conflict Stressor Coping Responses (N=200)*

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i><math>\alpha</math></i>
Situation Modification	4.92	1.53	1	7	.91
Accommodation	3.79	1.64	1	7	.89
Devaluation	2.49	1.67	1	7	.97
Avoidance	3.41	1.94	1	7	.95
Symptom Reduction	4.93	1.65	1	7	.90

Table 64

*Correlations between Personality, Coping, and Appraisal – Family Conflict Stressor (N=200)*

Variables	10	11	12	13	14	15	16	17	18
1. Age	.11	.15*	-.02	.07	.01	.04	-.02	-.10	-.06
2. Gender	-.10	.02	.17*	.15*	.04	-.02	.03	.00	-.01
3. Mood	.10	.11	.00	.14*	.18**	.15*	-.08	.09	.10
4. Stress	.18*	-.08	-.06	-.09	-.11	-.03	.04	-.05	-.04
5. Extraversion	.12	.22**	.12	.13	.24**	.14*	-.02	-.05	.09
6. Agreeableness	.12	.08	-.02	.04	.10	.06	-.16*	-.03	.06
7. Conscientiousness	.03	.13	.02	.18*	.19**	-.03	-.20**	-.22**	-.02
8. Neuroticism	.05	-.14*	-.27**	-.21**	-.23**	-.13	.01	-.05	-.02
9. Openness	-.02	.06	.07	.02	.12	-.05	-.08	-.07	.00
10. Primary Appraisal	-	-	-	-	-	-	-	-	-
11. SA - Problem	.00	-	-	-	-	-	-	-	-
12. SA - Emotion	-.34***	.27***	-	-	-	-	-	-	-
13. SA - Expectations	-.29***	.38***	.38***	-	-	-	-	-	-
14. Situation Modification	.18**	.46***	.01	.26***	-	-	-	-	-
15. Accommodation	.01	.11	.16*	.09	.16*	-	-	-	-
16. Devaluation	-.31***	-.14	.34***	.10	-.28***	.31***	-	-	-
17. Avoidance	-.18*	-.18**	.20**	.04	-.27***	.32***	.59***	-	-
18. Symptom Reduction	.20**	-.09	-.17*	-.09	.17*	.01	-.07	.15*	-

\*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001.

Table 65  
*Summary of Hierarchical Regression Analysis for Variables Predicting Primary Appraisal, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.43	.41		2.89	.75	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Age						
Gender						
Current Mood				.25	.10	.18*
Current Stress	.22	.09	.18*	.29	.09	.24**
$R^2$		.03*			.06**	
$F$ for change in $R^2$		6.53*			5.88*	

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

Table 66

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Problem, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.58	.12		2.22	.63	
Extraversion	.45	.14	.22**	.46	.14	.22**
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Age				.07	.03	.15*
Gender						
Current Mood						
Current Stress						
$R^2$		.05**			.07**	
$F$ for change in $R^2$		9.94**			4.78**	

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

Table 67  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Secondary Appraisal - Emotion,  
 Family Conflict Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.94	.12	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism	-.66	.17	-.27***
Openness			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.07***	
$F$ for change in $R^2$		15.78***	

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

Table 68

*Summary of Hierarchical Regression Analysis for Variables Predicting Secondary Appraisal - Expectation, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	4.19	.10		3.94	.15	
Extraversion						
Agreeableness						
Conscientiousness				.35	.16	.15*
Neuroticism	-.42	.14	-.21**	-.37	.14	-.18**
Openness						
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.04**			.07**	
$F$ for change in $R^2$		8.97**			4.65*	

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

Table 69

*Summary of Hierarchical Regression Analysis for Variables Predicting Situation Modification, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.34	.24		2.45	.38		2.46	.38	
Extraversion									
Agreeableness									
Conscientiousness									
Neuroticism							-.37	.13	-.18**
Openness									
Primary Appraisal				.16	.06	.18**	.17	.05	.19**
SA- Problem	.42	.06	.46***	.42	.06	.46***	.40	.06	.43***
SA - Emotion									
SA -Expectation									
Age									
Gender									
Current Mood									
Current Stress									
$R^2$		.21***			.24***			.27***	
$F$ for change in $R^2$		52.14***			8.64**			8.08**	

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

Table 69 Continued  
*Summary of Hierarchical Regression Analysis for Variables Predicting  
 Situation Modification, Family Conflict Stressor (N = 200)*

Variable	Model 4			Model 5		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	1.76	.48		2.26	.53	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism	-.32	.13	-.15*	-.38	.13	-.18**
Openness						
Primary Appraisal	.21	.06	.23***	.17	.06	.19**
SA- Problem	.35	.06	.38***	.37	.06	.40***
SA - Emotion				-.13	.06	-.15*
SA -Expectation	.16	.07	.16*	.19	.07	.19**
Age						
Gender						
Current Mood						
Current Stress						
$R^2$		.29***			.31***	
$F$ for change in $R^2$		5.04*			4.81*	

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



Table 70  
*Summary of Hierarchical Regression Analysis for Variables Predicting  
 Accommodation, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.18	.28		2.22	.54	
Extraversion						
Agreeableness						
Conscientiousness						
Neuroticism						
Openness						
Primary Appraisal						
SA- Problem						
SA - Emotion	.15	.06	.16*	.15	.06	.16*
SA -Expectation						
Age						
Gender						
Current Mood						
Current Stress				.20	.10	.15*
$R^2$		.03*			.05**	
$F$ for change in $R^2$		5.49*			4.37*	

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

Table 71

*Summary of Hierarchical Regression Analysis for Variables Predicting Devaluation, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	1.22	.28		1.89	.32		3.15	.53		3.37	.53	
Extraversion												
Agreeableness												
Conscientiousness										-.46	.17	-.18**
Neuroticism												
Openness												
Primary Appraisal							-.20	.07	-.20**	-.19	.07	-.20**
SA- Problem				-.25	.07	-.25***	-.23	.07	-.23***	-.21	.07	-.20**
SA - Emotion	.32	.06	.34***	.38	.06	.40***	.31	.07	.33**	.31	.07	.33***
SA -Expectation												
Age												
Gender												
Current Mood												
Current Stress												
$R^2$		.11***			.17***			.21***			.24***	
$F$ for change in $R^2$		25.63***			13.36***			8.66**			7.69**	

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

Table 72

*Summary of Hierarchical Regression Analysis for Variables Predicting Avoidance, Family Conflict Stressor (N = 200)*

Variable	Model 1			Model 2			Model 3			Model 4		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.88	.20		2.98	.35		3.65	.40		2.64	.63	
Extraversion												
Agreeableness												
Conscientiousness	-.67	.21	-.22**	-.68	.21	-.22**	-.59	.21	-.19**	-.63	.20	-.20**
Neuroticism												
Openness												
Primary Appraisal												
SA- Problem							-.27	.08	-.23**	-.29	.08	-.24**
SA - Emotion				.23	.07	.21**	.29	.08	.27***	.30	.07	.27***
SA -Expectation												
Age												
Gender												
Current Mood										.22	.11	.14*
Current Stress												
$R^2$		.05**			.09***			.14***			.16***	
$F$ for change in $R^2$		9.80**			9.42**			10.97**			4.25*	

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

Table 73  
*Summary of Hierarchical Regression Analysis for  
 Variables Predicting Symptom Reduction, Family Conflict  
 Stressor (N = 200)*

Variable	Model 1		
	<i>B</i>	<i>SE B</i>	$\beta$
Constant	3.87	.38	
Extraversion			
Agreeableness			
Conscientiousness			
Neuroticism			
Openness			
Primary Appraisal	.20	.07	.20**
SA- Problem			
SA - Emotion			
SA -Expectation			
Age			
Gender			
Current Mood			
Current Stress			
$R^2$		.04**	
$F$ for change in $R^2$		8.37**	

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

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## CURRICULUM VITAE

Daniel McGrath  
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**Education**

Psy.D. Marshall University, Huntington, West Virginia (December 2011 expected).

MA in Psychology, Marshall University, Huntington, West Virginia (2007).

BA in Psychology, West Virginia University, Morgantown, West Virginia (2003).

**Awards**

President's List, West Virginia University, 2003

**Professional Activities**

American Psychological Association of Graduate Students, 2009 – 2012.

**Clinical Experience**

<p>Summer 2010- Summer 2011</p>	<p><u>Supervised Psychologist.</u> Pretera Center. Huntington, West Virginia.          Community mental health. Group therapy and Individual therapy. Evaluation and testing. Programs included: Outpatient. Intensive outpatient. Substance abuse outpatient. Residential substance abuse. School-based services. Child outpatient.          Clinical Supervisor: Jeffrey Boggess, Ph.D.</p>
<p>Fall 2008- Spring 2009</p>	<p><u>Supervised Psychologist.</u> Lincoln County Pretera/Guyan Valley Middle School. Branchland, West Virginia. Community mental health/School.          Assessment and individual therapy with children, teens, and adults. Academic problems, ADHD, disruptive behavior, cognitive impairment, depression, anxiety, interpersonal difficulty, and family conflict.          On-site supervisor: Kevin White, MA. Spring 2009          Clinical supervisor: Marty Amerikaner, Ph.D.</p>
<p>Fall 2007- Spring 2008</p>	<p><u>Supervised Psychologist.</u> Mildred Mitchell Bateman Hospital. Huntington, West Virginia. Inpatient psychiatric hospital. Assessment, individual therapy, group therapy, art therapy, and recreation. Paranoid schizophrenia, borderline personality disorder, severe depression, cognitive impairment, substance abuse/addiction, and suicidality.          Supervisor: Vernon Kirk, Ph.D.</p>

- Spring 2007      Psychology Trainee. Ohio River Valley Juvenile Correctional Facility, Franklin Furnace, Ohio. Intervention and assessment with male juveniles. Conduct problems, substance abuse, inappropriate sexual behavior. Supervisor: Joseph Carver, Ph.D.
- Fall 2006      Psychology Trainee. Marshall University, Huntington, West Virginia. University based training clinic. Assessment and individual therapy, primarily with college students. Bereavement, marital problems, adjustment, and anxiety. Supervisor: Joseph Wyatt, Ph.D.
- Spring 2006-  
Summer 2006      Psychology Trainee. Marshall University Graduate College, South Charleston, West Virginia. Community based training clinic. Assessment, individual therapy, group therapy, family therapy with clients of all ages. Depression, anxiety, parent-child relational problem, and adjustment disorders. Supervisor: Stephen O'Keefe, Ph.D.

### **Community Experience**

- 2006      Consultant. Marshall University, Huntington, West Virginia. Served as a consultant to local Head Start. Met with teachers, observed classrooms, and provided psychological assessment of at-risk students. Supervisor: Marianna Footo-Linz, Ph.D.

### **Teaching Experience**

- Spring 2010      Instructor. Marshall University, Huntington, West Virginia. Psychology 360, Personality.
- Fall 2009,  
Spring 2008,  
Fall 2007      Instructor. Marshall University, Huntington, West Virginia. Psychology 201, Introduction to Psychology.

### **Research Experience**

- 6/2009 – 11/2011      Dissertation. Effects of Personality and Situation upon Appraisal and Coping.  
  
Proposal Accepted January 5<sup>th</sup> 2010.  
  
Defense Completed November 18<sup>th</sup> 2011.  
  
Committee Chair: Marty Amerikaner, Ph.D.  
Committee Members: Chris LeGrow, Ph.D.; Keith Beard, Psy.D.