INTEGRATING PERSONALITY AND COPING STYLES IN PREDICTING WELL-BEING ACROSS CULTURES

By

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INTEGRATING PERSONALITY AND COPING STYLES IN PREDICTING WELL-BEING ACROSS CULTURES

Abstract

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This study investigated an integrated model of personality and coping styles in predicting well-being among Asian and European Americans. Participants were 297 European American and 210 Asian American college-aged students and community members. Participants completed the Big Five Inventory (BFI; Benet-Martinez & John, 1998), Coping Orientation to Problems Experienced (COPE; Carver, Scheier, & Weintraub, 1989), Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), Positive Affect and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988), and Social Well-Being Scale (SWBS; Keyes, 1998). The Asian American participants also completed the Asian American Multidimensional Acculturation Scale (AAMAS; Chung, Kim, & Abreu, 2004).

Hypothesis 1 was largely supported, demonstrating the complex relationships among personality, coping, and well-being. The fit of the overall integrated structural model was fair. The majority of the hypothesized paths were statistically significant for both samples. Hypothesis 2 was not supported. The path coefficient relating emotion-focused coping to subjective well-being was not more negative for Asian Americans than for European Americans. Hypothesis 3 was not supported. The path coefficient relating problem-focused coping and subjective well-being was not significantly more positive for European Americans than Asian Americans. Hypothesis 4 was partially supported. As predicted, European Americans reported
greater Extraversion than Asian Americans. There were no ethnic differences in the other personality traits. Hypothesis 5 was partially supported. As predicted, Asian Americans reported using more emotion-focused coping strategies, but there were no ethnic differences in problem-focused or disengagement coping styles. Hypotheses 6 and 7 were not supported because there were no ethnic differences in subjective or social well-being. Hypothesis 8 was partially supported. As hypothesized, higher acculturation was associated with greater subjective well-being. However, higher acculturation was not associated with lower social well-being. Hypothesis 9 was partially supported. As expected, level of enculturation was positively associated with greater social well-being. However, level of enculturation was not negatively associated with subjective well-being. Interpretation of the findings, implications, and future directions for research are discussed. Overall, the study demonstrated the importance of integrating personality traits and coping styles in understanding the subjective and social well-being of Asian and European Americans.
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Dedication

This dissertation is dedicated to my two younger brothers, Trung and Hieu. We’ve been through so much together and no two people are more important to me. I want to inspire you to achieve your life’s personal and professional aspirations.
CHAPTER ONE
INTRODUCTION

Stress is a pervasive component of our daily lives. Chronic stress significantly decreases one’s ability to function normally over the course of an extended time and has significant implications for one’s psychological and physical health. Thus, the field of counseling psychology has been dominated by research on individuals’ coping strategies and processes in response to stressors or adverse circumstances. As we examine coping responses, it is also pertinent to understand the role that personality traits have on determining the types of situations or stressful encounters individuals perceive to be particularly distressing or threatening. A research agenda to ascertain the relationship between one’s innate personality traits and coping responses is a meaningful investigation, as it would present clinicians and researchers with knowledge and understanding into how adaptive and maladaptive coping strategies are initiated, processed, and maintained.

Personality and Coping

In attempts to conceptualize the relationship between personality and stress and coping, there have been two conflicting schools of thought. Suls, David, and Harvey (1996) described personality and coping as connected in psychodynamic theory, in which defense mechanisms are conceptualized as stable traits that (a) influence how individuals perceive events and (b) dictate consistently adaptive or maladaptive responses. In this view, coping is seen as an unconscious defense mechanism (e.g., repression, rationalization, denial) to cope with threat (Parker & Endler, 1992). In contrast, Lazarus and Folkman’s (1984) transactional model of stress and coping de-emphasized the role of stable traits, choosing instead to define coping as a conscious,
intentional, goal-directed response that is tailored to the specific demands of a stressor. Lazarus and Folkman’s framework has dominated the bulk of research on coping in the last few decades.

There is an abundance of empirical research on the relationship between personality and coping (Amirkhan, Risinger, & Swickert, 1995; Bolger & Schilling, 1991; Bolger & Zuckerman, 1995; Connor-Smith & Flachsbart, 2007; David & Suls, 1999; DeLongis & Holtzman, 2005; McCrae & Costa, 1986; O’Brien & DeLongis, 1996; Watson & Hubbard, 1996). For example, a recent meta-analysis performed by Connor-Smith and Flachsbart (2007) included 165 independent samples and 33,094 participants, providing 2,653 effect sizes. However, Connor-Smith and Flachsbart indicated that the relationship between personality and coping has been inconsistent, and the researchers have cited a need for greater consideration of methods and samples. Despite these inconsistent findings, the extant literature on the association between personality and coping responses leads to the conclusion that there are both direct and indirect relationships between the two types of variables (Bolger & Zuckerman, 1995; Geisler, Wiedig-Allison, & Weber, 2009; Lee-Bagley, Preece, & DeLongis, 2005; Suls, David, & Harvey, 1996; Watson & Hubbard, 1996). For instance, personality may affect the selection of coping strategies directly, by constraining or facilitating use of specific strategies, or indirectly, by influencing the nature and severity of stressors experienced or the effectiveness of coping strategies (Bolger & Zuckerman, 1995). Furthermore, Bolger and Zuckerman (1995) indicated that direct effects of personality on coping may begin in early childhood, with biologically-based appetitive, defensive, and attentional systems providing the framework in which coping develops. By facilitating approach to rewards, withdrawal from threats, and engagement or disengagement of attention, these biological tendencies may affect the selection of coping strategies throughout the lifespan.
Additionally, Connor-Smith and Flachsbart’s (2007) latest meta-analysis found correlations between personality and coping measures exceeding .60. Moreover, the researchers concluded that, although the Big Five personality traits of Extraversion, Neuroticism, Conscientiousness, Agreeableness, and Openness to Experience were weakly related to broad coping (i.e., engagement or disengagement), they did influence specific coping strategies. Extraversion, Openness to Experience, Conscientiousness, and—to a lesser degree—Agreeableness were positively correlated with coping strategies identified as primary or secondary control. Neuroticism was found to be positively related to problematic coping strategies, such as negative emotion-focused and disengagement. However, similar to Extraversion, Neuroticism also predicted support seeking.

Interestingly, Connor-Smith and Flachsbart (2007) also reported that personality may be more protective against stressors in ethnically diverse samples as compared to majority-group samples. For instance, they indicated that diversity weakened the positive correlation between Neuroticism and Disengagement, while strengthening the negative correlation between Agreeableness and Conscientiousness with Disengagement. Congruent with these findings, additional research is necessary to examine culture and its role in personality and coping responses. Most of the published research on personality and coping has been based largely on European American college samples. Connor-Smith and Flachsbart’s meta-analysis examined few ethnic samples. As a result, there is very little knowledge about how personality, coping, and related variables (i.e., level of acculturation) are associated with psychological well-being in different racial/ethnic groups.

Ultimately, do an individual’s inherent personality traits influence the coping strategies or styles he or she will employ in stressful situations? The concepts of personality and stress and
coping have been extensively researched individually for decades, but less so in combination. It is helpful to conceptualize the relationships between personality traits, coping, well-being, and acculturation within the Five-Factor Theory of personality framework. Using this theoretical model, for instance, can assist us to understand the dynamic and causal processes that occur between variables.

The Personality System

The Five-Factor Theory (FFT) originated as observations of personality traits; however, the theory can clarify much more (McCrae & Costa, 1997). Within the FFT are components such as Basic Tendencies, Characteristic Adaptations, Objective Biography, Self-Concept, and External Influences. These core components will be explained in further detail in the next chapter. The FFT posits that basic tendencies, including personality traits, are solely biological, thus, there is not a causal relationship between culture and personality (McCrae & Costa, 1996). However, once we understand the constructs of personality, coping, acculturation, well-being, and culture we can see that the FFT is not so contentious. We can begin to fit these variables into the model of personality development depicted in Figure 1. For instance, the Big Five personality traits are Basic Tendencies which are the underlying predispositions; coping styles and acculturation are Characteristic Adaptations that reflect individuals’ innate traits but also their response to the environment; well-being is one aspect of one’s Objective Biography, encompassing emotional reactions and behaviors throughout the lifespan; and culture is an example of External Influences which, along with basic personality traits, can influence Characteristic Adaptations. These main constructs can be integrated into FFT to provide a broader understanding of their dynamic relationships.
A comprehensive examination of personality characteristics, coping, and well-being in the context of culture can assist clinicians in client conceptualization and diagnosis, and inform therapeutic interventions. For example, a client high in the personality trait of neuroticism may be less likely to manage and cope with stressors in his or her life and may turn to others to deal with problems (i.e., coping styles as Characteristic Adaptations). This client may also have the tendency to panic and experience feelings of dismay and helplessness when faced with challenges (i.e., Objective Biography). Neuroticism is characterized by a disposition to experience strong negative emotions such as fear, sadness, guilt, or shame. Consequently, emotional dysregulation and expression suggest a loss of control, distress, or hostility toward others, causing the client to engage in emotion-focused or disengaged coping behaviors. A pattern of disengagement and avoidance to cope with stress or problems can lead the client to experience unhappiness and dissatisfaction with life. Based on repeated experience and social feedback, this individual may develop a negative Self-Concept and build a self-image around his/her perceived weaknesses. Within this conceptualization, culture, as one important External Influence on the individual, can influence the system of norms, beliefs, and values, including typical coping styles, which helps to guide behavior in relevant situations.
Figure 1. Adapted from the Five-Factor Theory of personality (McCrae & Costa, 1996). Arrows denote causal relationships between the variables.
CHAPTER TWO

LITERATURE REVIEW

The following chapter aims to provide a comprehensive review of current research on personality, stress and coping, and well-being. Furthermore, these variables will be discussed in relation to three important theoretical frameworks: the Five-Factor Theory of personality, the primary-secondary control model of stress and coping, and the individualism-collectivism cultural model. This literature review is organized according to these main topics. Each section incorporates theory and empirical research that provides a context for an integrated discussion of personality, coping, and well-being across cultures.

The Five Factor Model of Personality

Personality, as we know it, is a complex entity. How can one possibly begin to come to an agreement on measuring such complexities and varying individual differences? Prior to the ascendance of the Five Factor Model, there was a strong lack of agreement on a definitive number of factors that would comprehensively describe the structure or dimensions of personality. For instance, there are strong proponents of other personality frameworks, ranging from two three-factor models (i.e., Eysenck, 1975, 1986; Tellegen, 1985) to an alternative five-factor model by Zuckerman, Kuhlman, Joireman, Teta, and Kraft (1993). Ashton and colleagues (2004) also created a six-factor model to classify individual differences in human personality, although some researchers believe his sixth dimension, Honesty-Humility, can be adequately encompassed by the Five-Factor Model.

Rolland (2002) provided a comprehensive description of each of the five dimensions in the five-factor personality taxonomy. The five dimensions are Neuroticism versus Emotional Stability; Extraversion or Surgency; Openness to Experience or Intellect, Imagination, or
Culture; Conscientiousness or Will to Achieve; and Agreeableness versus Antagonism. In Costa and McCrae’s (1992) operationalization of the Five Factor Model, there are six specific facets or traits organized under each of the “Big Five” dimensions (see Table 1).

Neuroticism (versus Emotional Stability) is a classic dimension of personality represented in most personality models and has also been most researched. It takes into account individual differences in the susceptibility to construct, perceive, and feel reality as being harmful, difficult, and threatening. It is also the tendency to feel negative emotions such as anger and fear. Extraversion (or Surgency) is another classic personality dimension. It refers to the quantity and intensity of relationships with one’s environment, especially one’s interpersonal environment, and the ability to interact with the environment in an enthusiastic and energetic manner. Openness to Experience is independent of cognitive aptitudes and groups together different types of behavior that involve an active search for and love of new experiences. It is manifested in a wide range of interests and an eagerness to seek out and live new and unusual experiences without fear or anxiety and even pleasure. Conscientiousness is a dimension that focuses on characteristics such as organization, persistence of behavior, and control of impulses. It encompasses dynamic elements (anticipation, success-orientation, and task-orientation) and control and inhibition elements of behavior characterized by organization, perseverance, thoroughness, and respect for standards and rules. Agreeableness refers to the nature of one’s relationships with others and deals with the quality of interpersonal relationships on a scale ranging from compassion to antagonism.

Table 1. The Five-Factor Model of Personality

<table>
<thead>
<tr>
<th>Factor domains</th>
<th>Facets (primary adjective correlates)</th>
</tr>
</thead>
</table>

8
<table>
<thead>
<tr>
<th>Neuroticism</th>
<th>Anxiety (anxious, fearful, worrying)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Angry hostility (angry, irritable, impatient)</td>
</tr>
<tr>
<td></td>
<td>Depression (worrying, -contented, -confident)</td>
</tr>
<tr>
<td></td>
<td>Self-consciousness (shy, -self-confident, timid)</td>
</tr>
<tr>
<td></td>
<td>Impulsiveness (moody, irritable, sarcastic)</td>
</tr>
<tr>
<td></td>
<td>Vulnerability (-clear-thinking, -self-confident, -confident)</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Warmth (friendly, warm, sociable)</td>
</tr>
<tr>
<td></td>
<td>Gregariousness (sociable, outgoing, pleasure-seeking)</td>
</tr>
<tr>
<td></td>
<td>Assertiveness (aggressive, -shy, assertive)</td>
</tr>
<tr>
<td></td>
<td>Activity (energetic, hurried, quick)</td>
</tr>
<tr>
<td></td>
<td>Excitement-seeking (pleasure-seeking, daring, adventurous)</td>
</tr>
<tr>
<td></td>
<td>Positive emotions (enthusiastic, humorous, praising)</td>
</tr>
<tr>
<td>Openness</td>
<td>Fantasy (dreamy, imaginative, humorous)</td>
</tr>
<tr>
<td></td>
<td>Aesthetics (imaginative, artistic, original)</td>
</tr>
<tr>
<td></td>
<td>Feelings (excitable, hurried, quick)</td>
</tr>
<tr>
<td></td>
<td>Actions (interests wide, imaginative, adventurous)</td>
</tr>
<tr>
<td></td>
<td>Ideas (idealistic, interests wide, inventive)</td>
</tr>
<tr>
<td></td>
<td>Values (-conservative, unconventional, -cautious)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Trust (forgiving, trusting, -suspicious)</td>
</tr>
<tr>
<td></td>
<td>Straightforwardness (-complicated, -demanding, -clever)</td>
</tr>
<tr>
<td></td>
<td>Altruism (warm, soft-hearted, gentle)</td>
</tr>
<tr>
<td></td>
<td>Compliance (-stubborn, -demanding, -headstrong)</td>
</tr>
<tr>
<td></td>
<td>Modesty (-show-off, -clever, -assertive)</td>
</tr>
</tbody>
</table>
Tender-mindedness (friendly, warm, sympathetic)

Conscientiousness
- Competence (efficient, self-confident, thorough)
- Order (organized, thorough, efficient)
- Dutifulness (-defensive, -distractible, -careless)
- Achievement-striving (thorough, ambitious, industrious)
- Self-disciplined (organized, -lazy, efficient)
- Deliberation (-hasty, -impulsive, -careless)


The Five-Factor Model was first developed in research based on the psycho-lexical approach, which posited that, “Those individual differences that are of most importance in the daily transactions of persons with each other will eventually become encoded in their language. The more important is such a difference, the more people will notice it and wish to talk of it, with the result that eventually they will invent a word for it” (Goldberg, 1981, pp. 141-142).

McCrae and Costa (1996) asserted that the major objection to lexical studies is their overreliance on commonsense approaches to personality that ignore the wealth of research and theory in the field of personality. Yet the authors believed that the Five-Factor Model has a strong empirical foundation and that its dimensions comprise a necessary aspect in any future theory of personality.

Theory

The Five-Factor Theory (FFT) aims to conceptualize recent findings regarding personality traits, including the Five Factor Model, within the context of the development and operation of the whole personality system (Allik & McCrae, 2002). It proposes that individuals
have biologically-based personality traits that can be measured through self-ratings; are relatively stable in adulthood; and have an effect on our patterns of thoughts, behaviors, and feelings (McCrae & Costa, 1996). FFT also describes how biology and culture interact in the development of habits, values, attitudes, roles, and relationships, which integrate the influences of the individual and environment. These habits, values, and so forth are referred to as Characteristics Adaptations in FFT. Furthermore, longitudinal research has indicated that basic personality traits are largely untouched by even decades of life experiences, demonstrating the prevailing effect of genes and limited impact of the shared environment (Riemann, Angleitner, & Strelau, 1997).

The Five-Factor Theory of personality is based on the wealth of findings associated with research on the Five-Factor Model (McCrae & Costa, 1996). The figure below (reproduced from McCrae & Costa, 1996) represents the personality system and includes examples of specific content and arrows indicating the major causal pathways mediated by dynamic processes. The core components – Basic Tendencies, Characteristic Adaptations, and Self-Concept – are in rectangles. Basic Tendencies refer to the capacities and dispositions that are generally inferred rather than observed (such as our biologically-based personality traits). They may be inherited or imprinted by our early experiences, or modified by disease or psychological intervention, but at all times they delineate our potential and direction in life. Characteristic Adaptations are skills, habits, attitudes, and relationships we acquire throughout our lifetime from our interaction with our environment. They are “the concrete manifestations of Basic Tendencies” (McCrae & Costa, 1996, p. 69). They are the result of the interactions of Basic Tendencies (i.e., personality) and External Influences (i.e., culture). The Self-Concept consists of knowledge, views, and evaluations of the self that give a sense of purpose and meaning in life. In some respects, the
self-concept is a Characteristic Adaptation. The three ellipses refer to peripheral components that are outside of personality. Biological Bases and External Influences are the inputs that represent interactions of personality with the physical body and the environment. Objective Biography is the output, consisting of everything that an individual does, thinks, or feels across the whole lifespan. Moreover, Characteristic Adaptations interact with External Influences over time to construct the Objective Biography. Lastly, dynamic processes specify the nature of the interactions among all the elements. Within this framework, McCrae and Costa (1996) postulated that personality traits are predominantly determined by genetics and that personality and culture are independent contributors to the development of Characteristic Adaptations.

Figure 2

![Diagram of the personality system](image)

Figure 2. A depiction of the personality system, with categories of variables, specific examples, and arrows indicating causal pathways. Adapted from “A five-factor theory of personality,” by R. R. McCrae and P. T. Costa, 1999, In L. A. Pervin and O. P. John (Eds.), Handbook of personality: Theory and research (pp. 139-153). New York, NY: Guilford Press.
Accordingly, FFT proposes that personality traits are largely free of cultural influences. Thus, it would only be natural to make the assumption that individual differences in personality will have an impact on how one goes about coping with a stressful situation or solving a problem. For instance, we would expect a conscientious person to turn to their hard work or diligence to persevere through obstacles or stress. Alternatively, a highly agreeable individual might benefit from using support and eliciting cooperation from others to manage stress. Moreover, in the long run it would be anticipated that adaptive coping efforts would serve as a defense against stress or other adverse effects. As such, it is further assumed that personality differences have important implications for the individual’s overall level of adaptation and psychological well-being.

**Empirical Research**

In this section, I review two general types of personality research. One line of research has focused on comparing the structure, or dimensions, of personality across cultures. The other line of research examines patterns of mean differences in personality traits across the life course across cultures. Structural studies have demonstrated the cross-cultural generalizability of the FFM (Guanzon-Lapena, Church, Carlota, & Katigbak, 1998; Katigbak, Church, Guanzon-Lapeña, Carlota, & del Pilar, 2002; Rolland, 2002). Saucier and Goldberg (2001) reviewed the results of various lexical studies of the trait terms native to 13 different languages (English, German, Dutch, Czech, Polish, Russian, Italian, Spanish, Hebrew, Hungarian, Turkish, Korean, and Filipino) and concluded that the personality factor domains of Extraversion, Agreeableness, and Conscientiousness demonstrated consistency across cultures. Neuroticism and Openness to Experience also emerged across languages, although they did not display the strong consistency of the other three domains. Similarly, McCrae and Costa (1997) assessed the cross-cultural
generalizability of the FFM by comparing the American factor structure with data from studies using six translations of the NEO-PI-R. Results from German, Portuguese, Hebrew, Chinese, Korean, and Japanese participants (N = 7,124) revealed that the median cross-language factor congruence coefficients were .96, .95, .94, .96, and .96 for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, respectively.

McCrae, Costa, and Yik (1996) analyzed data on the generalizability of the NEO-PI-R with Chinese samples and reported that personality traits identified in Western populations can be measured in Chinese populations and that they confirm the same five-factor structure. The researchers replicated the American factor structure and compared mean scores of Hong Kong undergraduates with North American college student norms. Results demonstrated that both men and women in the Hong Kong sample appeared to be high in the Vulnerability facet of Neuroticism, low in all six facets of Extraversion (especially Excitement Seeking), and low in the Competence facet of Conscientiousness. They scored high in the two facets of Agreeableness, Straightforwardness and Compliance, yet scored low in Altruism. Altogether, these results appeared to suggest that, relative to their American counterparts, Hong Kong undergraduates tended to be more reserved and aloof, in addition to being more insecure and concerned about their ability to function effectively.

In an empirical investigation of the generalizability of the FFM to the Philippines, Katigbak et al. (2002) concluded that the five-factor structure replicated well in this country and that indigenous or emic measures added only modest incremental validity beyond that of imported or etic instruments. Similarly, Ortiz, Church, Vargas-Flores, Ibanez-Reyes, Flores-Galaz, Iuit-Briceno et al. (2007) examined the universality of the FFM by asking participants to respond to nine indigenous self-concept inventories and to the Spanish version of the NEO-PI-R.
Joint factor analyses with the imported and indigenous scales were then performed. Results revealed that most of the indigenous dimensions were subsumed by the FFM. However, when the researchers tested a seven-factor solution, they found that a Family-Centered Abnegation factor and an Honesty-Humility factor arose. Moreover, Ortiz and his colleagues indicated that the Family factor was more representative of familial values than personality traits, while the Honesty-Humility factor was not culture-specific for Mexico because it has been found previously in other cultures (e.g., Ashton, et al., 2004). It appears that the Big Five dimensions emerge in Mexico when using indigenous dimensions. The authors suggested additional methods for identifying other indigenous dimensions, such as a comprehensive lexical study of Spanish trait terms to further enhance the broader range of traits generated by some Mexican inventories.

Few studies have examined a large number of cultures on personality measures. McCrae (2001) investigated whether personality scores were reasonably generalizable to the cultures as a whole in 26 cultures. He correlated pairs of means stratified by culture and age group, and reported that men and women from a given culture tended to have similar personality trait levels. Similarly, college-age and adult samples showed parallel profiles across cultures. McCrae (2002) extended the data presented by McCrae (2001) and added ten more cultures, covering five major language families: Indo-European, Uralic, Altaic, Dravidian, and Sino-Tibetian. The investigation aimed to analyze age and gender differences, the generalizability of culture profiles across gender and age groups, and culture-level factor structure and correlates. Analyses of the 10 new cultures showed that women scored higher than men in Neuroticism, Openness to Experience, and Agreeableness (all $p < .05$) and that college-age men and women scored higher in Neuroticism and Extraversion, and scored lower in Conscientiousness than adults (all $p < .01$). Adults tended to score higher in Agreeableness and there was no age difference for Openness to
Experience. With the full set of 36 cultures, results indicated that the same age and gender differences were found. Across all 36 cultures, adults scored lower in Openness to Experience and higher in Agreeableness. Factor congruences for the five factors ranged from .85(Extraversion) to .94 (Neuroticism and Conscientiousness). McCrae, Terracciano, et al. (2010) recently investigated aggregate personality profiles of individuals in 51 cultures. The researchers provided further evidence for universality across age and sex groups, in addition to scalar equivalence of NEO-PI-R factor and facets across cultures. These studies demonstrated that the FFM factor structure replicates well across cultures. In addition, cultural differences in personality profiles replicated across age and gender, suggesting that cross-cultural mean comparisons of aggregate personality profiles are meaningful.

Allik and McCrae (2004) attempted to explain geographical patterns in personality traits in their study. The researchers drew on data collected from 36 cultures compiled by other researchers using translations of the Revised NEO-PI. Their sample consisted of 27,965 college-age and adult men and women. Correlations of country-level means for the five personality traits with country latitude were significant for Extraversion ($r = .59, p < .001$) and Conscientiousness ($r = .41, p < .05$), suggesting that people who are farther geographically from the equator tended to be more outgoing, yet less conscientious. Additionally, a cluster analysis indicated that geographically proximate cultures have similar mean personality profiles, and a multidimensional scaling analysis indicated a distinct contrast of European and American cultures versus Asian and African cultures. For instance, individuals from European and American cultures appeared to be outgoing, open to new experience, and antagonistic, while individuals from Asian and African cultures were more introverted, traditional, and compliant. Euro-Americans were also low in power distance (i.e., they reject status hierarchies) and higher
in individualism. Nonetheless, the researchers noted the need for acculturative studies and natural experiments to understand and discern geographical differences in personality traits.

McCrae, Terracciano et al. (2005) recently examined personality in college students from 51 cultures—including Arab, African, and Latin American cultures that have been under-represented in previous cross-cultural research. The researchers aimed to replicate and expand on the validity of aggregate personality scores as indicators of personality traits of cultures. In individual-level analysis of observer ratings, the researchers concluded that the Big Five personality traits were universally replicable. In addition, age and sex differences observed in self-ratings were similar in observer ratings. The researchers recruited college students who volunteered to participate anonymously in a study of personality across cultures. Participants were, for the most part, native-born citizens of their country. They were administered the NEO-PI-R and were asked to identify an adult or college-age man or woman they knew well and rated the 11,985 self-nominated target individuals. Results showed that culture-level scores for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness correlated .66, .45, .51, .62, and .36, respectively, across age groups, which demonstrated moderate generalizability. Culture-level scores for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness correlated .55, .78, .75, .68, and .84, respectively, across sexes, suggesting generalizability. In between-culture comparisons, European and American cultures were again more extraverted than Asian and African cultures. Furthermore, aggregate scores displayed meaningful patterns of discriminant and convergent validity with other culture-level variables, while geographically- and historically-similar cultures showed comparable personality profiles. The researchers concluded that with a few exceptions, their empirical data lends support to the hypothesis that features of personality traits (e.g.,
structure, age, and gender differences) are universal to all human groups, but that cultures may
differ in their mean trait levels. Also worth mentioning from this study is the great need for
examining acculturative effects to distinguish group similarities and differences within cultures.

Other investigators have examined the cross-cultural generalizability of the FFM with
alternative measures or methods. For example, Schmitt, Allik, McCrae et al. (2007), in the
largest cross-cultural study to date, investigated factor congruence in 56 countries using the Big
Five Inventory, a short version of the Big Five family of questionnaires. The study involved the
collaboration of over 100 social, behavioral, and biological scientists as part of the International
Sexual Description Project. The researchers translated the Big Five Inventory (BFI; Benet-
Martinez & John, 1998) into 28 different languages and administered the BFI to 17,837
participants. Internal consistency reliabilities of the BFI scales across all cultures were .77, .70,
.78, .79, and .76 for Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness
to Experience, respectively. Schmitt et al. also found that the five personality dimensions were
virtually identical to the five U.S. dimensions, with an average congruence coefficient of .98.
However, some of the correlations between BFI scales and EPQ counterparts were low. For
example, there were 26 countries for which the mean scores of N and E were measured by both
the EPQ and the BFI. As the researchers expected, the N scales of the two measures were
significantly correlated ($r = .49, p < .01$), yet the correlation between the BFI E scale and its EPQ
equivalent was very low and did not reach statistical significance ($r = .18$). Overall, some
findings (congruence) support the generalizability of the FFM, yet the limited BFI and EPQ
correlations fail to support convergent validity.

Finally, Hofstede and McCrae (2004) reported culture-level associations between the Big
Five personality dimensions and Hofstede’s four dimensions of culture (i.e., Individualism,
Uncertainty Avoidance, Power Distance, and Masculinity). Hofstede interpreted the findings as suggesting that culture influences personality (e.g., individualistic cultures are more likely to be extraverted). However, McCrae proposed a reverse causation hypothesis that is more consistent with the FFT, in which personality can be viewed as influencing culture. The empirical studies discussed in this review support the generalizability of personality dimensions across cultures. However, studies of mean levels of personality have been more controversial across cultures. This latter empirical issue is discussed in more detail in the following section.

Summary Critique

Taken together, how are we to understand the research findings on personality across cultures? McCrae and Costa (2003) interpreted empirical findings about personality to mean that personality traits are biologically-based dispositions that describe individuals. Moreover, congruent with the FFT, personality traits appear to transcend culture. Within this perspective, the study of personality and culture is no longer a matter of documenting how culture shapes personality. Rather, it encourages researchers to ask how personality traits and culture interact to shape the behavior of individuals and social groups (McCrae, 2000).

Some limitations or controversies associated with the Five Factor Model can be noted. For example, Church (2008) posited that the theory that personality traits are not influenced by cultural factors is contentious in the context of mean profile comparisons across cultures, as it suggests that cultural differences in mean trait levels have a biological source. Allik (2005) also pointed to the importance of studying a large number of cultures in order to generalize the structure of personality across cultures and languages. Allik further asserted that the proposition (e.g., McCrae & Costa, 1996) that personality is largely independent of culture is unconventional and likely to be met with criticism (i.e., Allik & McCrae, 2004). Church (2008) recommended
that researchers separate basic tendencies from characteristic adaptations to ascertain the true relationship between personality and culture.

Cross-cultural comparisons also present some challenges. Personality theorists and researchers conceptualize and conduct their personality studies across cultures from the etic and emic approaches. The emic approach provides an indigenous framework, which emerges from a native or source culture, without imposing influences from a foreign framework. The etic approach is considered an imported framework that helps researchers identify and compare findings across cultures and languages. The FFM is an example of research conducted from the etic approach. Although a large body of literature indicates that the Big Five personality factors emerge in various cultures, caution is necessary in arguing for such universality, as most studies have not integrated emic traits. Additionally, McCrae, Terracciano, et al. (2005) reported that the lack of exhaustive research on varying cultures have limited the claim that there are universal personality dimensions across cultures.

Guanzon-Lapeña et al. (1998) reviewed studies carried out in the Philippines, a country known for its long research tradition in indigenous psychology in the Tagalog language. The researchers developed four indigenous Philippine personality measures with different samples and were successful in conceptually matching their seven factors with the Big Five. However, they did not proclaim that their factors actually corresponded with the Big Five. Instead, they concluded that “(a) Each of the Big Five domains is represented by one or more dimensions from each of the indigenous instruments; and (b) None of the indigenous dimensions is so culturally unique that it is unrecognizable to non-Filipinos” (p. 265). Furthermore, some dimensions (e.g., social curiosity, excessive conformity, respectfulness, low tolerance for teasing, and thriftiness) are distinctly important to a collectivistic culture, such as the Philippines. Their findings
suggested that personality traits in the Philippines are not always organized in the same way as in Westernized cultures.

The prominence of the FFM has resulted in the development of several inventories with good psychometric properties. The most widely used and comprehensive personality measure is the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992), which has been extensively validated and generalized across cultures (Allik & McCrae, 2004; Hofstede & McCrae, 2001; McCrae, 2002; McCrae & Costa, 1997; McCrae, Costa, & Yik, 1996; McCrae et al., 2005). Three other well-established and widely used instruments are the 44-item Big-Five Inventory (BFI; see Benet-Martinez & John, 1998; John & Srivastava, 1999; Schmitt et al., 2007), the 60-item NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992), and Goldberg’s instrument comprised of 100 trait descriptive adjectives (TDA; Goldberg, 1992).

However, the validity of cultural mean profiles can be questioned. Church and Katigbak (2002) examined the meaningfulness of mean level comparisons of the FFM with Filipino and American samples. In a systematic effort to compare national stereotypes with the means of self-reported personality traits, the researchers asked 43 judges (who had lived in the Philippines and U.S. for a substantial length of time) to rate whether Filipinos or Americans would be more likely to display a particular trait. Even though the bicultural judges (23 ethnic Filipinos, 20 White Americans) demonstrated high agreement with each other, they were not consistent with the mean NEO-PI-R profiles. Hence, Church and Katigbak’s (2002) findings suggested that mean trait profiles and national stereotypes, even when rated by experts, are not always comparable. Moreover, Terracciano, et al. (2005) obtained national character ratings of 3989 participants from 49 cultures and compared them with the aggregate personality profiles of culture members through self-reports and observer ratings. The researchers stated that national
character ratings were reliable, yet did not converge with personality traits. The study also provided evidence that in-group perspectives of national character were helpful for learning about the particular culture, but they failed to describe the people themselves. Overall, findings from mean level comparisons across cultures must be approached with caution (Church & Katigbak, 2002; Poortinga et al., 2002).

Coping Styles

According to the transactional model of stress and coping discussed earlier, coping efforts are influenced by the appraisals of the situation or stressful encounter. Another perspective, the psychodynamic framework, maintains that innate personality traits are equally important in determining coping because they may predispose an individual towards a particular coping strategy (Carver, Scheier, & Weintraub, 1989; Suls et al., 1996). In line with the latter view, the Five-Factor Model of personality presents a helpful context in which to assess individual differences in coping strategy use.

Coping refers to an individual’s cognitive or behavioral attempts to master demands (conditions of harm, threat, or challenge) that are appraised or perceived as exceeding or taxing his or her resources (Lazarus & Folkman, 1984). Lazarus and Folkman (1991) recommended a taxonomy of coping that emphasizes two categories: problem-focused and emotion-focused. Modern coping research began with the distinction between problem-focused coping, intended to influence the source of stress, and emotion-focused coping, intended to minimize negative emotions through strategies such as emotional expression, support-seeking, and avoidance (Lazarus & Folkman, 1984). A major conclusion from coping research is that problem-focused coping is strongly correlated with positive psychological outcomes, while emotion-focused
coping has been associated with poorer mental health (Endler & Parker, 2000; Folkman & Lazarus, 1984).

Moreover, research has indicated that coping responses are influenced by both situation-specific stressors and general coping styles (Carver & Scheier, 1994). Coping research has tended to focus on these two areas of coping: general coping dispositions versus coping strategies in specific situations. This review will focus on the former, emphasizing coping traits, styles or dispositions. This approach is often employed by researchers interested in aspects of an individual’s personality, which makes the presumption that individuals have consistent and stable styles of coping across situations and will use the same coping techniques in most stress-induced events (Lazarus & Folkman, 1991). Endler and Parker (1990) posited that efforts to understand the association between negative life events and coping can be traced back to Freud, who used the concept of defense mechanisms to describe unconscious processes that individuals use to deal with internal threat and conflict. Defenses such as repression, rationalization, and projection were postulated to explain how individuals cope with threat and anxiety. Freud conceptualized these defenses as pathological. In a later theoretical development (White, 1948), defense mechanisms were separated into primary (i.e., repression) and secondary (i.e., projection) defenses, with the former being more pathological and primitive. Coping research moved towards a model that focused primarily on conscious processes during the 1970s and 1980s (Endler & Parker, 1990).

Lazarus and Folkman (1980) and Lazarus (1993) emphasized coping as a conscious response to external stressful or negative events. Lazarus (1993) noted an important issue in the coping literature as the distinction between the intra-individual and the inter-individual approach to the study of coping. The intra-individual perspective attempts to study the process of coping or
the impact of stressful encounters on coping strategies. This approach examines behaviors and cognitions of the same individual or the same group of individuals across different types of situations. In contrast, the inter-individual perspective allows researchers to examine individual differences by utilizing coping scores of the same individual collected over different measurement occasions, or scores aggregated on a single occasion, to represent a stable index of the individual’s coping styles and comparing those scores with scores of others. The distinction between the intra-individual and inter-individual approaches to coping can be compared to the distinction between the state and trait paradigm in personality research (Endler, 1983).

Moreover, Lazarus (1993) postulated:

“A combined intra- and inter-individual research design allows us to view coping in both its state and traits aspects, state representing instability (flux) or change, trait representing stability or consistency across diverse conditions. If we emphasize coping consistency over time and across encounters, we are dealing with the trait concept; if we emphasize contextual influences and coping inconsistency over time and across encounters, we are dealing with the state concept or process. They are two sides of the same coin, and both sides are usually relevant…The trait-process (state) issue cannot be studied empirically unless coping strategies are examined in the same persons over time and across stressful encounters” (p. 237).

Lazarus and Folkman’s (1984) conceptualization of coping has remained a strong presence in coping studies since its introduction over two decades ago. However, there have been recent developments in the field of stress and coping worthy of discussion. Wong, Wong, and Scott (2006) described these new advances. For example, there have been shifts of emphasis from reactive to proactive coping; instrumental to transformative coping; cognitive to existential coping; dichotomous to dualistic thinking; and individual to collective coping. Given the cross-cultural emphasis in this review, the shift from individual to collective coping should be discussed in detail. This new addition to the concepts of problem- and emotion-focused coping has been welcomed by many, as it is cognizant that coping cannot be entirely a solo effort. Yeh,
Arora, and Wu (2006) presented a new theoretical perspective on coping from a collectivistic orientation and developed a collectivistic coping scale (CCS; Yeh, Chang, Leong, Arora, & Kim, 2004) to account for East Asian’s collectivistic values. Moreover, Zhang and Long (2006) developed a collective coping scale based on such coping strategies as support seeking. These two scales are elaborated on later. Collectivistic and collective coping should be distinguished; collectivistic coping refers to the normative coping style of collectivistic individuals, whereas collective coping refers to activities that function to orient attention to in-group members, such as mobilizing group resources (Chun, Moos, & Cronkite, 2006). Because individuals from collectivistic cultures are encouraged, or socialized, to cope in different ways than those from individualistic cultures, researchers must be mindful to examine coping beyond the Western cultural perspective.

*Primary-Secondary Control Coping Model*

An important theoretical framework that addresses cultural differences in coping is the primary-secondary control model (Rothbaum, Weisz, & Snyder, 1982). The distinction between primary and secondary control coping emphasizes coping goals. Primary control coping is directed toward changing the stressor or related emotions through strategies such as problem-solving or emotion regulation. In contrast, secondary control coping is used to facilitate adaptation to stress through strategies such as acceptance or cognitive restructuring.

Subsequently, Weisz, Rothbaum, and Blackburn (1984) gave an expanded and revised overview of primary and secondary control theory. They stated that in primary control, individuals endeavor to enhance rewards (or reduce punishments) by influencing their realities through targets such as other people, objects, behavior problems, or environmental circumstances. With secondary control, individuals aim to enhance their rewards by accommodating to their existing
realities through targeting their own expectations, wishes, goals, perceptions, attitudes, interpretations and attributions. There are four forms of secondary control delineated by Weisz et al. (1984). Predictive control is defined by one’s attempts to accurately predict events and conditions in order to control its impact on self (e.g., to avoid uncertainty, anxiety, or future disappointment). Vicarious control is defined by one’s attempts to associate or align oneself to more powerful individuals, groups, or institutions, in the hopes of psychologically participating in the control they put forth. Illusory control is defined by one’s attempts to get in synchrony with chance, believing that luck will bring about a positive outcome. Interpretative control refers to attempts to understand or construe realities to develop a sense of meaning in order to increase one’s satisfaction with them, thus helping to restore a certain sense of primary control.

McCarty, Weisz, Wanitromanee, Eastman, Suwanlert, Chaiyashit et al. (1999) elaborated on the primary-secondary control model (Rothbaum, Weisz, & Snyder, 1982) and distinguished between coping methods and coping goals. With coping methods, the authors differentiated between methods that were outwardly observable, or overt, and those that were hidden from view, or covert. Coping goals were classified as involving primary control coping (i.e., modifying objective conditions to fit one’s wishes), secondary control coping (i.e., adjusting oneself to fit objective conditions), or relinquished control coping (i.e., lack of goal-directed behavior—no attempt either to modify or adjust to conditions). The researchers investigated whether cultural values and traditions influence the development of coping styles in 73 U. S. children and 68 Thai children. The U. S. children were all pupils in elementary schools, in suburban areas of North Carolina. The Thai children were drawn from elementary schools in suburban areas of south central Thailand. Two interviewers, a Thai clinical psychologist and a first-year clinical psychology graduate student, followed a detailed script, and all children were
interviewed independently. Interviewers were trained to adhere to the exact wording of the written interview. Each child was asked to recall times in the past year when they had felt bad, unhappy, or scared when encountering the following six stressors: 1) the child was separated from a friend, because of moving away or moving to a different school or a different class; 2) the child went to a doctor’s office to get a shot; 3) the child’s mother, father, or a teacher got angry at him/her; 4) a peer said unkind things to him/her; 5) the child got a grade on an exam or a report card that he/she did not like; and 6) the child had an accident and was physically hurt. These six situations were chosen to provide a sample of relatively specific everyday stressors. The interview was first written in English. The preparation of the Thai version involved preliminary translation into Thai, then back-translation into English, modification of inequivalencies, and production of a final Thai version. For each event that was recalled, children were asked to indicate what happened and how it felt, then to describe what they thought and did in response (i.e., their coping method). To assess the goals underlying each coping method, children were asked “How did you think that (coping method) would help or make things better?” The children’s responses were then recorded verbatim. All Thai responses were translated into English for coding, with two bilingual Thai psychologists reaching agreement on the translations.

McCarty et al. (2002) reported that the nature and direction of cultural effects differed across different stressful experiences. They found two main effects of Culture on coping methods, in addition to a significant Culture x Age interaction in two of the stressful scenarios. They also found significant Culture x Gender interactions for three stressful areas. For the stressor involving separation from a friend, more Thai children reported secondary control goals (81% Thai vs. 45% U.S.) \( \Delta G^2 (1, 68) = 15.18, p < .001 \). Thai children, compared to their
American age-mates, reported more covert methods in the injection situation (74% Thai vs. 33% U. S.) $[\Delta G^2 (1, 120) = 19.81, p < .001]$. Additionally, Thai children reported more covert methods in the adult anger situation than their American age-mates (33% Thai vs. 13% U.S.) $[\Delta G^2 (1, 128) = 8.46, p < .01]$. American children showed higher rates of secondary control coping goals in the injury situation (24% U.S. vs. 5% Thai) $[\Delta G^2 (1, 112) = 9.05, p < .01]$. The results suggested that the impact of culture on coping may best be construed as an interaction between culture and type of stressor.

There were some weaknesses in this study. First, participants were children from specific regions of the United States and Thailand. The selection bias and small sample size ($n = 141$) limit the generalizability and external validity of the results across populations. Since both samples were homogenous, it creates the possibility that coping methods or goals were influenced by geographic region. Second, asking the children to recount actual experiences in which they encountered the stressors may have not generated accurate or complete reports of coping, due to problems with recall. Moreover, the sample only allowed for moderate to large cultural effects to be detected, with low power to identify small main or interaction effects.

In a more recent study, Tweed, White, and Lehman (2004) explored internally- and externally-targeted control strategies in response to daily life stressors in European Canadian, East Canadian Asian, and Japanese university students in two separate studies. Interestingly, the researchers opted to conceptualize primary and secondary control through more descriptive and less value-laden terminologies. They characterized primary control as externally-targeted control and secondary control as internally-targeted control. In Study One, the researchers aimed to cross-culturally examine coping through externally- and internally-targeted control, assuming participants from East Asian backgrounds will display more internally-targeted coping styles.
(i.e., self-control, distancing, acceptance of the situation, and waiting things out). Additionally, European Americans were expected to engage in planful problem-solving, confrontation, and self-enhancement in their coping methods. Participants were 97 Canadian students (27 Western European, 57 East Asian, and 18 South Asian and mixed ethnicity) and 26 Japanese students visiting from Japan. They were asked to think back over the previous five years to a very negative, stressful, or traumatic event that occurred to them. Participants were administered the Ways of Coping Checklist (WCCL; Folkman & Lazarus, 1985) to assess coping. In addition, items from a Japanese stress questionnaire (Ozeki et al., 1994) relevant to the strategies of waiting (e.g., “waited until I was able to do something about the problem”) and accepting the problem (e.g., “tried to think of it as not being all that important”) were extrapolated for use in the WCCL. Self-enhancing interpretative control was assessed with the Positive Reappraisal subscale in the WCCL, as well as with McFarland and Alvaro’s (2000) set of temporal self-evaluation items (i.e., positive social orientation, wisdom and skills, self-insight and appreciativeness, honesty and reliability, general well-being, spirituality, and opportunities in life). Results revealed that Asian Canadians and Japanese students were more likely to report coping via internally-targeted control strategies: accepting responsibility, accepting the problem, waiting things out, and using self-control as compared to European Canadians. Conversely, these two groups did not report more distancing than European Canadians. European Canadians were more likely than Japanese to employ confrontation. European Canadians were also more likely than both Asian Canadians and Japanese to report engaging in positive reappraisal, a form of self-enhancing coping. Both European and Asian Canadians indicated more use of escape and avoidance than Japanese. Between-groups differences were not reported for seeking social support or engaging in planful problem-solving.
In Study Two, Tweed et al. (2004) used a different sample than in Study 1, recruiting a sample of Japanese in Japan instead of Japanese sojourners in North America, in addition to European Canadians. Secondly, additional control variables were included that were related to the nature of the stressor, type of problem, self-rated severity of problem, self-rated responsibility for causing the problem, and self-rated extent to which the problem had been solved. Participants were asked to describe the most stressful event or experience that had occurred to them in the last six months. The WCCL was used again to assess coping. Results demonstrated that East Asian cultural background, as compared to Western English-speaking cultural background, was associated with increased internally-targeted control on the distancing, accepting, and waiting subscales. Similar to findings in Study 1, European Canadians engaged in more self-enhancing interpretative control than Japanese, as indicated by the positive reappraisal items on the WCCL. Additionally, European Canadians were more likely to cope by escape and avoidance than were the Japanese. These findings suggest that cultural differences in orientation toward internally-targeted control coping are not limited to comparisons of European Canadians and Asian Canadians with East Asian sojourners, as was done in Study One. Weaknesses of the study included the potential for inaccuracy of self-reports by participants and limited validity evidence gathered for the coping measures used.

Sastry and Ross (1998) investigated the relationship between culture and sense of personal control and the influence of perceived control on depression and anxiety among Asians and non-Asians. The authors hypothesized that Asian ethnicity will be associated with comparatively low levels of perceived control. Furthermore, they anticipated that personal control among Asians has a weaker negative correlation with psychological distress than among non-Asians. Results indicated that sense of personal control is significantly lower for Asians than
for non-Asians individuals. In addition, persons who live in Asian countries report a lower sense of control than those who live somewhere else. However, despite the reported lower scores on sense of personal control, results demonstrated that Asians have lower predicted levels of depression and anxiety than others. These results can best be explained within the context of the theory of personal control, which states that individuals with little perceived control over their lives employ a passive, reactive orientation and those with high perceived control exert more of a proactive stance on life. Thus, within an Asian culture, sense of personal control may be effective for coping, but individuals might be negatively sanctioned for following individual self-interests. Instead, Asians are rewarded for fulfilling obligation to family and community.

Additionally, Sinha, Wilson, and Watson (2000) compared coping and stress in Indian and Canadian students. In their study, stress was conceptualized in terms of daily hassles and uplifts as well as items of life events or life experiences. Additionally, coping was conceptualized as a process rather than a trait or a style. The researchers recruited a sample of 198 Indian students from a major university in the state of Bihar (age \( M = 19.8, \ SD = 1.7 \)). A sample of 347 Canadian students was recruited from students attending the University of Alberta (age \( M = 20.1, \ SD = 1.4 \)). Sinha et al. (2000) proposed two primary and three secondary hypotheses: 1) Indian students will report higher levels of stress; 2) Indian students will employ more emotion-focused coping strategies; 3) Indian students are more external in their control perceptions; 4) Indian students will display lower self-esteem and pessimistic life orientation; and 5) Indian students will experience greater social support satisfaction.

Stress was measured with the Hassles and Uplifts Scale (HUS; Lazarus & Folkman, 1989), the Life Experiences Survey (LES; Sarason, Johnson, & Siegel, 1978), and the College Adjustment Rating Scale (CARS; Zitzow, 1984). The Ways of Coping Questionnaire (WCQ;
Folkman & Lazarus, 1988) was used to assess various coping strategies with a specific stressful situation. Control perception was measured with the Levenson Locus of Control scale (LLOC; Levenson, 1973). Concurrently, self-esteem was also assessed with the adult form of the Self Esteem Inventory (SEI; Coopersmith, 1981); life orientation was measured with the Life Orientation Test (LOT; Scheier & Carver, 1985); and social support was measured with the Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983). Each instrument demonstrated moderate to acceptable reliability and validity. Results failed to support the researchers’ first hypothesis; Canadian students reported higher daily hassles than did the Indian students. Hypothesis 2 was generally confirmed in that the Indian students made greater use of emotion-focused coping strategies. More specifically, they tended to use positive reappraisal, distancing, seeking social support, and confrontation in dealing with their stress. Hypothesis 3 was partially confirmed; when compared with their Canadian peers, Indian students reported external orientation only when chance was concerned. There was not a significant difference between the two groups in self-esteem and pessimism, thus disconfirming Hypothesis 4. Lastly, Canadian students showed more social support satisfaction ($M = 108$, $SD = 21.9$) than their Indian counterparts ($M = 99$, $SD = 19.3$). Interestingly, the findings demonstrated more similarities than differences between Canadian and Indian students. Differences were, however, attributed to cultural influences. The external validity of the study was limited due to the recruitment of samples from universities and similar geographic locations.

Another study that examined cross-cultural differences in coping and stress was conducted by Cross (1995). Culture and the self were conceptualized based on Markus and Kitayama’s (1994) self-construal model. Individuals in individualistic societies are more likely to construct a well-elaborated and accessible independent self-construal. That is, individuals are
encouraged to promote and maintain their distinctiveness and act according to their own volitions. In contrast, individuals in collectivistic societies tend to elaborate on the interdependent self-construal. That is, individuals are encouraged to focus on their relationships and act to maintain harmony within a group. Cross investigated differences in the independent and interdependent self-construals of American and East Asian graduate students studying in the United States and their impact on coping and stress. There were a total of 150 participants from a large Midwestern university (n = 71 East Asians, n = 79 Americans), who were asked to complete questionnaires mailed to them during their first year of graduate school. Measures of self-construals, coping styles, social support, and psychological well-being were included in the questionnaires. The Private Ego-Tasks subscale from the Ego-Tasks Subscales (Breckler, Greenwald, & Wiggins, 1986) was used to measure independent self-construal. Items from a measure of Yamaguchi’s (1990, 1994) group-oriented collectivism scale were selected to assess interdependent self-construal. Respondents were asked to indicate the importance of various statements by responding with a 6-point scale (1 = not at all important, 6 = extremely important). Direct coping was measured with the COPE scale (Carver, Scheier, & Weintraub, 1989), which assesses a wide range of coping responses. Additionally, several items were included that asked respondents to report how satisfied they were with various aspects of their graduate experiences. Psychological well-being was assessed with the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), which evaluated respondents’ appraisal of the stressfulness of their current life stressors in relatively universal terms. All instruments were translated into Chinese, Japanese, and Korean by bilingual assistants and back-translated by other assistants to guarantee equivalence of meaning.
Cross (1995) hypothesized that American and East Asian students will display differences in their ratings of independent and interdependent self-construals. The results revealed no significant difference in ratings of independent self-construal, but East Asians’ average ratings of the importance of interdependent self-construal were much higher ($M = 4.03$, $SD = .77$) than those of their American peers ($M = 3.40$, $SD = .78$), $t(144) = 4.88$, $p < .001$).

There were no differences between the two groups on these scales when tests of equal variances were performed. Cross (1995) suggested that the East Asian students were not more likely to restrict their responses in the middle of the scale. She explained that individuals in individualistic and collectivistic societies tend to adopt both forms of self-construal to some degree; hence, varying cultural customs and values will influence to what extent individuals will elaborate or access each self-construal and what aspects to employ in given situations. Furthermore, Cross reported that self-construal had a significant impact on perceived stress for the East Asian students. For example, students who rated the importance of independent self-construal as high described less perceived stress and made more direct attempts to solve stressful events, whereas those who scored high on interdependent self-construal reported higher levels of perceived stress. In regards to coping, Cross reported that direct coping strategies (i.e., active coping and planning) were associated with lower levels of perceived stress in international students in the U.S. Additionally, although the effects of self-construals and coping were moderated by culture, self-construals did not seem to influence perceived stress for American students.

There were some limitations in this study. First, using measures developed in American samples may limit their reliability and validity with international students and leaves the results in question. Second, low reliabilities of the interdependent self-construal measures may have led to an underestimate of the strength of the relationships examined. Lastly, the researcher
cautioned that one might inquire about the causal direction of the relationship between self-construals, coping styles, and stress presumed in this study.

Chang (1996) conducted a study to analyze cultural differences in optimism, pessimism, and coping in 111 Asian American and 111 European American college students. It was reported that Asian Americans used problem avoidance and social withdrawal strategies more than European Americans. Additionally, no significant ethnic differences were found for problem solving, cognitive restructuring, expressing emotions, seeking social support, self-criticizing, and wishful thinking. No within-group gender differences were reported for either the Asian American or European American sample. Thus, cultural differences appeared to be more relevant in determining the use of specific coping strategies. In a similar examination, Jung (1995) concluded that European Americans showed higher scores on Agreeableness and Extraversion, as well as lower avoidance coping scores, than Asian Americans and Latino Americans. He also evaluated gender differences in personality and coping, reporting that females scored higher than males on Agreeableness and Extraversion, and coped by seeking social support more than males did. He also found that differences in the relationship between coping and particular personality traits occurred only for females, with Neuroticism being positively related and Agreeableness inversely associated with avoidance.

The coping differences found between European Americans and Asian Americans recall Seiffge-Krenke’s (1993) model, which distinguishes functional coping from dysfunctional coping. In this model, functional coping is characterized by active coping and taking concrete actions to manage stress, whereas dysfunctional coping is characterized by withdrawal, controlling feelings, and having a fatalistic attitude. Furthermore, functional, or adaptive, coping is used by Western, individualistic cultures, whereas dysfunctional, or maladaptive, coping is
used by Asian, collectivistic cultures. Yet, this cannot be the last word on coping differences between cultural groups. Even empirical findings in support of Seiffge-Krenke’s assumptions can be questioned, as the measures and samples may be culturally biased.

Most importantly, two decades of cultural coping research revealed several findings and implications. Kuo (2011) reported that recurring studies have highlighted the prevalence of emotion-focused, indirect, passive/covert, internally target/secondary control coping among individuals of Asian ethnicity. In particular, these individuals tended to employ avoidance, withdrawal, and forbearance coping strategies. Furthermore, Kuo’s review found salient use of collective coping approaches among Asian Americans. It appears that this particular category of coping reflects the collectivistic and interdependent traits of many individuals from Asian backgrounds. However, these findings should be considered with caution due to several limitations. Previous studies have provided differing conceptualizations, measures, and categorizations of coping which significantly reduced the universality of the results across studies.

Limitations of Cross-Cultural Coping Research

Mounting evidence suggests that coping strategies play an important role in the way individuals react or respond to negative life events or stressful situations (Parker & Endler, 1992). Snyder (1999) reported that there have been over 3,500 scientific papers published on stress and coping. Furthermore, empirical findings have pointed to the need to examine the context in which stress occurs, both situational and cultural (Moos & Swindle, 1990). However, progress on stress and coping research has been greatly challenged by methodological and theoretical limitations (Wong et al., 2006).
More recently, a discussion of culture has proven beneficial in the examination of coping. However, recent reviewers of research on coping have agreed that there is a clear absence of research in cultural contexts (Folkman & Moskowitz, 2004; Kuo, 2011; Lazarus, 1999; Snyder, 1999; Somerfield & McCrae, 2000). Kuo’s (2011) valuable literature review shed light on the paucity of knowledge on culture’s role in stress and coping processes. Lazarus and Folkman (1984) believed that one’s internalized cultural values, norms, and beliefs influences how one evaluates a stressful situation, in addition to one’s perception of the appropriateness of particular coping strategies. Although culture is recognized as an important factor in coping research, there is a lack of well-developed constructs, methodologies, and theories that facilitate cross-cultural research.

Wong et al. (2006) further stated that the field is plagued by stagnation in part due to ethnocentric bias in generalizing American-based coping models and measures to other cultures, thus limiting our understanding of cultural differences in coping and stress responses. Because the bulk of the empirical knowledge on coping behaviors has been conducted with predominantly Anglo, middle-class populations, these research findings might not be applicable to individuals from racially different backgrounds. Hence, it is of utmost importance to conduct meaningful comparative studies of coping processes across cultures. However, this can only be achieved if coping instruments used across cultures possess an acceptable level of measurement equivalence. Consequently, Tweed and DeLongis (2006) highlighted the need to focus research on indigenous coping constructs to incorporate items and values considered important in other cultures.
Review of Coping Measures

Skinner, Edge, Altman, and Sherwood (2003) recently reviewed the coping literature and reported more than 100 coping categorization schemes, in addition to various scoring systems for common coping instruments. As a result, this inconsistency has presented a challenge for aggregation across studies (Connor-Smith & Flachsbart, 2007). Because of the large volume of coping strategies in the coping literature, Table 2 outlines three broad coping categories (i.e., emotion-focused, problem-focused, and disengagement) and delineates specific subscales or factors that have been proposed by different researchers under each of these broad categories. I chose these categorizations based on a hierarchical coping model generated by previous research (e.g., Ayers et al., 1996; Connor-Smith & Flachsbart, 2007; Connor-Smith, Compras, Wadsworth, Thomsen, & Saltzman, 2000; Tobin, Holroyd, Reynolds, & Wigal, 1989; Walker, Smith, Garber, & Van Slyke, 1997). This hierarchical coping model describes three core families of coping (i.e., Negative/Mixed Emotion-Focused, Engagement, and Broad Disengagement) similar to the three broad categories I suggested. The multitude of coping subscales and factors will be organized within these three broader categories of coping to allow for a quicker understanding of the various coping strategies.

Emotion-focused coping consists of emotional regulation and expression strategies that entail a loss of control, distress, or hostility toward others. Problem-focused coping is another broad category that reflects approach-oriented responses directed toward the stressor or one’s reactions to the stressor. Disengagement involves distancing oneself from the stressor or related feelings. Additionally, Table 3 presents collective, engagement, and disengagement coping categories relevant to collectivistic coping measures. Consistent with the higher-level category of coping (engagement versus disengagement) discussed earlier, I chose these categorizations along
with a broad collective coping category to reflect Asian cultures’ interdependent values and beliefs. I chose to place all coping subscales under each broad coping category based on my own understanding and researchers’ definitions of the subscales.

In the following subsections, I describe some of the most commonly-used coping instruments in the existing coping studies, in addition to three new instruments specifically developed to incorporate Asian in-group referencing and cultural values. Due to the plethora of coping instruments available currently, I have chosen to review only a few pertinent instruments. The tables following this discussion will provide additional subscales offered by other coping researchers.

*Coping instruments.* At present, the most popular method for measuring coping involves the quantitative, methods-focused approach that was first developed by Lazarus and colleagues (1980). The COPE (Coping Orientation to Problems Experienced), which was developed by Carver, Scheier, and Weintraub (1989), is a commonly used 53-item, multidimensional coping inventory. It has fourteen subscales that encompass four dimensions of coping: problem-focused, emotion-focused, disengagement (i.e., avoidance), and social support (see Table 2). The COPE can be administered in both trait and episodic forms by simply changing the administration instructions. This coping inventory possesses both a strong theoretical foundation and sound validity (Cook & Heppner, 1997). Here, the dispositional style form of the COPE will be emphasized. When used as a trait measure, respondents are asked how they generally cope with stressors. Respondents indicate how frequently they used each coping strategy on a four-point Likert scale anchored by “usually do not do this at all” and “usually do this a lot.” Items for each factor are summed to form scale scores. Higher scores on each scale indicate more frequent use of that specific coping response. The original COPE inventory had 12 scales (excluding
Alcohol/Drug Disengagement and Focusing on Venting Emotion). Initial alpha coefficients for the 12 scales ranged from .45 to .92, with only one scale having an alpha less than .62 (Carver et al., 1989). Initial test-retest reliability ranged from .46 to .77 for an 8-week interval and .42 to .89 for a 6-week interval (Carver et al., 1989). Carver et al. (1989) also reported that correlations between the COPE scales and various personality measures provide initial evidence of discriminant and convergent validity. Watson and Hubbard (1996) reported reliabilities ranging from .56 to .94, with a median value of .73. The researchers indicated that the COPE captured a differentiated assessment of diverse coping styles.

The Ways of Coping Checklist (WCCL; Folkman & Lazarus, 1984) has also been widely used in coping studies. It consists of 67 items that describe a broad range of cognitive and behavioral coping responses that individuals might use to manage internal or external demands when encountering stressful situations. This instrument clearly delineates between problem- and emotion-focused coping strategies. The WCCL is comprised of eight factors (see Table 2). Approaches to using and scoring the WCCL have varied across studies. However, in the common form, respondents are asked to describe their coping responses in a problem situation by indicating which coping strategy they employ using a 4-point scale: 0 = not used/not applicable; 1 = somewhat used; 2 = used quite a bit; 3 = used a great deal. Unfortunately, the WCCL does not possess strong construct validity (Edwards & Baglioni, 1993). Based on factor analyses of data from several samples with different demographic characteristics, researchers concluded that the WCCL has an unstable factor structure with three to nine factors emerging in various studies (e.g., Aldwin, Folkman, Schaeffer, Coyne, & Lazarus, 1980; Folkman & Lazarus, 1986; McCrae, 1984; Vicaliano, Russo, Carr, Maiuro, & Becker, 1985).
Folkman and Lazarus (1985) revised the WCCL (dropping some items and adding others) and created a 66-item, 4-point Likert scale, self-report instrument subsequently referred to as the Ways of Coping Questionnaire (WCQ). A factor analysis was conducted on ratings of 324 college undergraduates. The result was an eight-factor model for the WCQ that demonstrated moderate to high internal consistency reliabilities, ranging from .56 to .85. Folkman, Lazarus, Dunkel-Schetter, Delongis, and Gruen (1986) subsequently administered the WCQ to 85 married couples on five different occasions over a 6-month period, and conducted three factor analyses to construct eight scales (See Table 2). The scales had moderate to high internal consistency reliabilities, ranging from .61 to .79.

Asian instruments. Of particular interest is the recent development of collectivistic and collective coping measures. The Collectivistic Coping Scale (CCS; Yeh et al., 2004) comprises seven distinct dimensions: Family Support (i.e., utilizing family members to cope), Respect for Authority Figures (i.e., utilizing elders and mentors to cope), Intracultural Coping (i.e., use of supportive networks comprised of racially-similar individuals), Relational Universality (i.e., seeking support from those with shared experiences), Forbearance (i.e., preference for coping with problems privately), Social Activity (i.e., utilizing social support), and Fatalism (i.e., accepting problems as predetermined). The CCS was designed to measure individuals’ styles or ways of coping with an interdependent self-construal. Data from their research revealed that the seven factors accounted for 56.65% of the variance found in collectivistic coping. Intercorrelations among the seven factors ranged from .18 to .50, and strong alpha reliability values were reported. The researchers cautioned that the use of an overall CCS score is not appropriate and that the seven factors should be treated as separate subscales.
Zhang and Long (2006) developed a preliminary scale in hopes of achieving a valid and reliable measure that measures collective coping. The development of the collective coping instrument was part of a larger project on workplace stress and coping that was comprised of three phases. In Phase 1, the researchers employed focus groups and item generation methods to operationalize the collective coping construct and develop initial questionnaire items. In Phase 2, the items were administered to 228 overseas Chinese professionals and exploratory factor analyses were conducted. The participants engaged in focus group discussions via email to describe their workplace stress and coping strategies. Phase 3 involved the examination of the convergent and predictive validity of the scale. A total of 33 items were developed to include the domains of seeking support from one’s in-group, conforming to one’s group norms and values, and using group action to cope (Collective, Engagement, and Disengagement subscales, respectively). Respondents were asked to rate on a 4-point Likert scale the extent to which they used each item (0= not used or does not apply to 3 = used a great deal). Item-analysis indicated acceptable internal consistency for collective, engagement, and disengagement coping scales (Cronbach’s alpha = .90, .78, and .70, respectively). Zero-order correlations showed small but statistically significant positive relationships between Chinese cultural values and the CCS total score ($r = .19, p < .01$) and between work support and the CCS total score ($r = .20, p < .01$), demonstrating some evidence for convergent validity.

In addition, Kuo, Roysircar, and Newby-Clark (2006) developed the Cross-Cultural Coping Scale (CCCS), a scenario-based instrument, in three separate studies using Chinese Canadian adolescents, Asian and European Canadian college students, and Asian international students studying in the U.S. The results yielded three coping factors (see Table 3). Their research demonstrated that the three-factor structure of the CCCS presents support that coping
can be viewed as a culturally mediated process; however, the scale has not been correlated with other coping measures to ascertain its construct validity. In summary, these new collective coping scales show promise yet must be investigated with other cultural groups and within different cultural settings, as all three instruments are in an early stage of development (Kuo et al., 2006; Yeh et al., 2004; Zhang & Long, 2006).
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<th>Author(s)</th>
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<th>Problem-focused</th>
<th>Disengagement</th>
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<td>Acceptance</td>
<td>Suppressing of Competing Activities</td>
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<td>Planful Problem-Solving</td>
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Table 3. Broad Coping Strategies Delineated into Specific Subscales or Factors: Asian Instruments

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<td>Forbearance</td>
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<td>Fatalism</td>
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<td>Relational Universality</td>
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<td>Kuo et al. (2006)</td>
<td>Collective Coping</td>
<td>Engagement Coping</td>
<td>Avoidance Coping</td>
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Personality and Coping Research

There exists a plethora of research studies on personality and coping. Connor-Smith and Flachsbart’s (2007) meta-analysis presented a comprehensive overview of previous empirical research in this area. However, it would be worthwhile to briefly cover some pertinent studies on the Big Five personality traits and coping styles. Congruent with the psychodynamic perspective, these studies emphasized that personality dispositions predispose or determine one’s coping strategies. For instance, Watson and Hubbard (1996) found in their examination of adaptational styles and personality traits that Neuroticism was directly related to seeking emotional support and behavioral/mental disengagement; Extraversion was correlated with seeking social support; Openness to Experience was negatively related to use of religion faith as a coping strategy; Agreeableness was positively associated with support-seeking, positive reappraisal, and active coping and planning; and those high in Conscientiousness engaged in more problem-focused coping (e.g., active coping, planning, restraint coping) and less in emotion-focused coping (e.g., alcohol/drug use, denial, behavioral and mental disengagement).

More recently, Geisler et al. (2009) conducted two studies to address whether coping behavior could predict personality impressions that would be similar to findings in previous personality and coping research. They also attempted to compare the interpersonal impact of coping (as assessed by a favorable personality impression) with the affective impact of coping (as evaluated by the associations with changes in affect following the elicitation of the stressor). In the first part of their study, the researchers used 157 participants from a larger study examining sex differences in anger-related behavior (Weber & Wiedig-Allison, 2007). Participants were exposed to unfair treatment in a laboratory setting, where a confederate accused them of being responsible for causing the breakdown of a computerized task they were
asked to complete. Self-reports and observer ratings were used to measure the participants’ behaviors based on video clips. Coping reactions were assessed through six dimensions encompassing basic strategies with coping in response to interpersonal anger-related encounters (e.g., non-hostile feedback, humor, distancing, rumination, submission, and venting anger). In the second part of the study, individuals unacquainted with the participants were asked to be independent judges and view the video clips showing the provocation and the participants’ response and behavior. The independent judges evaluated the participants in terms of the Big Five dimensions, intelligence, and social attractiveness. Results revealed that higher levels of Extraversion, Agreeableness, Conscientiousness, and Openness to Experience, in conjunction with intelligence and social attractiveness, were predictive of problem-focused coping behavior and cognitive restructuring, while higher levels of Neuroticism predicted withdrawal and passivity.

DeLongis and Holtzman (2005) further argued for the claim that personality traits may influence the effectiveness of coping responses, and that those coping strategies found to be effective for one individual may not be for another individual with differing personality traits. The researchers reported findings from their studies using a structured diary methodology. Results revealed that individuals high in Neuroticism employed ineffective and maladaptive coping, as they reported lower levels of problem-solving skills and higher levels of confrontation, self-blame and escape avoidance. Furthermore, given their tendencies toward negative affect it is not surprising that they are more likely to use emotion-focused coping strategies. Individuals who scored high on E reported more effective coping, as they utilized cognitive reframing and active problem-solving. These results for Neuroticism and Extraversion further support McCrae and Costa’s (1986) findings. However, DeLongis and Holtzman’s study
revealed dissimilar results for Openness to Experience. The researchers concluded that Openness to Experience was related to lower levels of cognitive reframing, yet participants still reported less distancing tendencies in response to stress. Individuals high on Agreeableness reported less confrontive coping and more support-seeking. Additionally, they were less likely to engage in self-blame. Lastly, the researchers found that those high on Conscientiousness reported more empathic responding and less escape avoidance and self-blame. However, the researchers emphasized that the findings for Conscientiousness were reflective of situational influences, explaining that Conscientiousness interacted with stressor type to predict self-blame. In particular, those high on Conscientiousness were more apt to report using self-blame in coping with a marital stressor and less likely to use self-blame to cope with child misbehavior. It was also noted that those individuals high in Conscientiousness reported more planful problem-solving strategies with non-interpersonal situations than in stressful interpersonal situations.

The main criticism in regards to these studies is that they have all been conducted using retrospective self-reports, in which respondents are asked to recall events from memory. In addition, some studies inquire into how individuals generally cope with stressors and are cross-sectional in nature. Carver and Connor-Smith (2010) posited that because many existing studies only examine dispositional coping, there is virtually no information from the current research to suggest how the timing, order, combination, or duration of coping influences outcomes. The limited number of studies of personality and coping that have used the daily report methodology clearly highlights that the impact of coping does change over time. In addition, those coping strategies found to be effective during one moment or time may have a negative impact on subsequent days or even on long-term adjustment.
David and Suls (1999) emphasized the transactional model of coping and explored the role of problem appraisal and the Big Five in the ability to cope with bothersome daily events. Consistent with Lazarus and Folkman’s (1984) model, the researchers indicated that perceived uncontrollability was positively related to use of distraction, catharsis, acceptance, and seeking emotional support (i.e., emotion-focused coping), while it was negatively related to taking direct action (i.e., problem-focused coping). More specifically, high scorers on Neuroticism employed more catharsis and relaxation. In addition, Neuroticism moderated the relationship between perceived severity of stressor(s) and three coping strategies: distraction, religion, and relaxation. The findings related to Extraversion were especially notable. Extraversion was positively related to several emotion-focused coping strategies: redefinition, religion, and catharsis. David and Suls’ study is the first to examine Extraversion and daily coping efforts. The findings suggest that extraverted individuals opt to express or vent their emotions when faced with stressful encounters. In regards to Openness to Experience, previous research has revealed that it has a weak association to coping responses; however, the findings from this study do indicate that Openness to Experience was negatively correlated with distraction, while also moderating the relations between problem-severity appraisal and two coping strategies: catharsis and religion. The researchers suggested that Openness to Experience may be related to coping styles in ways that are too complicated and interactive to bring to light in correlational research. Additionally, the study failed to find any significant relationship between Conscientiousness and coping strategy use.

On the whole, the studies discussed revealed important relationships between Big Five personality traits and coping responses. Of course, situational factors may also explain the difference in coping responses; however, personality dispositions clearly have an influential role
in every aspect of the stress and coping process. It has been implicated in the probability of stressful events occurring (Bolger & Zuckerman, 1995); the appraisal of an event as stressful (Gunthert, Cohen, & Armeli, 1999); the likelihood of employing particular coping strategies (David & Suls, 1999; McCrae & Costa, 1986; Watson & Hubbard, 1996); and the effectiveness or outcomes of such coping strategies (Bolger & Zuckerman, 1995; Gunthert et al., 1999). For instance, Neuroticism predicts exposure to interpersonal stress and the likelihood of perceiving events as highly threatening and coping resources as low (Bolger & Zuckerman, 1995; Grant & Langan-Fox, 2007; Gunthert et al., 1999; Suls & Martin, 2005). High neuroticism and low conscientiousness is related to high stress exposure and threat appraisals; low neuroticism and high extraversion and conscientiousness predict especially low stress exposure and threat appraisals (Grant & Langan-Fox, 2006; Vollrath & Torgersen, 2000). Conscientiousness is associated with low stress exposure (Lee-Baggley et al., 2005; Vollrath, 2001). Carver and Connor-Smith (2010) explained this outcome as follows: conscientious individuals tend to plan for predictable stressors, while also evading impulsive behaviors that can lead to financial, health, or interpersonal difficulties. Agreeableness has been linked to low interpersonal conflict and low social stress (Asendorpf, 1998). Extraversion, Conscientiousness, and Openness to Experience are associated with tendencies to appraise events as challenges (rather than external threats) and positive appraisals of coping ability (Penley & Tomaka, 2002; Vollrath, 2001).

Culture and Coping

While personality appears to be a strong determinant of coping styles, culture also plays a powerful role in how one goes about coping with stressors. Cultural differences can be reflected in differences in preferred styles of coping with day-to-day hassles and problems. Defining culture is a difficult endeavor. Kluckholn (1954) stated that “culture is to society what memory is
to individuals” (as cited in Triandis & Suh, 2002, p. 135). Moreover, culture is the collection of “shared standard operating procedures, unstated assumptions, tools, norms, values, habits about sampling the environment, and the like” (Triandis & Suh, 2002, p.136). Culture and societal institutions shape the content and structure of the self (Cross, 1995). Current research demonstrates that the individualism-collectivism and acculturation constructs are both essential in our understanding of coping across cultures.

*Individualism and Collectivism Cultural Model*

The individualism-collectivism distinction is the most studied and significant cultural difference among cultures (Triandis, 2001). Thus, it should be considered in examining cultural influences on the individual. Hofstede (1991) defined an individualistic society as one “in which the ties between the individuals are loose; everyone is expected to look after himself or herself and his or her immediate family only” (p. 260). He defined a collectivistic society as one “in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in return for unquestioning loyalty” (p. 261). Individualistic and collectivistic orientations have important outcomes for the environmental and personal systems, and provide an understanding into how context influences behavior (Chun et al., 2006).

Hofstede (1980, 1983) conducted a comparative study in which he systematically mapped 53 countries on the individualism-collectivism spectrum between 1968 and 1972. He administered questionnaires to 117,000 employees of a large, multi-national technology company (IBM) and used factor analysis on 14 work-goal items to identify four dimensions: power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance. To date, it is still the largest comparative study and has led to a proliferation of empirical
research on the I-C dimension. Voronov and Singer (2002) emphasized that the I-C construct necessitates a careful and close examination, because it is now the most widely used construct in cross-cultural psychology in terms of theoretical and measurement efforts (Triandis, 1994, 1995).

Despite the popularity of Hofstede’s work, Voronov and Singer (2002) highlighted the various limitations that plagued his studies. First, they cited the differential representativeness of the samples in each nation. The participants were mostly employees of a large multi-national advanced technology corporation and were considered highly educated and highly adept managers, technicians, and other white-collar professionals. Secondly, there is a discrepancy between Hofstede’s operational definitions of individualism and collectivism and the actual items he designed to measure the construct. Specifically, he only constructed six items to assess individualism and collectivism (three for each). Individualism was measured by items that refer to having a job that allows adequate time for family life, freedom to adapt one’s own approach to the job, and valuing a fulfilling and challenging occupation. Collectivism items referred to valuing training opportunities, satisfactory work conditions, and utilizing skills and abilities on the job. Obviously, these operational definitions do not fully capture other commonly defined aspects of individualism and collectivism. Indeed, it is debatable whether using six items is enough to comprehensively assess the I-C construct. Lastly, Hofstede attributed 67% of the variance in the I-C construct to national wealth. He suggested that I-C was never proposed to be a psychological dimension, but merely a sociological one.

Most notably, Schwartz (2004) presented evidence contrary to the I-C perspective when he administered a value survey to 86 teacher and student samples drawn from 41 cultural groups in 38 countries. He derived ten individual-level and seven culture-level value types: Conservatism, Intellectual Autonomy, Affective Autonomy, Hierarchy, Mastery, Egalitarian
Commitment, and Harmony. Several of the value types resembled either pole of the I-C construct. Individualism was positively related to Intellectual Autonomy, Affective Autonomy, and Egalitarian Commitment, and negatively related to Conservatism. The United States has been known as a highly individualistic country. However, according to Schwartz (1994), the U.S. sample scored neither high on Autonomy nor low on Conservatism. Furthermore, China is a country known for its collectivistic mindset yet results indicated that the Chinese sample scored average on Autonomy and Conservatism, and low on Egalitarian Commitment—suggesting that China is not the exemplary collectivist society. Western European nations (e.g., France) came closest to meeting the ideal of an individualistic country. The French sample scored high on Autonomy, low on Conservatism, and high on Egalitarian Commitment. Singapore came closest to matching the profile of a pure collectivist nation, scoring high on Conservatism and Hierarchy and low on Autonomy and Mastery. When the United States was compared to Japan, results from the two sample groups were surprisingly similar. Both samples obtained similar Conservatism scores, although the U.S. participants scored higher on Affective Autonomy, whereas the Japanese participants scored higher on Intellectual Autonomy.

Another important figure in individualism-collectivism research is Triandis (1995), who proposed that the individualism-collectivism construct should be conceptualized as polythetic constructs, in which four clearly delineated attributes reflect universal dimensions of individualism-collectivism. These four attributes include: 1) Definition of the self; 2) Structure of goals; 3) Emphasis on norms versus attitudes; and 4) Emphasis on relatedness versus rationality. Furthermore, Triandis, Leung, Villareal, and Clark (1985) recommended replacement of the individualism-collectivism terminology with idiocentrism-allocentrism at the individual level. Using the terms idiocentrism and allocentrism enables a discussion of the behavior of
idiocentrics and allocentrics in both individualist and collectivist countries. The researchers argued that idiocentrics perceive their society or culture as imposing and stifling, and aim to escape from it, whereas allocentrics become involved in groups, gangs, unions, and other collectives. Triandis and colleagues proposed that there are more idiocentrics than allocentrics in individualistic cultures and more allocentrics than idiocentrics in collectivistic cultures. Later, Triandis (1995) differentiated horizontal and vertical individualism and collectivism. Horizontal indicates equality, whereas vertical indicates hierarchy. This conceptualization allows researchers to distinguish between horizontal and vertical countries along the I-C continuum.

**Empirical Studies on I-C and Personality**

A few studies have related the I-C construct and personality traits. Triandis (2001) reviewed the extant research on the I-C syndrome and personality. He first noted that there must be a distinction between the cultural and individual levels of analysis. Triandis posited that cultural-level analyses have revealed that individualism and collectivism are opposite sides of a continuum. However, when individuals are used as the units of analysis within a culture, the findings seem to suggest that there are a number of orthogonal factors reflecting individualism (i.e., Competition, Emotional distance, and Hedonism) and collectivism (i.e., Sociability, Interdependence, and Family Integration).

Grimm, Church, Katigbak, and Reyes (1999) investigated I-C theory by assessing self-described traits, values, and moods of students in individualistic (United States, n = 660) and collectivistic (Philippine, n = 656) cultures. The researchers hypothesized that some of the cultural differences demonstrated by the two groups of students would be attributed to differences in individualism versus collectivism. For instance, they expected that the Philippine sample would average lower than their counterparts on traits and values associated with
individualism (independence, pleasure-seeking, assertiveness, creativity, curiosity, competitiveness, self-assurance, efficiency, initiative, and directness) and score higher on traits and values associated with collectivism (attentiveness, respectfulness, humility, deference, obedience, dutifulness, reciprocity, self-sacrifice, security, traditionalism, conformity, and cooperativeness). Although the American and Philippine students were generally comparable in their average descriptions of their traits, valued traits, and moods, at least some of the cultural differences were modestly to moderately explained by I-C theory (effect sizes of 0.02 to 0.43).

In another cross-cultural study, Kwan, Bond, and Singelis (1997) investigated the potential of self-construals and Big Five personality factors to predict the mediating variables of self-esteem and relationship harmony in 389 European American and Hong Kong college students. Consistent with the researchers’ hypotheses, self-esteem and relationship harmony mediated the association between self-construals and life satisfaction. The effect of independent self-construal on life satisfaction was mediated through self-esteem, while the effect of interdependent self-construal was mediated through relationship harmony. The researchers also found that all Big Five personality dimensions exerted a considerable and pancultural influence on life satisfaction. The mediating variables of self-esteem and relationship harmony were differently influenced by the Big Five. The effects of Extraversion, Neuroticism, Openness to Experience, and Conscientiousness on life satisfaction were mediated through self-esteem, whereas the effects of Extraversion and Agreeableness on life satisfaction were mediated through relationship harmony. The authors posited that Extraversion’s influence on both self-esteem and relationship harmony in generating life satisfaction suggests that characteristics such as optimism and sociability can assist in achieving interpersonal goals, and therefore can increase life satisfaction through two mediators. Most importantly, Kwan et al. (1997) also reported
significant correlations between the personality factors and self-construals. Independent self-construal was positively related to Extraversion, Openness to Experience, and Conscientiousness but was negatively related to Neuroticism. Interdependent self-construal was positively related to Neuroticism, Extraversion, and Agreeableness. The researchers highlighted the need for a more complete and coherent theoretical framework to examine life satisfaction across cultures.

Finally, Realo, Allik, and Vadi (1997) explored the relationship of allocentrism to the Big Five personality traits in Estonian culture. Realo and colleagues developed an allocentric measure and studied its convergence with the Big Five, concluding that there was a negative correlation between Openness to Experience and allocentrism. Agreeableness and Conscientiousness were positively correlated with allocentrism. This finding has implications for future research on the possible biological bases of idiocentrism and allocentrism, going beyond environmental influences. It appears that the inconsistent extant findings prevent us from arriving at firm conclusions about what role the I-C construct plays in personality development across cultures.

**Individualism-Collectivism and Coping Styles**

There has also been a dearth of research conducted on coping and the individualism-collectivism construct. In one of the few empirical investigations, Bailey and Dua (1999) examined the role of culture and levels of acculturation in mediating coping styles in international and Anglo-Australian students. The researchers categorized the students into five groups: newly arrived Asian students who had resided in Australia for less than six months (Asian 1); Asian students who had resided in Australia for more than six months but less than three years (Asian 2); Asian students who had resided in Australia for more than three years (Asian 3); Asian-Australians, and Anglo-Australians (total \( n = 112 \)). Participants were asked to
complete the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) and the COPE scale (Carver, Scheier, & Weintraub, 1989). Results demonstrated the Asian 1 group scored highest in levels of perceived stress and tended to utilize collectivist coping strategies (i.e., Seeking Emotional Social Support and Seeking Instrumental Social Support) more so than any other group. Moreover, Anglo-Australians were found to be the lowest on measures of perceived stress and employed individualistic coping styles (best thought to be reflected by Active Coping and Planning). It appeared the longer the Asian students resided and acculturated to the Australian culture, the less they opted for the use of collectivist coping strategies. These findings are indicative of the role of the individualism-collectivism construct in explaining cross-cultural differences in individual’s coping styles. The authors believed that coping styles differ across Asian and Australian cultures and that collectivist coping strategies are more significantly correlated with stress than are measures of adaptive and maladaptive coping strategies. Additionally, these findings suggest that coping styles were more related to cultural orientation, and even perhaps acculturation, than they were to race or ethnicity.

More recently, O’Connor and Shimizu (2002) conducted a study examining the relationship between sense of personal control, stress, coping, and psychological distress with 82 British students from the University of Leeds and 84 Japanese students from Obihiro Chikusan University and Otaru Syouka University. Mean age of the British and Japanese samples were 21.79 and 21.77, respectively. Participants were asked to respond to a questionnaire, although the nature and purpose of the questionnaire was not mentioned. Sense of personal control was assessed with the Mirowsky/Ross Sense of Control Index (Mirowsky & Ross, 1991), consisting of eight items measuring sense of personal control over good outcomes and bad outcomes. Perceived stress was assessed with the 14-item Perceived Stress Scale (PSS; Cohen, Kamarck, &
Mermelstein, 1983). Items included how often one had been ‘upset because of something that happened unexpectedly’ or ‘felt nervous or stressed,’ and so forth, in the last month. Coping was assessed with the modified version of The Ways of Coping Questionnaire (WCQ; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986), consisting of 50 items that described a broad range of cognitive and behavioral strategies people use to manage internal and external demands in stressful situations. The WCQ has eight subscales (confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving, and positive reappraisal) that were combined into either problem-focused coping or emotion-focused coping. Psychological distress was assessed with the Malaise and Negative Mood Scales of the Modified Centre for Epidemiological Studies’ Depression Scale (CESDm; Ross & Mirowsky, 1984) and the Mirowsky/Ross Anxiety Scale (Mirowsky & Ross, 1995).

O’Connor and Shimizu (2002) hypothesized that: 1) Sense of personal control will be higher in the British sample; 2) The Japanese sample will employ significantly less problem-focused coping styles; 3) The Japanese sample will employ significantly more emotion-focused coping styles; 4) Sense of personal control will only be associated with stress, psychological distress, problem- and emotion-focused coping in the British sample; and 5) Sense of personal control and perceived stress level will significantly predict problem- and emotion-focused coping only in the British sample. Pearson correlations were computed for the British and Japanese samples separately. The Japanese sample reported significantly lower sense of personal control, significantly higher levels of perceived stress, and significantly greater levels of negative mood, compared to the British sample. Furthermore, no significant main effect was found for malaise and anxiety. In the Japanese sample, the researchers reported that sense of personal control was
not significantly correlated with perceived stress, negative mood, malaise, anxiety, or problem-focused coping. However, the Japanese students employed significantly more emotion-focused coping \((r = -0.22, p = 0.047)\). In contrast, the British students’ sense of personal control was significantly negatively correlated with perceived stress, negative mood, and malaise. Anxiety was also found to be negatively associated with sense of personal control, although the coefficient barely missed statistical significance \((r = -0.25, p = 0.02)\). Moreover, sense of personal control was significantly positively associated with problem-focused coping, but not with emotion-focused coping. The authors noted that the findings in the British sample provide support that the buffering effects of sense of personal control is only evident in Western cultures.

Individualism implies that open emotional expression and achievement of one’s personal goals are important sources of well-being and life satisfaction (Diener & Diener, 1995; Markus & Kitayama, 1991). In contrast, collectivism entails the notion that life satisfaction is gained from successfully carrying out social roles and obligations, while also avoiding failure in these domains (Kim, 1994; Markus & Kitayama, 1991). Moreover, self-control in emotional expression is likely to be valued as a means of ensuring in-group harmony rather than open and direct expression of personal emotions. Accordingly, cultural orientation (individualism vs. collectivism) and self-construal have been demonstrated to influence an individual’s coping behavior.

Regardless, Oyserman, Coon, and Kemmelmeier’s (2002) recent review of the extant literature on the individual-collectivism construct demonstrated that preceding conclusions about cultural differences have been founded mainly in student samples, thus limiting the generalizability of the findings. College students are presumed to have a higher level of education and come from a higher socioeconomic status. As a result, observations in this
population might not offer an accurate representation of differences between cultures. Although the review does support the conception that European Americans differ in individualism and collectivism from others, and that basic psychological processes are influenced by I-C, the empirical basis for these conclusions is not firm. Consequently, it is not certain whether cultural differences attributed to differences in I-C are generalizable across populations or if differences are restricted to specific countries studied in the meta-analysis.

**Acculturation**

Acculturation is the most researched variable in cross-cultural psychology (Rivera, 2010). It is important to examine components of acculturation as moderators in the relationship between personality and coping, as it has been implicated in previous research to have a strong influence on the two variables. Berry (1997) conceptualized four types of acculturative styles in his model to address the two main conflicts individuals face: 1) to what extent are cultural identity and characteristics considered to be important and how does one strive for this maintenance (cultural maintenance); and 2) to what extent does one become involved with other cultural groups or remain mainly among one’s own group (contact and participation)? To resolve these conflicts, individuals utilize four acculturative strategies. From the perspective of the non-dominant groups, assimilation refers to individuals’ disinterest and lack of desire to maintain their cultural heritage, while seeking daily interactions with the dominant culture. Separation is defined by the individuals’ desire to maintain their heritage, while avoiding contact and participation with the dominant group. Marginalization refers to having limited possibility or interest in cultural maintenance (oftentimes for reasons of enforced cultural loss) and little interest in engaging with others (oftentimes for reasons of exclusion or discrimination). Integration (or biculturalism)
occurs when individuals simultaneously maintain their culture and interact with others in the dominant group; it has been implicated in the best psychological outcomes (Berry, 1997).

Although there is currently a large literature on the psychology of acculturation, there is very little known about its role in personality development. Allik and McCrae (2002) asserted in their chapter that most cross-cultural studies cannot explain the role of nature versus nurture in the development of personality traits due to the fact that most societies consist of individuals who hold both biological ancestry and culture. They noted that acculturation studies allow for a way to unconfound these two factors: “Immigrants are often assimilated into a new culture long before they lose their genetic ethnic identity. According to FFT, ancestry ought to be more important than the current social environment in shaping personality dispositions” (p. 317).

McCrae, Yik, Trapnell, Bond, and Paulhus (1998) reported significant acculturation effects by assessing personality in a sample of Chinese undergraduate students in Hong Kong and Vancouver in three separate studies. In Study 1, participants were 162 undergraduates in Hong Kong who completed the NEO-PI-R. Effects of acculturation were examined with 633 undergraduates at a large Canadian university in Study 2. Study 3 examined peer-rated personality profiles of Canadian-born Chinese and recent immigrants from Hong Kong. In both studies of self-reports, Hong Kong-born Chinese were significantly lower than Canadian-born Chinese in total Extraversion and its Warmth, Excitement Seeking, and Positive Emotions facets; in total Openness to Experience and its Fantasy, Actions, and Values facets; and in three facets of Agreeableness: Trust, Altruism, and Tender-Mindedness. These effects cannot be a result of ethnicity or characteristics of the raters, as all targets were Chinese, and in Study 3, the same raters described both targets. The researchers instead suggested that the effects appear to have been true acculturation effects. Specifically, Canadian culture appears to promote pro-social
behavior and attitudes and openness to some aspects of experience more so than Hong Kong culture. As a result, Hong Kong students’ residence in Canada resulted in their higher scores on Openness to Experience and Agreeableness.

In another empirical examination, Leininger (2002) explored the relationships between Vietnamese personality, culture, and acculturation in the United States. Participants were 233 Vietnamese Americans living in North Carolina (N = 57) and California (N = 176). The age range was 17-88, with a mean of 39.7. Most of the participants (89%) were considered recent immigrants and arrived in the U.S. in 1979 or later and the average time participants had been living in the U.S. was 11 years. The International Personality Item Pool (IPIP; Goldberg, 1999) version of the NEO-PI-R was administered with this sample. In the IPIP questionnaire, respondents were asked to rate how accurately each item describes them. The English items are brief verbal phrases (e.g., “lose my temper,” “seldom get lost in thought”) and the Vietnamese translation was modified to include toi (“I”) to each item. Procrustes rotation revealed a close match between Vietnamese and American factor structures (factor congruences = .89 to .95).

Interview, participant observation, and results from the IPIP provided support for Vietnamese Americans being low in the Achievement Striving facet of Conscientiousness. Furthermore, unacculturated Vietnamese Americans were low in Openness to Experience when compared to Americans and acculturated Vietnamese Americans. Although Leininger (2002) touched on the possible role of acculturation in this study, her design was not effective. This study did not possess data from respondents in Vietnam, so there was no means for comparison. Moreover, the study was complicated by age differences and the impact of self-selection.

More recently, Roesch, Wee, and Vaughn (2006) explored the role of the Big Five personality traits and acculturation on coping styles. A community sample of 100 Korean
Americans completed the NEO-P-R, Brief COPE inventory (Carver, 1997), and the Suinn-Lew Asian Self-Identity Acculturation scale (SL-ASIA; Suinn, Ahuna, & Khoo, 1992). Neuroticism was positively correlated with indices of emotion-focused coping (emotional support) and avoidance (substance abuse, behavioral disengagement, venting, and self-blame). Extraversion, Conscientiousness, and Openness to Experience were positively related to indices of problem-focused coping (active coping and planning) and emotion-focused coping (positive reframing, humor, and acceptance). Agreeableness was positively correlated with active coping and humor. In regards to acculturation and coping, it was only positively associated with venting. The researchers also reported that acculturation level interacted with personality to predict coping. For instance, for individuals high in acculturation, both Neuroticism and Openness to Experience were positively related to indices of avoidance coping. For individuals low in acculturation, a negative association was found between Conscientiousness and venting. Moreover, Roesch et al. (2006) suggested that the level of individualism and collectivism may also influence responses to stress and the availability of coping resources. For example, a collectivistic culture that prizes family connections and interdependence may offer social resources not readily available in an individualistic culture. As a result, this might allow an individual high in Neuroticism to avoid social withdrawal and disengagement.

The results of this study suggested that consideration of cultural factors is crucial. The authors noted that ethnicity might be an indicator for some other factor, such as the nature of stressors experienced. Many individuals from minority groups experience more uncontrollable stressors, such as racism and poverty. Furthermore, the strong relationship found between the dimensions of personality and coping styles (in comparison to the relations between
acculturation and coping styles) implies that personality traits, rather than acculturation, may be clinically pertinent when profiling patients and developing treatment/interventions.

Presumably, the culture in which one grows up plays a vital role in the development of a self-identity. Ryder, Alden, and Paulhus (2000) explained that, as individuals have more exposure to and adapt to a culture over the generations, it is expected that they will soon become indistinguishable from the dominant culture. This perspective has been worthy in assessing factors such as personality characteristics of different cultures. And as McCrae et al.’s (1998) empirical investigation found, recent Chinese immigrants to the U.S. have personality profiles that resemble those found in Hong Kong, while personality profiles of later-generation Chinese align with those of Americans. However, given the limited empirical data on acculturation, coping, and personality traits, firm conclusions cannot be made from the few studies conducted. Acculturation studies are powerful and unique, yet there must be more of a foundation in its research with personality and coping before we have knowledge on which to reflect.

Psychological Well-Being

A prominent aim in the field of psychology involves the investigation of the various mechanisms individuals employ to develop and maintain high, enduring well-being. Coping research has also focused on the relationship between coping efforts and adaptational and well-being outcomes (Felton & Revenson, 1984; Menaghan, 1982). The previous discussion of personality and coping suggests that the propensity to cope with stressful life events will determine the adoption of active or problem-focused coping behaviors, and thus, lead to adaptive psychological outcomes.

The concept of well-being refers to the optimal psychological functioning and experience that an individual possesses (Ryan & Deci, 2001). There are two perspectives of well-being:
eudaimonic and hedonic. Eudaimonic well-being is characterized by strivings to develop one’s potential and an orientation of openness to the tension and excitement of life challenges and uncertainties (Ryan & Deci, 2001; Ryff & Singer, 1998). Eudaimonic well-being is less about feeling good and more about being aware of emotions and thoughts, expressing them openly, and acting on them to be congruent with one’s true self (Ryan & Deci, 2001). Yet, positive feelings can be one of the payoffs from attempting to maximize abilities and capacities. Representative eudaimonic behaviors include developing life goals that fit with personal values, overcoming obstacles to these life goals, being authentic, and trying to better understand the self and others. In contrast to markers of hedonic well-being, eudaimonic well-being has stronger relations with being challenged, striving for mastery and competence, and effort expenditure (Waterman, 1993). Behaviors that are intentional and effortful best facilitate lasting changes in well-being (Lyubomirsky & Tucker, 1998). Thus, eudaimonic behaviors are expected to be a primary process in paths to meaningful living.

Hedonic well-being is characterized by frequent and enduring positive affect, low levels of negative affect, and appraisals that life components are satisfying (Kahneman, Diener, & Schwarz, 1999; Waterman 1993). Essentially, hedonic well-being is about people’s feelings and beliefs that the life they are leading is satisfying (Kahneman et al., 1999). Moreover, although positive feelings can derive from any activity, pleasant social interactions, physical activities (e.g., exercise, aromatherapy), and prototypical “hedonistic” pursuits such as substance use, sex, and material consumption are more likely to produce this outcome. Ryan and Deci (2001) posited that both hedonic and eudemonic well-being should be considered when examining well-being as a whole.
Another aspect of well-being, social well-being, has been less researched. Keyes (1998) proposed five dimensions of social well-being. Social integration refers to the evaluation of the quality of one’s relationship to society and community. Social acceptance is the understanding and perception of society through the character and quality of other people as a generalized category. Social contribution is the evaluation of one’s value within society. Social actualization is the evaluation of the potential and trajectory of society. Social coherence is the perception of the quality, organization, and operation of the social world, including an expression of concern for knowing and understanding the world. The researcher reported that socially healthier individuals exhibit well-being due to their perception that they are social resources, are cared for and supported within their communities, and lead coherent personal lives. It would seem logical that social well-being, therefore, can better reflect the notion of psychological well-being in collectivistic societies. However, this speculation has not been confirmed by research. The following sections will detail the existing empirical literature relating well-being to self-construals and personality.

**Self-construals and Well-Being**

A number of studies have examined the association between self-construal and some domains of distress or well-being across ethnic-racial groups. In two separate studies, Okazaki (1997, 2000) investigated the relationship between independent and interdependent self-construals and symptomatology of depression and social anxiety. In Okazaki (1997), White and Asian American college students’ self-construals were surveyed using the translated version of Takata’s (1993) 40-item Japanese measure of independent and interdependent self-construal. In this study, Okazaki used an abbreviated (29-item) English translation of the measure. Results revealed that independent self-construal was found to be negatively correlated with a measure of
depression \( (r = -0.27) \) and with two measures of social anxiety \( (r = -0.37 \) and \( r = -0.48) \).

Interdependent self-construal was positively correlated with a measure of depression \( (r = 0.20) \) and with two measures of social anxiety \( (r = 0.24 \) and \( r = 0.53) \). In particular, the researcher reported that those who were more concerned with asserting their own opinions and judgments and emphasize independence from others were less likely to be socially avoidant, distressed in social settings, and fearful of social evaluations. Okazaki (2000) replicated these findings in her study of self-construal and depression and social anxiety. She used the Self-Construal Scale (SCS; Singelis, 1994) with her sample and found that independent self-construal was negatively correlated with a depression measure \( (r = -0.27) \) and a social anxiety measure \( (r = -0.55) \). The researcher failed to find significant associations between the levels of interdependent self-construal and depression and social anxiety. However, both studies found that levels of self-construals appear to be closely related to mental health symptomatology in college students.

Furthermore, there has been a series of cross-cultural studies exploring the association between self-construal (assessed with the SCS; Singelis, 1994) and indices of well-being, including self-esteem, life satisfaction, and embarrassability (Kwan et al., 1997; Singelis, Bond, Sharkey, & Lai, 1999; Singelis & Brown, 1995; Singelis & Sharkey, 1995). Singelis et al. (1999) investigated these domains across three ethnic groups (European American, Asian American in Hawai’i, and Chinese in Hong Kong). The researchers found the expected differences among the groups on levels of self-construal. However, the relationship between measures of self-construal and self-esteem did not differ across the three groups. Specifically, for each ethnic group, higher independent self-construal and lower interdependent self-construal was related to higher levels of self-esteem. Similarly, Kwan et al. (1997) reported that self-construals were significantly correlated with life satisfaction ratings in both American and Hong Kong students. The
researchers indicated that the effect of independent self-construal on life satisfaction was mediated by self-esteem, while the effect of interdependent self-construal was mediated by relationship harmony, or the degree to which individuals reported a sense of harmony across five dyadic relationships they considered most important in their lives.

These findings support the notion that there is a positive relationship between independent self-construal and well-being and a negative relationship between interdependent self-construal and well-being. As such, it appears that individuals who have an independent self-construal are less likely to report being depressed and socially anxious, have more positive self-appraisals, and can protect their self-concept from threats (Okazaki, 2002).

**Personality and Well-being**

*Hedonic well-being.* Previous research has demonstrated the strong relationship of well-being to the personality dispositions of Neuroticism and Extraversion (Emmons & Diener, 1985; Warr, Barter, & Brownbridge, 1983). Certainly, well-being can be predicted from levels of these personality traits measured years earlier (Costa & McCrae, 1980; Costa, McCrae, & Norris, 1980). Neuroticism and Extraversion are also systematically related to the mechanisms that compose the neurotic and mature coping factors (McCrae & Costa, 1986). Therefore, the authors suggested that it is useful to consider the possibility that part of the association of coping efforts with adaptational outcomes may be due to the common influence of enduring personality variables.

Costa and McCrae (1980) conducted three studies to observe the relationship between personality and happiness or subjective well-being. Participants were recruited from a project on smoking and personality conducted in collaboration with the Normative Aging Study, an interdisciplinary longitudinal study of health and aging in men. In Study 1, the relationship
between four measures of happiness and seven personality dispositions hypothesized to be related to positive or negative affect were investigated. In Study 2, the researchers attempted to clarify and organize the results by testing the original hypothesis using measures of the broader dimensions of Neuroticism and Extraversion. In Study 3, happiness was predicted from data obtained on Neuroticism and Extraversion ten years previously. The researchers found that Extraversion, in conjunction with its component traits of sociability, tempo, and vigor, predisposed individuals toward positive affect, whereas Neuroticism (along with general emotionality, impulsivity, fear, and anger) predisposed individuals toward negative affect. In addition, extraverted traits contributed to one’s positive enjoyment or satisfaction in life, even though they did not generally appear to diminish the unpleasantness of adverse situations. Neurotic traits influenced one to suffer more acutely from life’s misfortunes, but they did not necessarily decrease one’s joy or pleasures. In summary, the researchers suggested that a better estimate of the unique contribution of coping to well-being might be obtained by partialing out the specific facets of Neuroticism and Extraversion known to be most strongly related to well-being, which can be obtained from the NEO Inventory Depression and Positive Emotions subscales. Furthermore, they posited that, although researchers and clinicians typically think of coping as a way of reducing emotional distress, coping may be more useful in maintaining good spirits despite adversity.

McCrae and Costa (1986) investigated personality, coping, and well-being in two separate studies. Participants in both studies were part of the Augmented Baltimore Longitudinal Study of Aging, comprised of community-dwelling, generally healthy volunteers who have agreed to medical and psychological testing at regular intervals. In Study 1, data was obtained from 255 participants who reported a recent life event that was classified as a loss, threat, or
challenge (from October 1978-1979). Participants were asked to recall the assigned event and to indicate which of a series of coping strategies they had ever used in dealing with it (August 1980). The participants, who in Study 1, did not report an event in the last year that they would categorized as a loss, threat, or challenge were invited to participate in Study 2. These participants were asked to nominate their own stressful events and were mailed a questionnaire asking them to describe and evaluate their coping in three situations. In October, 1979, all participants were also administered a series of tests to assess psychological well-being. In February 1980, participants were administered the NEO-PI. In both studies, Neuroticism was associated with increased use of hostile reactions, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity, and indecisiveness. Extraversion was correlated with rational action, positive thinking, substitution, and restraint. Open individuals were more likely to use humor in dealing with stress, whereas closed individuals were more likely to use faith. The researchers also reported that those who scored high on Neuroticism used poor coping strategies and scored low on well-being, whereas individuals who used more effective ways of coping reported higher subsequent happiness and life satisfaction. However, the researchers cited flaws in their study. First, their community sample was not representative of the population as a whole. Second, the temporal design of their study might have contributed to errors in memory and causal ambiguities. The scholars noted that it would have been preferable to assess personality well before stressful events and coping directly afterwards. Thus, further research is warranted.

More recently, Lucas and Fujita (2000) demonstrated in their meta-analysis that, on average, Extraversion correlated .38 with pleasant affect at the zero-order level. Moreover, when multiple diverse methods of measurement were used to model the relationship between Extraversion and pleasant affect, the correlation often approached .80. Similarly, Fujita (1991)
found strong correlations when he used structural equation modeling to assess the relationship between Neuroticism and negative affect. Due to the consistency of these findings, scholars have pointed to Extraversion and Neuroticism as providing the primary links between personality and subjective well-being.

In addition, Diener, Oishi, and Lucas (2003) reviewed the two interrelated factors believed to influence subjective well-being: personality and culture. They concluded that some personality dispositions (i.e., neuroticism, extraversion, and self-esteem) can have a crucial influence on SWB. Much of the research literature on personality and well-being has implicated N and E. Yet, as DeNeve and Cooper (1998) discussed, this may over-generalize the complex relationship between personality and SWB. They demonstrated in their study that there are a number of broad dimensions and narrower traits that have displayed consistent correlations with SWB constructs. For instance, Agreeableness and Conscientiousness correlated approximately .20 with SWB and narrow traits, such as repressive defensiveness, trust, locus of control, desire for control, and hardiness, all showed moderate correlations with SWB. Furthermore, even though personality accounted for much variability in the presence of SWB, life circumstances is also a major factor in long-term levels. Furthermore, differences in mean levels of SWB were attributed to cultural variables (i.e., wealth, norms dictating appropriate feelings, and importance given to SWB).

Similarly, Kwan and her colleagues (1997) shed light on some possible moderator and mediator variables in the association between personality traits and SWB. Across cultures, the links between the Big Five and SWB are largely mediated by intra- and interpersonal esteem evaluations. In particular, self-esteem appears to be a powerful mediator on the influence of Extraversion, Neuroticism, and Conscientiousness on SWB, whereas relational self-esteem (i.e.,
satisfaction with relationships with family and friends) mediates the influence of Agreeableness and Extraversion on SWB. The authors indicated that although the weights of self-esteem and relationship harmony in predicting SWB vary across cultures, the weights of each of the Big Five dimensions on self-esteem and relationship harmony seem to be cross-culturally equivalent. Consistent with previous research, self-esteem is a unique phenomenon that is shown to be a powerful predictor in Western cultures.

DeNeve and Cooper (1998) also examined the dispositional sources of life satisfaction. In their meta-analysis, they reported the validity of both direct and indirect measures of personality measures and found the following uncorrected mean estimates: Neuroticism ($r = .24$), Extraversion ($r = .17$), and Conscientiousness ($r = .22$). Their results can be best explained by the fact that at the time their study was conducted, there existed a paucity of research investigating the relationship between direct and comprehensive measures of the Big Five and subjective well-being. Thus, Heller, Watson, and Ilies (2004) further investigated this in their recent meta-analysis and reported that Neuroticism, Extraversion, Agreeableness, and Conscientiousness were related to both various domain satisfactions and life satisfaction.

Diener and Diener (1995) investigated the extent to which correlates of satisfaction would be the same across cultures. They compared the size of correlations between various domain satisfactions and global life satisfaction. Although there were no reported cultural differences in the size of the correlations relating satisfaction with friends and family to global life satisfaction, there was a significant cultural difference in the size of the correlations between satisfaction with self and global life satisfaction. More specifically, whereas satisfaction with self was strongly associated with life satisfaction in highly industrialized, individualistic Western nations (i.e., Finland, Canada), satisfaction with the self was less associated with global life
satisfaction in less industrialized, collectivistic nations (i.e., India, Cameroon). These findings were replicated by Oishi, Diener, Lucas, and Suh (1999), who concluded that satisfaction with self and one’s freedom were more strongly predictive of life satisfaction in highly individualistic cultures than in those low in individualism.

Watson (2000) investigated the association between the Big Five traits and general negative affect (NA) and positive affect (PA). Results revealed that the correlation between personality and NA and PA were quite strong ($r = .62$ and .66, respectively). With the exception of Openness to Experience, all of the Big Five traits were found to be related to negative and positive affectivity, especially Neuroticism and Extraversion. Furthermore, Watson, Wiese, Vaidya, and Tellegen (1999) found a correlation of .58 between Neuroticism and the trait form of the PANAS Negative Affect scale in their sample of 4,457. The results also demonstrated a correlation of .51 between Extraversion and the trait form of the PANAS Positive Affect scale. It would seem that, consistent with previous research, Neuroticism and Extraversion are important influences on NA and PA, respectively. Taken altogether, these relationships indicate that these personality traits characterize stable affective dispositions that have direct effects on life satisfaction. Such evidence suggests that individual differences in well-being are due to predispositions between individuals.

_Eudaimonic well-being_. There has been an absence of research that examines cultural differences in the two main aspects of meaning of life, presence of meaning and search for meaning. Steger, Kawabata, Shimai, and Otake (2008) undertook the task of comparing Japanese and Americans on cultural variations in tendencies to experience search for meaning and presence of meaning. They recruited 1183 college-aged participants in the U.S. and 982 college-aged participants in Japan. The American sample completed the Meaning in Life Questionnaire
(MLQ; Steger, Frazier, Oishi, & Kaler, 2006), the Purpose in Life Test (PIL; Crumbaugh & Maholick, 1964), and the Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999). The Japanese sample completed published Japanese translations of the MLQ, PIL, and SHS. Results indicated that Americans reported higher levels of presence of meaning than did Japanese, thus confirming the notion that presence of meaning is linked to positive self-concept found more in independent (individualistic) cultures than in interdependent (collectivist) cultures. Moreover, those individuals who reported more presence of meaning in their lives also reported more happiness. It appears that meaning in life is considered important to all human functioning across cultures; however, independent cultures are more likely to see life as meaningful. Cultural differences in search for meaning were also observed with Japanese participants reporting more searching for meaning. Relevant also is the finding that search for meaning was negatively related to presence of meaning among Americans, but it was positively related to presence of meaning among Japanese. Culture might influence how individuals interpret the concept of searching for meaning. On the one hand, it is seen as a negative pursuit in America, whereas it is promoted in Japan. This investigation was limited in its reliance on cross-sectional data and correlational analyses with college students, thus limiting generalizability and causal inferences. Additionally, the researchers were unable to actually assess the influence of culture because they did not directly assess the constructs proposed to impact cultural variations.

In summary, although these studies certainly contribute to insight on cultural differences in well-being, the paucity of empirical knowledge hinders us from fully understanding well-being across cultures. There are still many questions left unanswered. Is happiness something everyone strives for or is it only important in some cultures? If meaning in life is a basic human motivation, why is it that some cultures value it more than others? If one considers the search for
meaning as important, indicative of a presence of meaning in one’s life, does that imply there is something amiss in the culture? Many more questions abound and future research is necessary to address the importance and role of well-being and cultural influences.

Measures of Well-Being

Several measures have been used widely to assess hedonic well-being. Life satisfaction, a component of SWB, has been assessed by the widely-used Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Using a 7-point Likert scale, respondents are asked to complete the 5-item SWLS with ratings from 1 (strongly disagree) to 5 (strongly agree). The SWLS measures general positive cognitive appraisals of life with items such as “In most ways my life is close to the ideal.” Diener, Emmons, Larsen, and Griffin (1985) reported a coefficient alpha of .87 and a test-retest correlation coefficient of .82 with a two-month interval for the SWLS. Optimism has been assessed by the Life Orientation Test (LOT; Scheier & Carver, 1985), which contains eight items, such as “In uncertain times, I usually expect the best.” These items, along with four filler items, were rated on a 5-point scale with ratings from 0 (strongly disagree) to 4 (strongly agree). Scheier and Carver reported that coefficient alpha for the LOT was 0.83 in the parent sample and 0.84 in the follow-up sample. The 20-item trait version of the Positive Affect and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988) with ratings from 1 (very slightly) to 5 (extremely) has also been used. The 10-item PANAS-PA and 10-item PANAS-NA subscales assess general tendencies to feel activated positive and negative emotions, respectively. Alpha coefficients for the trait PA and NA subscales were .86 and .88.

Other instruments have been used to measure eudaimonic well-being. The 10-item Meaning in Life Questionnaire (MLQ; Steger et al., 2006) was recently developed for this purpose. Ratings are made on a 7-point scale ranging from 1 (absolutely untrue) to 7 (absolutely
true). With two 5-item subscales, the MLQ measures the presence and search for meaning. The Presence subscale assesses cognitive appraisals of whether life is meaningful (e.g., “I have a good sense of what makes my life meaningful”). The Search subscale assesses general tendencies to actively seek meaning and purpose in life (e.g., “I am seeking a purpose or mission in my life”). Stability for the MLQ instrument has also been strong (Steger & Kashdan, 2007). Respective alpha coefficients for the Presence and Search subscales were .82 and .88. Positive psychological wellness has been assessed with Ryff’s (1989) Psychological Well-Being scale, which includes six scales: autonomy, personal growth, self-acceptance, life purpose, mastery, and positive relations with others. Each scale has seven items, for which participants are asked to, “Decide to which extent each statement describes you?” Responses are scored on a 6-point Likert scale, ranging from 1 (agree strongly) to 6 (disagree strongly). Evidence of internal consistency is shown by alpha coefficients for each scale: Self-acceptance (.79), Environmental mastery (.72), Positive relations with others (.78), Purpose in life (.79), Autonomy (.70), and Personal growth (.77).

Conclusion

The body of literature in the aforementioned sections suggests several conclusions and directions for future research. In the following sections, I will present a brief conclusion for each area of research.

**Personality**

The Five-Factor Model of personality has been an influential paradigm in examining personality characteristics across cultures. Cross-cultural research on the Big Five personality dimensions has confirmed the generalizability of these dimensions across cultures using imported inventories (e.g., Allik & McCrae, 2004; Hofstede & McCrae, 2001; McCrae, 2002;
McCrae & Costa, 1997; McCrae, Costa, & Yik, 1996; McCrae et al., 2005; Schmitt et al., 2007). However, psycho-lexical studies have found that Neuroticism and Openness to Experience are the least replicable across cultures (De Raad et al., 2010). Although the Five-Factor Model offers a representation of the structure of personality across cultures, it is possible that it excludes indigenous dimensions in some cultures.

Coping

Individuals have differing methods for managing threat or stressors. Research in the area of stress and coping has been abundant; however, the field has been limited by methodological issues associated with the use of self-report and dispositional coping instruments. Additionally, numerous conceptualizations of coping (i.e., disengagement versus engagement, emotion-focused versus problem-focused, situational versus dispositional, etc.) have overwhelmed the research literature, hindering researchers from a full understanding of what coping encompasses. The empirical research also appears to suggest that the use of emotion-focused coping strategies is correlated with adverse, maladaptive outcomes (Noh & Kaspar, 2003). Problem-focused coping responses, in contrast, lead to more positive psychological outcomes (Endler & Parker, 2000). The few cross-cultural studies conducted on coping have shown that coping responses, at best, follow the distinction between problem-focused and emotion-focused coping, assumed to be employed by people in individualistic and collectivistic cultures, respectively. Additionally, constructs such as Markus and Kitayama’s (1991) self-construal and the individualism-collectivism dimension have both been influential in research on Asian Americans’ personality, coping, and health outcomes. However, these approaches can be criticized because there has not been adequate research to support the notion that European Americans are truly individualistic, or have independent self-construals, or that Asian Americans are truly collectivistic, or have
interdependent self-construals. This presumption is disputed by some cross-cultural findings (i.e., Matsumoto, 1999; Okazaki, 2002). Furthermore, several studies have failed to replicate predicted patterns of cross-cultural differences in levels of self-construal (Gudykunst et al., 1996; Kim, Hunter, Miyahara, & Horvath, 1996; Kleinknecht, Dinnel, Kleinknecht, Hiruma, & Harada, 1997).

**Personality and Coping**

The field of counseling psychology flourishes with a plethora of research studies on personality and coping. Research on individual differences and coping and adaptation has spanned three generations (Suls, David, & Harvey, 1996). The advent of research on personality and coping began with the psychodynamic/ego development framework, which emphasized coping as unconscious defense mechanisms individuals employ to manage internal and external threats or conflicts. The transactional perspective dominated the second generation. Led by Lazarus and Folkman (1980, 1984), it focused on the importance of coping behavior and cognitive/situational determinants rather than dispositions. Within the transactional model, there are two broad distinctions of coping: problem-focused coping and emotion-focused coping. Additionally, the use of problem-focused or emotion-focused coping is influenced by an individual’s appraisal of the stressor/situation (i.e., primary versus secondary appraisal or control). The third generation of coping theory and research emerged from the availability of models and broad taxonomies of personality, such as the Big Five. This new paradigm takes into consideration the role of both situational and dispositional determinants of coping (Suls, David, & Harvey, 1996).

Despite empirical support for the strong association between personality and coping the field is limited by the dearth of cross-cultural research. According to Connor-Smith and
Flachsbart (2007), the relationship between personality and coping across cultures was difficult to interpret and limited in their meta-analysis due to the paucity of participants from non-Western cultures. There is a strong need to evaluate ethnicity as an influential factor affecting personality and coping responses, and researchers can conduct meaningful comparative studies of personality and coping across populations in different cultures. Cultural differences in personality and coping measures, stressors experienced, and attitude toward personality traits and coping strategies may all impact the strength of associations between personality and coping. Although the structure of coping is relatively consistent across cultural and ethnic groups, stressor exposure and appraisal, coping resources, and the acceptability of strategies and frequency of use may vary across cultures.

The majority of the research studies conducted on personality and coping have focused on coping as a trait (Connor-Smith & Flachsbart, 2007; McCrae & Costa, 1986; Watson & Hubbard, 1996). It does appear that future research needs to examine coping both across situations and within persons if we are to increase our understanding of the role of personality in coping and adaptation. The context of a situation affects the demands, resources, selection of coping responses, and cost-benefit analyses of coping responses. Therefore, greater consideration of the nature of stressors, such as severity, controllability, and domain, are important in illuminating coping processes. Many researchers require that studies do not simply merge participant reports to a wide range of self-created stressors (Carver & Connor-Smith, 2010; Tweed et al., 2004). Coping studies must also incorporate prospective, daily report, and lab-based experiments to further expand on the knowledge that we have from cross-sectional studies (Carver & Connor-Smith, 2010).
Previous empirical research has demonstrated that Neuroticism is associated with disengagement coping, whereas Extraversion, Openness to Experience, and Conscientiousness have been related to engagement coping, and Agreeableness to less disengagement coping. Personality and coping can each individually influence physical and mental health outcomes (Carver & Connor-Smith, 2010). However, future research must call attention to the aforementioned suggestions in order to increase our understanding of how personality and coping can determine one’s response to stressors.

Individualism-Collectivism

In the previous two decades, research on the individualism-collectivism cultural theory has gained much recognition, stimulated in large part by Hofstede’s influential conceptualization of these two constructs. The strength of I-C theory is that it focuses on key dimensions of cultural difference that present a meaningful explanation for how we can understand the variability in the behavior of individuals residing in different parts of the world (Oyserman et al., 2002). The empirical studies discussed do support the general view that European Americans and Asian Americans differ in I-C and that I-C impacts psychological processes such as well-being, personality, and coping. However, the main criticisms of the existing research on the I-C model center on the broad definitions of the constructs and researchers’ readiness to explain any cultural differences as being the result of I-C processes. Oyserman et al. (2002) have cautioned that the value of this model is greatly compromised if and when social scientists do not offer explicit, operational definitions of the two constructs. Furthermore, the common sampling of college students limits the generalizability of the results.
Acculturation

There is limited research, both theoretical and empirical, that examines the acculturation process of individuals and the effects of such adaptations on their coping-related outcomes. Roesch et al. (2006) reported that the level of acculturation did interact with personality to predict coping responses; however, findings from one study are not nearly enough to provide more than just inferences. Yet, the few current studies on acculturation and personality do offer some important implications. Allik and McCrae (2002) also suggested that the linear emphasis of acculturation (i.e., high acculturation versus low acculturation) has resulted in our limited knowledge of contextual variations in acculturative adaptational styles. Interestingly, mediating variables (i.e., personality characteristics) may also influence one’s adaption to a new culture.

Well-Being

Another important consideration that further expands on how personality influences coping is the connection between personality and coping to well-being. There is a dearth of knowledge on well-being as a function of personality and coping. Suh (2000) became interested in the empirical phenomenon documenting that North Americans were happier and had more positive self-concepts than East Asians. As a result, he conducted an integrative analysis of cross-cultural literature on subjective well-being to confirm that the self is essential in the understanding of cross-cultural differences in perceived levels of subjective well-being. In his research, he showed that psychological constructs, such as self-esteem and self-congruence, are less emphasized in East Asians’ conceptualizations of their mental health. In particular, self-esteem and self-identity are less likely to predict mental health outcomes in collectivistic cultures. Suh indicated that obtaining personal happiness is not a relevant goal in collectivistic cultures, and that one’s self-appraisals are based more on external social standards. Additionally,
Suh, Diener, Oishi, and Triandis (1998) suggested that individuals in collectivistic societies view life satisfaction in the context of their social norms and emotions, whereas those in individualistic societies are inclined to base their perceptions of life satisfaction primarily on their emotions. Hence, the differences in cultural socialization influence how individuals go about seeking to enhance their well-being, if it is even something they consider to be salient and meaningful.

**Summary**

In conclusion, this literature review makes clear that additional research studies are needed before we can ascertain the specific processes that account for the relationship between personality and coping responses in various cultural groups. To the extent possible, these studies should address the limitations addressed in my review. Few, if any, studies have examined the impact of individualism and collectivism or acculturation on the role of personality and coping in dealing with stressful encounters. Therefore, it would be a meaningful pursuit to investigate how personality traits, coping strategies, and well-being can be incorporated into an integrated model that also takes into consideration the individual-collectivism and acculturation constructs.

**An Integrated Model of Personality and Coping**

The present study tested an integrated model relating the Big Five personality traits and coping styles in the prediction of well-being among European Americans and Asian Americans. Figure 3 depicts the integrated model, which is based on the FFT (McCrae & Costa, 1996). I will investigate the goodness-of-fit of the overall model and test if each of the hypothesized paths is statistically significant, using structural equations modeling. In this model, the constructs of the study are integrated into the FFT model, providing a theoretical basis for the hypotheses. For instance, Basic Tendencies (i.e., Big Five personality traits) are expected to predict Characteristic
Adaptations (i.e., coping styles) and aspects of well-being. Characteristic Adaptations, in turn, predict Objective Biography, which consists of emotional and behavioral reactions throughout the lifetime (i.e., well-being).

Based on previous research (e.g., Bolger & Zuckerman, 1995; Connor-Smith & Flachsbart, 2007; DeLongis & Holtzman, 2005; McCrae & Costa, 1986), I expect that there will be significant direct effects relating the Big Five traits to coping strategies and well-being, as well as direct and indirect effects relating personality and coping to subjective well-being and social well-being, as depicted in the integrated model (see Hypothesis 1 below). Due to the paucity of research on the effects of personality on coping strategies, the predictions made in this study are based on general influences of personality traits on limiting or aiding coping strategies.

Although I expect that the integrated model depicted in Figure 3 will apply to both European Americans and Asian Americans, I also anticipate that selected path coefficients will be stronger in one or the other ethnic group. In general, my hypotheses are based on the assumption that European Americans are more individualistic, and less collectivistic, than Asian Americans. In their meta-analysis, Oyserman and colleagues (2002) demonstrated that East Asians are lower in individualism and higher in collectivism than Americans. In particular, I predict that the hypothesized negative path coefficient relating emotion-focused coping to subjective well-being will be stronger (i.e., even more negative) for Asian Americans, as compared to European Americans (see Hypothesis 2 below). In addition, I anticipate that the hypothesized positive path coefficient relating problem-focused coping to subjective well-being will be even more positive for European Americans, as compared to Asian Americans (see Hypothesis 3 below). According to the transactional stress-coping model discussed in Chapter 2 (Lazarus & Folkman, 1984), stress is conceptualized as an interaction between the individual and
the environment that is perceived by the individual to be taxing or exceeding his/her resources, which in turn is detrimental to well-being. In collectivistic cultures, it is presumed that emotion-focused coping strategies (e.g., emotional expression, wishful thinking, acceptance) are not condoned. Therefore, these strategies are likely to cause poor subjective well-being if displayed. In individualistic cultures, independence and personal control are valued. Individuals who engage in problem-focused coping strategies (e.g., problem-solving, active coping, planning) are behaving in accordance with their societal norms and personal expectations. As a result, this degree of congruence will lead to high subjective well-being.

In addition to the structural (predictive) relationships among the personality, coping, and well-being variables, my hypotheses also address ethnic differences in the mean levels of these variables. Regarding cultural mean differences in personality tendencies, there is minimal research on ethnic and cultural differences in the Big Five personality dimensions, with the exception of Neuroticism, Extraversion, and Openness to Experience. One relevant finding is that individuals in Western/European cultures and the United States score higher in Extraversion than people in other countries, while individuals in Asian cultures score higher in Neuroticism (McCrae & Terracciano, 2005). McCrae (2001) also found that culture-level individualism is associated with higher Extraversion and Openness to Experience ($r_s = .61$ and $.48$, respectively). Although Conscientiousness and Agreeableness have been less researched, it is plausible to expect that Asian Americans will display higher conscientious and agreeable traits. Consistent with these findings and conceptualizations, I predict that European Americans will average higher levels of Extraversion and Openness to Experience and lower levels of Neuroticism, Agreeableness, and Conscientiousness, as compared to Asian Americans (see Hypothesis 4 below).
Regarding ethnic mean differences in coping styles, it is predicted that European Americans will display more problem-focused coping strategies, while Asian Americans will engage in more emotion-focused and disengagement coping (see Hypothesis 5 below). An investigation of these cultural differences may be able to clarify inconsistent findings in previous studies. For example, Tweed and colleagues (2004) found that European Americans actually were more likely to use escape-avoidance than Japanese. Sinha et al. (2000) indicated in their study that Canadian and Indian students’ coping strategies were more similar than different. These findings also conflict with traditional models (e.g., Seiffge-Krenke, 1993) which propose that European Americans are more action-oriented than their Asian American counterparts. Asian Americans are also noted to engage in maladaptive coping strategies.

Regarding cultural mean differences in subjective well-being, previous research (e.g., Kwan et al, 1997; Okazaki, 2000; Okazaki, 2002) has demonstrated that there is a positive association between independent self-construal and well-being and a negative association between interdependent self-construal and well-being. Markus and Kitayama’s (1994) self-construal model proposes that independent self-construal is more prevalent in individualistic, or Western, cultures, whereas interdependent self-construal is more prevalent in collectivistic, or Eastern, cultures. Thus, based on these empirical and theoretical findings, I predict that European Americans will report greater subjective well-being than Asian Americans (see Hypothesis 6 below).

The empirical groundwork for predictions regarding mean differences in social well-being is noticeably absent. As a result, there is not a strong empirical basis to support my prediction that Asian Americans will report higher levels of social well-being (see Hypothesis 7 below). However, it is plausible to expect this difference given the composition of the social
well-being construct developed by Keyes (1998), which includes social integration, social acceptance, social coherence, social contribution, and social actualization. These constructs appear to reflect the emphasis in collectivistic cultures on community interconnectedness.

Lastly, as depicted in Figure 4, I predict that more highly acculturated Asian Americans will report higher subjective well-being and lower social well-being, while more highly enculturated Asian Americans will report higher social well-being and lower subjective well-being (see Hypotheses 8 and 9 below). Acculturation influences subjective well-being. Relocation to a new environment and culture affects many aspects of one’s personal and social identities, as individuals are often required to make significant adjustments or reconstructions of themselves to accommodate or assimilate (Rocca, Horenczyk, & Schwartz, 2000). Research has shown that individuals who prefer and attain some degree of integration (i.e., biculturalism) are most likely to experience fewest psychological problems (e.g., Berry & Kim, 1998; Rocca et al, 2000). There is no theoretical or empirical foundation for the hypothesized association between levels of acculturation and social well-being. However, key elements of social well-being (e.g., interdependence, shared consciousness, social integration) are essential within collectivistic cultures. Therefore, Asian Americans who immigrate to a new country are most likely to maintain their ethnic identity and prefer and adhere to social integration and coherence.

Taken altogether, the integrative model proposed by the FFT may be able to address and explain some of the inconsistencies and limitations of previous research on personality, coping, and well-being. In addition, the findings may provide an important contribution to our understanding of personality and coping across cultures. This study tested an integrated model of personality and coping styles in the prediction of well-being among European Americans and Asian Americans.
Figure 3. A depiction of the hypothesized relationships between the variables. Solid lines indicate stronger path coefficients relating the variables, while dashed lines indicate weaker path coefficients relating the variables. For simplicity, covariances between the Big Five traits are not depicted.
Figure 4. A depiction of the hypothesized relationships between AAMAS scales and well-being. Solid lines indicate stronger relationships between the variables, while dashed lines indicate weaker relationships between the variables.
Hypotheses

From the aforementioned research goals, the hypotheses for the study were the following:

Hypothesis 1: The structural model depicted in Figure 3 will provide a good fit to the data and all of the hypothesized direct and indirect paths will be statistically significant.

Hypothesis 2: The path coefficient relating emotion-focused coping to subjective well-being will be more negative for Asian Americans than for European Americans.

Hypothesis 3: The path coefficient relating problem-focused coping to subjective well-being will be more positive for European Americans than Asian Americans.

Hypothesis 4: European Americans, compared to Asian Americans, will average higher in Extraversion and Openness to Experience and lower in Neuroticism, Agreeableness, and Conscientiousness.

Hypothesis 5: European Americans, compared to Asian Americans, will average higher in problem-focused coping and lower in emotion-focused and disengagement coping.

Hypothesis 6: European Americans, compared to Asian Americans, will average higher in subjective well-being.

Hypothesis 7: Asian Americans, compared to European Americans, will average higher in social well-being.

Hypothesis 8: In Asian Americans, higher acculturation levels will be associated with greater subjective well-being and lower social well-being.

Hypothesis 9: In Asian Americans, higher enculturation levels will be associated with greater social well-being and lower subjective well-being.
CHAPTER THREE

METHODOLOGY

Participants

Participants were 507 college-aged students and community members across various regions of the country (297 European Americans, 210 Asian Americans). Participants were mostly undergraduate students enrolled in large lecture-based courses at a large university in Washington state ($n = 386$, 76.1%). In addition, a significant percentage of participants in the Asian American sample were recruited through relevant student organizations. Recruitment of participants was conducted through direct contact, as well as e-mail and other Internet methods (i.e., Facebook). Participation was voluntary and participants were allowed to withdraw at any point if they choose.

The Asian American sample consisted of 50 Vietnamese Americans, 43 Filipino Americans, 34 Chinese Americans, 34 Japanese Americans, 17 Korean Americans, 8 Taiwanese Americans, 6 Cambodian Americans, 4 Thai Americans, 8 who self-identified as “Other,” and 6 who did not report their ethnic subgroup. Seventy-six Asian American participants reported that they immigrated to the U.S., with their ages of immigration ranging from age 1 to 38 years old. Reported generational statuses were as follows: 15.4% first-generation, 21.7% second-generation, 3.7% third-generation, 9.9% fourth-generation, and 27.6% fifth-generation (total $n = 397$). The European American sample consisted of a good balance of women and men (52.7% women, 47.3% men), as did the Asian American sample (57.7% women, 42.3% men). The average age of participants was 25.26 ($SD = 10.28$) for the European American sample and 24.98 ($SD = 6.99$) for the Asian American sample. About 67% of European American participants reported their income to be in the < $10,000 range and 69.9% reported some college education.
In the Asian American sample, 58.6% of participants reported their income to be in the < $10,000 range and 55.3% reported some college education. Overall, the demographic characteristics of both ethnic groups were fairly similar.

**Instruments**

The following instruments were used to measure personality traits, coping strategies, well-being, and acculturation.

*Demographic information form.* Participants were asked to complete a demographic information form, from which data was obtained on gender, age, class status/major in college, ethnicity, country of origin, generational status, and age at time of immigration (if applicable). The demographic form is shown in Appendix A.

*Big Five Inventory (BFI; Benet-Martinez & John, 1998).* The BFI is a well-established and widely used 44-item, self-report instrument measuring the Big Five personality traits of Neuroticism, Extraversion, Conscientiousness, Agreeableness, and Openness to Experience. The BFI items are rated on a 5-point scale ranging from 1 (disagree strongly) to 5 (agree strongly). The BFI has demonstrated good reliability, test-retest reliability, and validity (John & Srivastava, 1999). Coefficient alphas have ranged from .75 to .90. The BFI has shown high convergent validity with other self-report instruments and with peer ratings of the Big Five personality traits (Gosling, Rentfrow, & Swann, 2003). John and Srivastava (1999) have estimated that the BFI takes approximately five minutes to complete. Table 4 shows the alpha reliabilities for the individual personality scales in the present study, which ranged from .68 to .86 for the European American sample and from .75 to .88 for the Asian American sample. Note that the reliabilities were fairly similar in the two ethnic groups.
Table 4

*Alpha Reliabilities for BFI Scales for Each Sample Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>European Americans</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>.68</td>
<td>.75</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.86</td>
<td>.83</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>.73</td>
<td>.76</td>
</tr>
<tr>
<td>Agreeableness</td>
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<td>.81</td>
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<tr>
<td>Conscientiousness</td>
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</tbody>
</table>

*Coping Orientation to Problems Experienced (COPE; Carver et al., 1989).* The COPE is a 53-item, multidimensional coping inventory. It has fourteen subscales that encompass four dimensions of coping: problem-focused, emotion-focused, avoidance, and social support. Table 2 shows which scales are associated with each of the four general coping styles. The COPE can be administered in both trait and episodic forms by simply changing the administration instructions. This coping inventory possesses both a strong theoretical foundation and sound validity (Cook & Heppner, 1997). For the present study, the dispositional style form of the COPE was used. When used as a trait measure, respondents are asked how they generally cope with stressors. Respondents indicate how frequently they use each coping strategy on a four-point Likert scale anchored by “usually do not do this at all” and “usually do this a lot.” Items for each factor are summed to form scale scores. Higher scores on each scale indicate more frequent use of that specific coping response. Initial test-retest reliability findings indicated that the COPE scores are moderately stable with 8-week correlations ranging from .46 to .77, and 6-week correlations ranging from .42 to .89 (Carver et al., 1989). Carver et al. (1989) also reported that correlations between the COPE scales and various personality measures provided evidence of discriminant and convergent validity. Watson and Hubbard (1996) reported reliabilities ranging from .56 to
.94, with a median value of .73. Cook and Heppner (2009) reported that the COPE has sound theoretical foundation and validity. Research relevant to the validity of the COPE was reviewed in Chapter 2.

To confirm the higher-order structure of the COPE subscales, I also performed three-factor, four-factor, and five-factor principal-axis factor analyses with promax rotations with the COPE subscales given existing theory and previous research findings (i.e., Litman, 2006). Promax (oblique) rotation was used to allow the coping factors to be correlated. Based on Litman’s (2006) results, I examined a four-factor solution, which accounted for 43.5% of the variance. Eigenvalues for the first six factors were 3.21, 2.42, 1.39, 1.10, .97, and .79, which also suggested that four factors be extracted. The four-factor solution resembled Litman’s result, whereas factor solutions of three and five factors were not very interpretable. Table 5 shows the structure matrix for the four-factor solution. Loadings for scales expected to define the respective factors, as identified in Litman’s results, are shown in boldface in Table 5. The first factor corresponds to the disengagement coping style. The second factor corresponds to the support coping style. The third factor corresponds to the problem-focused coping style. The fourth factor corresponds to the emotion-focused coping style. One limitation of the four-factor solution was that the Turning to Religion subscale did not load well onto any of the factors. As did Litman, I opted to treat this subscale separately.

Although my factor analysis results resembled those obtained by Litman, it is worth noting that not all coping styles loaded on the particular coping style projected based on conceptual considerations in Table 2 in my literature review (see Chapter 2). Given the coping style dimensions derived in the factor analysis, I decided to expand the SEM analysis originally planned for Hypothesis 1, as depicted in Figure 3, to include not only problem-focused, emotion-
focused, and disengagement, but also support and religion coping styles (see Figure 5 in Chapter 3 results).

Table 5

*Factor Loadings of the COPE Subscales after Promax Rotation*

<table>
<thead>
<tr>
<th>Coping-style factor</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Coping</td>
<td>-.14</td>
<td>-.03</td>
<td>.77</td>
<td>-.09</td>
</tr>
<tr>
<td>Planning</td>
<td>-.08</td>
<td>.00</td>
<td>.64</td>
<td>.11</td>
</tr>
<tr>
<td>Suppression Competing Activities</td>
<td>.13</td>
<td>.00</td>
<td>.53</td>
<td>.07</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>.26</td>
<td>-.05</td>
<td>.15</td>
<td>.49</td>
</tr>
<tr>
<td>Instrumental Social Support</td>
<td>-.10</td>
<td>.53</td>
<td>.07</td>
<td>.15</td>
</tr>
<tr>
<td>Emotional Social Support</td>
<td>-.08</td>
<td>1.02</td>
<td>-.12</td>
<td>-.05</td>
</tr>
<tr>
<td>Positive Interpretation &amp; Growth</td>
<td>-.20</td>
<td>.15</td>
<td>.09</td>
<td>.53</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.06</td>
<td>-.00</td>
<td>-.06</td>
<td>.58</td>
</tr>
<tr>
<td>Turning to Religion</td>
<td>.08</td>
<td>.23</td>
<td>-.01</td>
<td>.13</td>
</tr>
<tr>
<td>Focusing on Venting Emotions</td>
<td>.36</td>
<td>.49</td>
<td>.18</td>
<td>-.18</td>
</tr>
<tr>
<td>Denial</td>
<td>.71</td>
<td>.03</td>
<td>.14</td>
<td>-.04</td>
</tr>
<tr>
<td>Behavioral Disengagement</td>
<td>.79</td>
<td>-.00</td>
<td>-.09</td>
<td>.04</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>.63</td>
<td>.05</td>
<td>-.11</td>
<td>.17</td>
</tr>
<tr>
<td>Substance Use</td>
<td>.42</td>
<td>-.07</td>
<td>-.04</td>
<td>.03</td>
</tr>
</tbody>
</table>

*In factor analysis, estimates of factor loadings that exceed 1.0 are occasionally obtained when the variable in question has a very high loading on the factor. No error message or lack of convergence was reported.*
In the present study, alpha reliabilities for the individual COPE subscales ranged from .68 to .95 (see Table 6) for the European American sample and from .75 to .96 for the Asian American sample. These reliabilities were somewhat higher than those reported by Carver et al. (1989) and Watson and Hubbard (1996). Again, note that reliabilities were generally similar in the two groups, suggesting equivalent precision in measurement. Information on validity and reliability of the COPE instrument was also provided in Chapter Two.

Table 6

Alpha Reliabilities for COPE Subscales for Each Sample Group

<table>
<thead>
<tr>
<th>Subscale</th>
<th>European Americans</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Coping</td>
<td>.68</td>
<td>.75</td>
</tr>
<tr>
<td>Planning</td>
<td>.86</td>
<td>.83</td>
</tr>
<tr>
<td>Suppressing of Competing Activities</td>
<td>.73</td>
<td>.76</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>.78</td>
<td>.81</td>
</tr>
<tr>
<td>Instrumental Social Support</td>
<td>.81</td>
<td>.88</td>
</tr>
<tr>
<td>Emotional Social Support</td>
<td>.93</td>
<td>.92</td>
</tr>
<tr>
<td>Positive Reinterpretation &amp; Growth</td>
<td>.80</td>
<td>.82</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.84</td>
<td>.86</td>
</tr>
<tr>
<td>Turning to Religion</td>
<td>.95</td>
<td>.96</td>
</tr>
<tr>
<td>Focusing on Venting Emotions</td>
<td>.87</td>
<td>.84</td>
</tr>
<tr>
<td>Denial</td>
<td>.86</td>
<td>.88</td>
</tr>
<tr>
<td>Behavioral Disengagement</td>
<td>.87</td>
<td>.84</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>.68</td>
<td>.76</td>
</tr>
</tbody>
</table>

*Satisfaction with Life Scale (SWLS; Diener et al., 1985).* The SWLS is a widely used instrument measuring life satisfaction, a component of subjective well-being. Using a 7-point Likert scale, respondents are asked to complete the 5-item SWLS with ratings from 1 (strongly disagree) to 7 (strongly agree). The SWLS measures cognitive appraisals of general life satisfaction with items such as “In most ways my life is close to the ideal.” Diener, Emmons,
Larsen, and Griffin (1985) reported a coefficient alpha of .87 and a test-retest correlation coefficient of .82 with a two-month interval for the SWLS. Table 7 shows the alpha reliabilities for the individual well-being scales, including the satisfaction with life scale, which ranged from .68 to .86 for the European American sample and from .75 to .83 for the Asian American sample.

*Positive Affect and Negative Affect Scales (PANAS; Watson et al., 1988).* The 20-item trait version of the PANAS has items with ratings from 1 (very slightly) to 5 (very much). Respondents are asked to rate the extent to which they have experienced each particular emotion within a specified time period. The 10-item PANAS-PA and 10-item PANAS-NA subscales assess general tendencies to feel activated positive and negative emotions, respectively. Watson et al. reported alpha reliabilities for the trait PA and NA subscales of .86 and .88, respectively. The reliability estimates for the PA and NA scales are shown in Table 7.

Table 7

*Alpha Reliabilities for Well-Being Scales for Each Sample Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>European Americans</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Life</td>
<td>.68</td>
<td>.75</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>.86</td>
<td>.83</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.73</td>
<td>.76</td>
</tr>
<tr>
<td>Social Well-Being</td>
<td>.78</td>
<td>.81</td>
</tr>
</tbody>
</table>

*Social Well-Being Scale (SWBS; Keyes, 1998).* The SWBS consists of five dimensions of social well-being: social integration (e.g., “My community is a source of support”), social acceptance (e.g., “People who do a favor expect nothing in return”), social contribution (e.g., “I have something valuable to give to the world”), social actualization (e.g., “Society has stopped making progress”), and social coherence (e.g., “The world is too complex for me”). Each subscale contains three items and is relatively balanced between negative and positive items.
Respondents are asked to indicate their agreement on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). Negative items are reverse-coded and higher scores indicate higher levels of social well-being. Keyes (1998) found, in two separate studies, that the instrument demonstrated good construct validity. The SWBS scales also demonstrated convergent validity with measures of anomie, generativity, perceived social constraints, community involvement, and neighborhood quality. The scales showed divergent validity with measures of dysphoria, global well-being, physical health, and optimism.

For the present study, I used the total scale score to test for ethnic mean differences in social well-being. In addition, three-items parcels were used as observed indicators of the overall construct in structural equation modeling (SEM). Keyes did not report reliability estimates for this instrument. Lima and Novo (2006) reported adequate reliability for the social acceptance and social actualization scales, but they did not use the other three scales in their study. The researchers indicated that the social acceptance subscale demonstrated an internal consistency of .73 and a mean item-total correlation of .48. The social actualization subscale was shown to have an internal consistency of .81 and a mean item-total correlation of .46. The reliability estimates for the total score in the present study are shown in Table 7.

Asian American Multidimensional Acculturation Scale (AAMAS; Chung, Kim, & Abreu, 2004). The AAMAS is a 45-item, self-report inventory that measures acculturation level of Asian Americans. The specific items for the AAMAS were derived largely from the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Richard-Figueroa, Lew, & Vigil, 1987). The instrument uses a 6-point Likert type scale ranging from 0 (not very much) to 6 (very much). Respondents are asked to rate items in relation to three reference groups: (a) their culture of origin, (b) other Asian Americans, and (c) European Americans. As a result, the AAMAS
includes three scales: (a) AAMAS-CO, (b) AAMAS-AA, and (c) AAMAS-EA. In regards to the construct domains of acculturation assessed by the 15 items, 10 items measure cultural behavior (i.e., language and food consumption), 3 items measure cultural identity, and 2 items measure cultural knowledge. Chung et al. (2004) reported three studies of the AAMAS with Asian American male and female college students that have demonstrated acceptable levels of reliability for the three scales. Reliability estimates ranged from .87 to .91 for the AAMAS-CO, .78 to .83 for the AAMAS-AA, and .76 to .81 for the AAMAS-EA. Chung et al. (2004) also reported good convergent and divergent validity. For the present study, all three scales were administered but only the AAMAS-CO and AAMAS-EA scales were used in the tests of hypotheses. Alpha reliabilities in the Asian American sample are shown in Table 8.

Table 8

*Alpha Reliabilities for AAMAS Scales for Asian American Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Asian Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAMAS-European Americans</td>
<td>.84</td>
</tr>
<tr>
<td>AAMAS-Asian Americans</td>
<td>.84</td>
</tr>
<tr>
<td>AAMAS-Country of Origin</td>
<td>.87</td>
</tr>
</tbody>
</table>

*Procedures*

All instruments were administered in their English versions. The principal investigator distributed research packets containing the instruments to local participants. Student participants from local universities fill out the instruments in group sessions scheduled by the principal investigator. Where possible, extra credit was arranged in the classes from which they were recruited. Volunteer participants from the community and local Asian-American student organizations completed the instruments at a designated and private location determined by the principal investigator. Recruitment of the remaining participants was conducted via direct
contact and online sources (i.e., email, Facebook). These participants completed pre-made packets containing the demographic form and instruments in person or through on-line versions of the surveys (i.e., Question Pro). The estimated time to complete the demographic form and the four instruments was 20-30 minutes. All participants completed the demographic form first. Participants filled out the remaining surveys in one of two orders. Approximately half of the European American participants completed the instruments in the following order: BFI, COPE, SWLS, PANAS, and SWBS. The remaining European Americans completed the instruments in the opposite order. Asian American participants also filled out the surveys in one of the two orders, and also completed the AAMAS as their last survey. The incentive for participation was a chance to be entered into a drawing for three gift cards, valued at $100 each.
CHAPTER FOUR

RESULTS

Descriptive Statistics

Table 9 shows the means and standard deviations for the various scales in the European American and Asian American groups. The following descriptive summaries apply to both ethnic groups. For the BFI, a comparison of the scale means with the original 5-point rating anchors indicated that participants responded, on average, between “neither agree nor disagree” and “agree a little” on items measuring Extraversion, Openness, and Conscientiousness. On average, they also “disagreed a little” with the Neuroticism items and “agreed a little” with the Agreeableness items. Regarding coping styles, participants responded, on average, that they use substance use, denial, and behavioral disengagement coping styles between “not at all” and “a little bit.” On average, they reported using mental disengagement, focusing on venting emotions, and turning to religion “a little bit.” On average, participants reported that they use suppression of competing activities, restraint coping, and emotional social support as coping styles between “a little bit” and “a medium amount.” Lastly, they perceived that they employed active coping, planning, acceptance, and instrumental social support “a medium amount.” Thus, participants reported using problem-focused and emotion-focused coping styles the most and the disengagement coping style the least. Regarding subjective well-being, participants reported experiencing positive emotions (PA) between “moderately” and “quite a bit” and negative emotions (NA) “a little.” Additionally, participants “slightly agreed,” on average, that they were satisfied with their lives. Regarding overall social well-being, participants, on average, “agreed a little” with items measuring perceived social integration, acceptance, coherence, actualization, and contribution. Standard deviations for all scales indicated sufficient variability to enable
correlations with the other variables in the study. The correlations among all variables in the total sample are shown in Appendix B. Comparisons between European and Asian Americans on these scales will be addressed later in the Results chapter.

Table 9

*Descriptive Statistics for Key Variables*

<table>
<thead>
<tr>
<th>Scale</th>
<th>European American</th>
<th>Asian American</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Extraversion</td>
<td>3.50</td>
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<tr>
<td>Neuroticism</td>
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<td>.76</td>
</tr>
<tr>
<td>Openness</td>
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<td>.62</td>
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<tr>
<td>Conscientiousness</td>
<td>3.63</td>
<td>.63</td>
</tr>
<tr>
<td>Agreeableness</td>
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<td>.61</td>
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<tr>
<td>Active Coping</td>
<td>3.03</td>
<td>.59</td>
</tr>
<tr>
<td>Planning</td>
<td>3.05</td>
<td>.76</td>
</tr>
<tr>
<td>Suppressing of Competing Activities</td>
<td>2.40</td>
<td>.63</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>2.41</td>
<td>.71</td>
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<tr>
<td>Instrumental Social Support</td>
<td>2.95</td>
<td>.75</td>
</tr>
<tr>
<td>Emotional Social Support</td>
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<td>1.00</td>
</tr>
<tr>
<td>Positive Reinterpretation and Growth</td>
<td>3.10</td>
<td>.67</td>
</tr>
<tr>
<td>Acceptance</td>
<td>3.00</td>
<td>.74</td>
</tr>
<tr>
<td>Turning to Religion</td>
<td>1.99</td>
<td>1.10</td>
</tr>
<tr>
<td>Focusing on Venting Emotions</td>
<td>2.23</td>
<td>.84</td>
</tr>
</tbody>
</table>
Tests of Measurement Models

Before testing Hypotheses 1, 2, 3, 8, and 9, all of which involved structural equations modeling (SEM), I first conducted multi-group confirmatory factor analyses to test the measurement models for all instruments (i.e., BFI, COPE, SWB, SWLS, PANAS, and AAMAS). Ethnic group comparisons of the structural paths in SEM models require that the factor loadings for the observed indicators of the latent variables are equivalent across the two groups. This was tested by comparing the fit of measurement models in which the factor loadings associated with the observed indicators of each latent variable were freely estimated versus constrained to equality across the two ethnic groups. In my measurement models, Model 1 refers to models in which the factor loadings were freely estimated (i.e., allowed to vary across ethnic groups) and Model 2 refers to models in which the factor loadings were constrained to be equal in the two

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Denial</td>
<td>1.43</td>
<td>.62</td>
<td>1.39</td>
<td>.58</td>
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<tr>
<td>Behavioral Disengagement</td>
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<td>.64</td>
<td>1.44</td>
<td>.56</td>
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<tr>
<td>Mental Disengagement</td>
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<td>2.23</td>
<td>.74</td>
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<td></td>
</tr>
<tr>
<td>Substance Use</td>
<td>1.71</td>
<td>.94</td>
<td>1.46</td>
<td>.82</td>
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<td></td>
<td></td>
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<td>AAMAS-Asian American</td>
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<tr>
<td>AAMAS-European American</td>
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<td>-</td>
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<td>.71</td>
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<td>AAMAS-Country of Origin</td>
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<td>-</td>
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<td>.90</td>
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<td></td>
</tr>
<tr>
<td>Satisfaction with Life</td>
<td>4.90</td>
<td>1.22</td>
<td>4.84</td>
<td>1.25</td>
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<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>3.75</td>
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<td>3.71</td>
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<td>1.94</td>
<td>.60</td>
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<td></td>
</tr>
<tr>
<td>Social Well-Being</td>
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<td>4.94</td>
<td>.76</td>
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<td></td>
</tr>
</tbody>
</table>
ethnic groups (i.e., a test of metric equivalence). Some measurement models also required other minor modifications to improve fit (e.g., covariances between residual terms), but these are not detailed in the text because they did not significantly impact the factor loadings (i.e., standardized regression weights) for the observed indicators. To test the fit of the measurement and structural models, the following statistical tests or goodness-of-fit indices were used: overall $\chi^2$ to accept or reject the model; $\chi^2/df$, good fit = 2:1-3:1; GFI, good fit $\geq .90$; CFI, good fit $\geq .90$; RMSEA, good fit $\leq .05$, fair fit $\leq .08$; and RMR, good fit $\leq .05$, fair fit $\leq .08$. Tables 10 and 11 show the selected fit indices for the measurement and structural models tested. Also shown in the last three columns are the results of relevant $\chi^2$ difference tests between Models 1 and 2. If the table entry indicates “not significant” it means that the $\chi^2$ difference test was not statistically significant ($p < .01$), which means that the model with constrained factor loading was not significantly worse in fit than the model with freely estimated loadings (i.e., measurement equivalence across the two ethnic groups was acceptable). Since the AAMAS was administered only to Asian Americans, only the freely estimated model (Model 1) was tested.
## Table 10

**Fit Indices for Measurement Models**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Overall $X^2$</th>
<th>$df$</th>
<th>$p$</th>
<th>$X^2/df$</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>RMR</th>
<th>$X^2_{Diff}$</th>
<th>$df$</th>
<th>$p$</th>
<th>$X^2_{Diff}$ Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement Models</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>BFI (Model 1)</td>
<td>402.41</td>
<td>160</td>
<td>.00</td>
<td>2.52</td>
<td>.90</td>
<td>.92</td>
<td>.06</td>
<td>.04</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>BFI (Model 2)</td>
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<td>.91</td>
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<td>.04</td>
<td>11.23</td>
<td>10</td>
<td>.25</td>
<td>Not Significant</td>
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<tr>
<td>COPE (Model 1)</td>
<td>509.09</td>
<td>216</td>
<td>.00</td>
<td>2.36</td>
<td>.89</td>
<td>.93</td>
<td>.05</td>
<td>.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>COPE (Model 2)</td>
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<td>.00</td>
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<td>.89</td>
<td>.92</td>
<td>.05</td>
<td>.05</td>
<td>21.30</td>
<td>12</td>
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<td>Not Significant</td>
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<tr>
<td>Subjective WB (Model 1)</td>
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<td>-</td>
<td>-</td>
<td>1.00</td>
<td>1.00</td>
<td>.19</td>
<td>.00</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Subjective WB (Model 2)</td>
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<td>.73</td>
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<td>1.00</td>
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<td>.01</td>
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<td>2</td>
<td>.95</td>
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<td>Social WB (Model 1)</td>
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<td>0</td>
<td>-</td>
<td>-</td>
<td>1.00</td>
<td>1.00</td>
<td>.403</td>
<td>.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Social WB (Model 2)</td>
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<td>2</td>
<td>.95</td>
<td>.05</td>
<td>1.00</td>
<td>1.00</td>
<td>.00</td>
<td>.01</td>
<td>.10</td>
<td>2</td>
<td>.95</td>
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</tr>
<tr>
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<td>24</td>
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<td>.91</td>
<td>.94</td>
<td>.12</td>
<td>.03</td>
<td>-</td>
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</table>

Note: Model 1 refers to models in which the factor loadings were freely estimated in each ethnic group. Model 2 refers to models in which the factor loadings were constrained to be equal in the two ethnic groups.
Table 11

*Fit Indices for Structural Models*

<table>
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<tr>
<th>Construct</th>
<th>Overall $X^2$</th>
<th>$df$</th>
<th>$p$</th>
<th>$X^2/df$</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>RMR</th>
<th>$X^2_{Diff}$</th>
<th>$df$</th>
<th>$p$</th>
<th>$X^2_{Diff}$ Results</th>
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<td>1.90</td>
<td>.86</td>
<td>.92</td>
<td>.05</td>
<td>.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AAMAS → WB</td>
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<td>.00</td>
<td>1.70</td>
<td>.92</td>
<td>.97</td>
<td>.06</td>
<td>.04</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>.00</td>
<td>1.92</td>
<td>.78</td>
<td>.87</td>
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<td>.06</td>
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Big Five Inventory (BFI). For the Big Five measurement model, Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness were the latent variables. The items for each trait from the BFI were randomly grouped into three-item parcels, which served as the observed indicators of the Big Five traits. Model 1 (freely estimated loadings) was rejected based on the overall $\chi^2$ test, ($p < .01$). However, the fit indices suggested that the model provided a good fit to the data. The standardized regression weights (i.e., factor loadings) for the observed indicators were all statistically significant in both ethnic groups, indicating that they were good measures of the latent Big Five traits (range = .60 to .91 for Asian Americans and .66 to .97 for European Americans). Model 2 (constrained factor loadings) also fit the data well and the $\chi^2$ difference test revealed that the constrained model was not significantly worse in fit than the freely estimated model. Thus, good measurement equivalence across ethnic groups was demonstrated for the BFI.

Coping Orientation to Problems Experienced (COPE). For the coping measurement model, emotion-focused coping, problem-focused coping, disengagement coping, support, and religion were the latent variables. For emotion-focused coping, the observed indicators (subscales) included: Acceptance, Positive Reinterpretation and Growth, and Restraint Coping. For problem-focused coping, the observed indicators included: Active Coping, Planning, and Suppression of Competing Activities. For disengagement coping, the observed indicators included: Behavioral Disengagement, Mental Disengagement, and Alcohol/Drug Disengagement. For support coping, the observed indicators included: Focusing on Venting Emotions, Emotional Social Support, and Instrumental Social Support. For religion coping, the observed indicators included the four items that defined the Turning to Religions subscale.
Model 1 (freely estimated loadings) was rejected based on the overall $\chi^2$ test, ($p < .01$). However, the fit indices suggested that the model provided a good fit with the data. The standardized regression weights (i.e., factor loadings) for the observed indicators were all statistically significant for both ethnic groups (range = .29 to .99 for Asian Americans and .29 to .96 for European Americans). Model 2 (constrained factor loadings) also fit the data well and the $\chi^2$ difference test revealed that the constrained model was not significantly worse in fit than the freely estimated model. Thus, good measurement equivalence across ethnic groups was demonstrated for the COPE measure.

**Subjective well-being (SWB).** The latent variable subjective well-being was measured with the following three observed indicators (scales): life satisfaction, positive affect, and negative affect. Because there were only three indicators of a single latent construct, the initial model was saturated (i.e., has a perfect fit). Thus, the SWB measurement model was accepted ($p > .05$) based on the overall $\chi^2$ test. For both ethnic groups, all standardized regression weights (i.e., factor loadings) were statistically significant (range = -.34 to .88 for Asian Americans and -.38 to .76 for European Americans). Model 2 (constrained factor loadings) also fit the data very well and the $\chi^2$ difference test revealed that the constrained model was not significantly worse in fit than the freely estimated model. Thus, good measurement equivalence across ethnic groups was demonstrated for the subjective well-being construct.

**Social Well-Being Scale (SWBS).** For the latent variable of social well-being, items were randomly organized into three-item parcels to comprise the observed indicators. The saturated measurement model (Model 1) was accepted ($p > .05$) based on the overall $\chi^2$ test. For both ethnic groups, the standardized regression weights (i.e., factor loadings) for the observed indicators were all statistically significant (range = .68 to .83 for Asian Americans and .69 to .82
for European Americans). Model 2 (constrained factor loadings) also fit the data well and the \( \chi^2 \) difference test revealed that the constrained model was not significantly worse in fit than the freely estimated model. Thus, good measurement equivalence across ethnic groups was demonstrated for the social well-being latent construct.

**Acculturation (AAMAS).** For acculturation, the AAMAS-EA, AAMAS-AA, and AAMAS-CO constructs were the latent variables. To obtain observed indicators of the acculturation constructs, the items in the AAMAS-CO, AAMAS-AA, and AAMAS-EA scales were randomly organized into three-item parcels for each construct. The overall \( \chi^2 \) test for the AAMAS measurement model was rejected (\( p < .01 \)), yet the model demonstrated good fit to the data. Given that only the Asian American participants completed the AAMAS, it was not necessary to run a measurement model with constrained factor loadings (i.e., Model 2) for this instrument. For the AAMAS freely estimated model, the standardized regression weights (i.e., factor loadings) for the observed indicators were all statistically significant for the Asian American sample and ranged from .82 to .92. Having demonstrated acceptable measurement (i.e., factor loading) equivalence of the measurement models, I proceeded to test my hypothesized structural model using the constrained measurement models for each latent construct.

**Goodness of Fit for the Structural Model (Hypothesis 1)**

To test Hypothesis 1, multi-group structural equation modeling (SEM) was used to test the hypothesized relationships among the latent personality, coping, and well-being variables, as depicted in Figures 5 and 6. Note that five coping styles were incorporated in the model based on my factor analysis results with the COPE scales, rather than the three originally planned and depicted in Figure 3. The original hypothesized paths were all retained and depicted in Figures 5
and 6. In addition, I used two considerations to determine new paths involving the support and religion coping styles. First, I inspected the pattern of Pearson’s correlations relating these coping styles to the Big Five traits and well-being variables for statistically significant relationships. Second, the introduced paths need to be plausible conceptually. As it turned out, several of the new paths were not, in fact, statistically significant in the context of the other variables in the model and thus are not included in the figures. In the presentation below, I focus primarily on the originally hypothesized paths involving the problem-focused, emotion-focused, and disengagement coping styles.

Consistent with Hypothesis 1, I predicted that the expanded structural model depicted in Figures 5 and 6 would provide a good fit to the data and that all of the originally hypothesized path coefficients relating the Big Five dimensions, coping styles, and subjective and social well-being would be statistically significant. These hypothesized paths are bolded in the figures. Specifically, I predicted that Neuroticism would be positively related to emotion-focused coping, positively related to disengagement coping, and negatively related to subjective well-being. In addition, Extraversion was hypothesized to be positively related to subjective well-being and positively related to problem-focused coping. I predicted that emotion-focused coping would be negatively related to subjective well-being and negatively related to social well-being. Problem-focused coping was hypothesized to be positively related to subjective well-being, while disengagement coping would be negatively related to subjective well-being.

To determine whether the hypothesized integrated model generalized well across the two ethnic groups, the structural model was also tested simultaneously in the European and Asian American groups with all factor loadings in the measurement models constrained to be equal in the two ethnic groups. Model modifications were made as necessary, drawing on the
modification indices provided by AMOS 19.0, as well as substantive considerations.
Specifically, modification indices recommended that I allow the residuals (i.e., variable
uniquenesses) to correlate for four of the religion coping items. The freely estimated structural
model (BFI-COPE-WB model) was accepted ($p > .05$) based on the overall $\chi^2$ test and the model
had fair fit based on the goodness-of-fit indices (see Table 11). Figures 5 and 6 show the
standardized path coefficients for the freely estimated model for the Asian American and
European American samples, respectively.

As seen in the figures, many of the hypothesized paths were statistically significant. For
the Asian American sample, seven of the nine hypothesized paths were significant at the .01 or
.05 levels. Results indicated that Extraversion had direct effects (i.e., significant path
coefficients) on subjective well-being ($\beta = .31, p < .01$) and problem-focused coping ($\beta = .20, p
< .05$). Neuroticism had a direct positive effect on disengagement coping ($\beta = .30, p < .01$) and
direct negative effects on subjective well-being ($\beta = -.73, p < .01$) and emotion-focused coping
($\beta = -.41, p < .01$). Problem-focused coping had a direct positive effect on subjective well-being
($\beta = .38, p < .01$), while emotion-focused coping had a direct positive effect on social well-being
($\beta = .66, p < .01$). Contrary to the original hypotheses, disengagement coping did not directly
impact subjective well-being ($\beta = -.02, p = .81$). Additionally, emotion-focused coping did not
significantly predict subjective well-being ($\beta = .05, p = .84$). It is also noteworthy that the
hypothesized association between Neuroticism and emotion-focused coping was actually
negative, not positive. Moreover, emotion-focused coping had a positive direct effect on social
well-being, rather than negative.

For the European American sample, seven of the nine hypothesized paths were
significant at the .01 or .05 levels. Results indicated that Extraversion had a direct positive effect
on problem-focused coping ($\beta = .43, p < .01$). Neuroticism had a direct positive effect on disengagement coping ($\beta = .42, p < .01$) and a direct negative effect on subjective well-being ($\beta = -.58, p < .01$) and emotion-focused coping ($\beta = -.42, p < .01$). Problem-focused coping had a direct positive effect on subjective well-being ($\beta = .18, p < .05$), while emotion-focused coping positively predicted both social well-being ($\beta = .59, p < .01$) and subjective well-being ($\beta = .43, p < .01$). Contrary to the original hypotheses, disengagement coping did not significantly predict subjective well-being ($\beta = -.09, p = .27$). Additionally, Extraversion did not directly affect subjective well-being ($\beta = .11, p = .14$). It is also worth mentioning that, as in the Asian American group, the hypothesized association between Neuroticism and emotion-focused coping was actually negative, not positive. Moreover, emotion-focused coping had positive direct effects on subjective and social well-being, rather than negative.

While the hypothesized paths all involved direct effects, there were also indirect, or mediating, effects for both ethnic groups. For the Asian American sample, problem-focused coping mediated the relationship between Extraversion and subjective being, while emotion-focused coping mediated the relationship between Neuroticism and social well-being. For the European American sample, the same mediating effects occurred, and in addition, Extraversion indirectly impacted subjective well-being via emotion-focused coping.

Although not originally hypothesized, the results showed other predictive relationships noteworthy of discussion. In the Asian American sample, Extraversion significantly predicted support coping ($\beta = .33, p < .01$) and emotion-focused coping ($\beta = .29, p < .05$). In the European American sample, Extraversion significantly predicted support coping ($\beta = .31, p < .01$), emotion-focused coping ($\beta = .35, p < .01$), and religion coping ($\beta = .20, p < .05$). Neuroticism significantly predicted support coping ($\beta = .33, p < .01$), while Openness significantly predicted
support coping ($\beta = -.14, p < .05$) and religion coping ($\beta = -.20, p < .05$). Overall, it appears that the direct effects across variables in the freely estimated models were similar in the two ethnic groups. For the indirect effects, the patterns were also similar except that Neuroticism also predicted subjective well-being via emotion-focused coping in the European American sample. For Hypothesis 2 and 3, I will test a subset of the total integrated model to examine some of the ethnic group differences more formally.
Figure 5

SEM with Asian American Sample
Figure 6

SEM with European American Sample
Ethnic Differences in Predicting Well-Being from Specific Coping Styles (Hypothesis 2 and 3)

In Hypothesis 2, I predicted that the path coefficient relating emotion-focused coping to subjective well-being would be more negative for Asian Americans than for European Americans. It was apparent from Figures 5 and 6 that emotion-focused coping did not have a negative relationship with subjective well-being in either ethnic group, so Hypothesis 2 was not supported. Nonetheless, I decided to test whether the strength of the direct effect was less positive among Asian Americans. That is, I examined whether constraining the path coefficient relating emotion-focused coping to subjective well-being to be equal in the two ethnic groups resulted in a significant loss of model fit, as compared to a model with freely estimated path coefficients in each ethnic group. In the freely estimated model, the path coefficients relating emotion-focused coping to subjective well-being were $\beta = .31, p = .08$, in the Asian American sample and $\beta = .53, p < .01$, in the European American sample. (Note that the path coefficients differ somewhat from the estimates in Figures 5 and 6 because the latter were estimated in the context of additional personality and coping variables.) A $\chi^2$ difference test comparing the freely estimated and constrained models revealed that there was no significant loss of fit after constraining the path coefficients in the two ethnic groups ($\chi^2 [1] = .19$). It cannot be concluded with confidence that the paths differ significantly in the two ethnic groups.

In Hypothesis 3, I predicted that the path coefficient relating problem-focused coping to subjective well-being will be more positive for European Americans than Asian Americans. As seen in Figures 5 and 6, when the relationship between problem-focused coping and subjective well-being was considered in the context of the personality traits and other coping styles, this hypothesis was not supported because the path was actually more positive in the Asian American sample (i.e., .38 versus .18). Nonetheless, I tested this hypothesis when the relationship is
considered in isolation from the other variables in the integrated model. That is, I examined whether constraining the path coefficient relating problem-focused coping to subjective well-being to be equal in the two ethnic groups resulted in a significant loss of model fit. In the freely estimated model, the path coefficients relating problem-focused coping to subjective well-being were $\beta = .24, p = .15$, in the Asian American sample and $\beta = .29, p < .05$, in the European American sample. A $\chi^2$ difference test comparing the freely estimated and constrained models revealed that there was not a significant loss of fit after constraining the path coefficient in the two ethnic groups, which suggests that the paths did not differ significantly in the two ethnic groups ($\chi^2 [1] = 0$).

*Mean Differences in Big Five Traits (Hypothesis 4)*

In Hypothesis 4, I predicted that European Americans, compared to Asian Americans, would average higher in Extraversion and Openness to Experience and lower in Neuroticism, Agreeableness, and Conscientiousness. My hypotheses did not involve predictions about gender differences. However, I conducted a two-way MANOVA to examine gender and ethnic differences on the Extraversion, Neuroticism, Openness to Experience, Agreeableness, and Conscientiousness scales. There was no two-way interaction effect between gender and ethnicity, Wilks’ $\lambda = .99$, $F(5, 491) = 1.08, p > .05$, partial $\eta^2 = .01$. There was an overall significant multivariate main effect for gender, Wilks’ $\lambda = .85$, $F(5, 491) = 17.54, p < .01$, partial $\eta^2 = .15$. The results of follow-up ANOVAs for each Big Five trait are shown in Table 12, which shows that women were more agreeable and conscientious than men, although they were also more vulnerable to experiencing negative affectivity (i.e., Neuroticism). The MANOVA also revealed a significant multivariate main effect for ethnicity, Wilks’ $\lambda = .97$, $F(5, 491) = 3.56, p < .01$, partial $\eta^2 = .04$. Table 12 shows the results of the follow-up ANOVAs for each Big Five traits,
which revealed a significant main effect for Extraversion only. The other personality traits failed to show significant ethnic differences. Therefore, Hypothesis 4 was only partially supported. European Americans reported more extraverted tendencies than did Asian Americans.

Mean Differences in Coping Styles (Hypothesis 5)

In Hypothesis 5, I predicted that European Americans, compared to Asian Americans, would average higher in problem-focused coping and lower in emotion-focused and disengagement coping. A two-way MANOVA was conducted to examine gender and ethnic differences between European Americans and Asian Americans on the five coping styles derived in the factor analysis of the coping scales. The coping style factor scores were used as the dependent variables. The gender by ethnicity interaction effect was not significant, Wilks’ $\lambda = .99$, $F(5, 491) = .85$, $p > .05$, partial $\eta^2 = .01$. There was an overall significant multivariate main effect for gender, Wilks’ $\lambda = .81$, $F(5, 491) = 23.53$, $p < .01$, partial $\eta^2 = .19$. Follow-up ANOVAs indicated that women were more likely to use support and religion to cope than men. There was also a significant multivariate main effect for ethnicity, Wilks’ $\lambda = .96$, $F(5, 491) = 3.96$, $p < .01$, partial $\eta^2 = .04$. Follow-up ANOVAs (see Table 12) revealed significant main effects only for emotion-focused coping and religion. In particular, there were no ethnic differences in problem-focused or disengagement coping. Therefore, Hypothesis 5 was only partially supported. Similar to previous research, Asian Americans reported more emotion-focused coping. That is, they reported being more likely to engage in coping strategies that entail redirecting their emotions than European Americans. There has been a limited amount of research on ethnic differences in using religion to cope. This study found that Asian Americans are more likely to cope by turning to their religion.
Table 12

*Gender and Ethnic Differences: Results of Follow-up ANOVAS*

<table>
<thead>
<tr>
<th>Scale</th>
<th>European Americans</th>
<th>European Americans</th>
<th>Gender</th>
<th>Ethnicity</th>
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<td>Women</td>
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<td>.86</td>
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</table>
Mean Differences in Subjective and Social Well-Being (Hypothesis 6 and 7)

In Hypothesis 6, I predicted that European Americans would report higher subjective well-being than their Asian American counterparts. In Hypothesis 7, I predicted that Asian Americans would report higher social well-being than European Americans. A two-way MANOVA was conducted to examine gender and ethnic differences on the life satisfaction, positive affect (PA), negative affect (NA), and social well-being scales. There was no significant ethnicity by gender interaction effect, Wilks’ $\lambda = 1.00$, $F(4, 495) = .03$, $p > .05$, partial $\eta^2 = .00$. There was a significant multivariate main effect for gender, Wilks’ $\lambda = .96$, $F(4, 495) = 4.71$, $p < .01$, partial $\eta^2 = .04$. Follow-up ANOVAs revealed that women reported experiencing more satisfaction with life than men. There was no significant multivariate main effect for ethnicity, Wilks’ $\lambda = .99$, $F(4, 495) = 1.73$, $p > .05$, partial $\eta^2 = .01$. Therefore, Hypotheses 6 and 7 were not supported.

AAMAS-EA and AAMAS-CO as Direct Predictors of Subjective and Social Well-Being (Hypotheses 8 and 9)

To test Hypotheses 8 and 9, I conducted a SEM analysis using only the Asian American sample (see Figure 4). In Hypothesis 8, I predicted that higher acculturation levels would be associated with greater subjective well-being and lower social well-being in Asian Americans. AAMAS-EA was the latent variable and the observed indicators were the three-item parcels that define this acculturation scale. In Hypothesis 9, I predicted that higher enculturation levels will be associated with greater social well-being and lower subjective well-being in Asian Americans. AAMAS-CO was the latent variable and the observed indicators were the three-item parcels that define this acculturation scale. I tested a single model with AAMAS-EA and AAMAS-CO as simultaneous predictors of subjective and social well-being. The final structural model for
acculturation and enculturation, as defined by the AAMAS-EA and AAMAS-CO scales, was rejected based on the overall $\chi^2$ test ($p < .01$). However, the fit indices suggested a fair model fit (see Table 11). Both the path coefficients from AAMAS-EA to subjective well-being ($\beta = .62$, $p < .01$) and social well-being ($\beta = .49$, $p < .01$) were statistically significant. As hypothesized, participants who reported higher acculturation perceived greater subjective well-being. However, higher acculturation levels (i.e., AAMAS-EA scores) did not contribute to lower social well-being as predicted. Instead, it appears that more acculturated participants reported greater social well-being. Therefore, Hypothesis 8 was partially supported. The AAMAS-CO construct did not significantly predict subjective well-being ($\beta = .13$, $p = .16$). However, AAMAS-CO did significantly predict social well-being ($\beta = .19$, $p < .05$). Participants who endorsed a higher level of enculturation reported significantly more social well-being. Therefore, Hypothesis 9 was partially supported.
Figure 7

AAMAS as a Predictor of Subjective and Social Well-Being

![Diagram showing relationships between AAMAS-CO, AAMAS-AA, AAMAS-EA, Subjective WB, and Social WB with correlation coefficients: 0.13, 0.62*, 0.19**, 0.49*.]
CHAPTER FIVE
DISCUSSION

The results of the present study provided empirical evidence for the complex relationships between personality, coping, and well-being. The findings, with some exceptions, are consistent with past studies demonstrating important associations between personality, coping styles, and well-being in Asian and European Americans (Connor-Smith & Flachsbart, 2007; DeNeve & Cooper, 1998; McCrae & Costa, 1986). Specifically, this study investigated whether personality and coping styles predicted well-being among Asian and European Americans. To date, there are only a few empirical studies that have examined the integration of personality, coping, and well-being (i.e., Hart, Wearing, & Headey, 1995; McCrae & Costa, 1986).

Summary of Results

Hypothesis 1 was largely supported and demonstrated the complex relationships among personality, coping, and well-being. The fit of the overall integrated structural model was fair and the majority of the hypothesized paths were statistically significant for the Asian American and European American samples. For the Asian American group, as predicted in Hypothesis 1, Extraversion had direct positive effects on subjective well-being and problem-focused coping. Also, as predicted in Hypothesis 1, Neuroticism had a direct positive effect on disengagement coping and a direct negative effect on subjective well-being. Furthermore, problem-focused coping had a direct positive effect on subjective well-being, while emotion-focused coping had a direct positive effect on social well-being. However, contrary to my hypothesis, Neuroticism had a negative, not positive, effect on emotion-focused coping. Also contrary to the original predictions, disengagement coping did not have a direct effect on subjective well-being.
Additionally, emotion-focused coping did not significantly predict subjective well-being. For the European American group, as predicted in Hypothesis 1, Extraversion had direct positive effects on subjective well-being and problem-focused coping. Also as predicted, Neuroticism had a direct positive effect on disengagement coping and a direct negative effect on subjective well-being. Furthermore, problem-focused coping had a direct positive effect on subjective well-being, while emotion-focused coping had a direct positive effect on social well-being. However, contrary to my hypothesis, Neuroticism had a negative, not positive, effect on emotion-focused coping. Also contrary to the original predictions, disengagement coping did not directly impact subjective well-being. Additionally, Extraversion did not significantly predict subjective well-being.

Hypothesis 2 was not supported. The path coefficient relating emotion-focused coping to subjective well-being was not more negative for Asian Americans than for European Americans. Hypothesis 3 was also not supported. The path coefficient relating problem-focused coping and subjective well-being was not significantly more positive for European Americans than Asian Americans. Hypothesis 4 was partially supported. European Americans were more extraverted than Asian Americans. There were no ethnic differences in the other personality traits (i.e., Neuroticism, Conscientiousness, Openness to Experience, and Agreeableness). Hypothesis 5 was also partially supported. Asian Americans reported using more emotion-focused coping strategies, but there were no ethnic differences in problem-focused or disengagement coping styles. Hypotheses 6 and 7 were not supported. That is, there were no ethnic differences in life satisfaction, positive affect, negative affect, or social well-being. Hypothesis 8 was partially supported. As hypothesized, participants who reported higher acculturation perceived greater subjective well-being. However, higher acculturation levels did not contribute to lower social
well-being as predicted. Instead, it appears that more acculturated participants reported greater social well-being. Hypothesis 9 was partially supported. Level of enculturation did not significantly predict subjective well-being. However, level of enculturation did significantly predict higher social well-being. In the following section, I provide interpretations of the abovementioned results and discuss their relationships with previous research.

**Interpretation of Results and Relation to Previous Findings**

*Relationships between personality, coping, and well-being (Hypothesis 1).* In Hypothesis 1, the majority of the predicted relationships between personality, coping, and well-being were supported. The fit of the overall structural models was fair and the majority of the hypothesized paths were statistically significant for the Asian American and European American samples. Consistent with past research findings on personality and coping, Neuroticism directly impacted disengagement, passivity, and withdrawal tendencies in both ethnic groups (i.e., DeLongis & Holtzman, 2005; Geisler et al., 2009; McCrae & Costa, 1986; Watson & Hubbard, 1996). Thus, individuals with heightened sensitivity to threat or danger (i.e., high neuroticism) are more likely to use disengagement or avoidance in dealing with stress or problems. In contrast, Extraversion has been shown to be directly related to active problem-solving and coping, as was again the case in the present study. Individuals who are more approach-oriented, therefore, are more inclined to employ problem-focused coping behaviors. McCrae and Costa (1986) also found that Extraversion was correlated with rational action, positive thinking, substitution, and restraint, which were considered to be problem-focused strategies in their study. The present study also found that problem-focused coping had a positive direct effect on subjective well-being for both Asian and European Americans. Consistent with previous research, the use of problem-focused coping strategies was associated with high levels of well-being, while the use of avoidance
coping was associated with low levels of well-being (i.e., Hynes, Callan, Terry, & Gallois, 2011). Hynes and colleagues used measures of self-esteem, depression, and self-confidence to examine psychological well-being, so my findings extend their findings to alternative measures of well-being.

Surprisingly, results of the present study showed that emotion-focused coping had a direct positive effect on social well-being in both ethnic groups. There is an absence of research on the association between emotion-focused coping and social well-being. Although the direction of the relationship was not originally anticipated, it is reasonable that emotion-focused coping behaviors (i.e., positive reinterpretation, acceptance, and restraint coping) can be seen as an individual’s ability to modify misinterpretations to events and situations, which can subsequently influence enhanced self-concept, a more balanced way of thinking, and improved quality of relationships with others and one’s community.

Also unexpected was the finding that disengagement coping did not predict subjective well-being in either ethnic group. That is, the use of disengagement coping behaviors (e.g., denial, behavior avoidance, self-distraction, thought suppression, substance use) in the face of stressful encounters did not negatively impact the degree of life satisfaction and experiences of positive and negative emotions. Scheier and Carver (1992) indicated that use of avoidance coping was negatively associated with adjustment, while use of active coping was positively associated with adjustment. It is possible that disengagement’s effect on psychological adjustment was overshadowed by the strong direct impact of Neuroticism on subjective well-being in my integrated model. Scheier and Carver did not include personality dispositions in their study.
In both ethnic groups, Neuroticism had a direct positive effect on disengagement coping and direct negative effects on subjective well-being and emotion-focused coping. McCrae and Costa (1986) conducted one of the few integrative studies on personality, coping, and well-being and found results that were consistent with these findings. These researchers reported that those who scored high on Neuroticism used poor coping strategies (i.e., increased use of hostile reactions, escapist fantasy, self-blame, sedation, withdrawal, wishful thinking, passivity, and indecisiveness) and scored low on well-being. In contrast, individuals who used more effective ways of coping reported higher subsequent happiness and life satisfaction. One significant finding in my study was inconsistent with previous research (i.e., Roesch et al., 2006). Contrary to expectations, Neuroticism had a negative rather than positive relationship with emotion-focused coping. That is, a proclivity to experience negative emotionality was associated with a reduced tendency to employ emotion-focused coping strategies such as positive reappraisal and growth, acceptance, and restraint coping. This may be best explained by the composition of the scales that comprised emotion-focused coping based on my factor analysis results, which is somewhat different than the composition of emotion-focused coping in the literature. Restraint Coping is typically viewed as a type of problem-focused coping, although some researchers have opted to use this coping strategy as a type of emotion-focused coping (e.g., Fontaine, Manstead, & Wagner, 1993; Litman, 2006; Phelps & Jarvis, 1994; Sica, Novara, Dorz, & Sanavio, 1997).

Given that personality dispositions, particularly Extraversion and Neuroticism, have been generally documented as a reliable determinant of subjective well-being (Costa & McCrae, 1980; DeNeve & Cooper, 1998; Diener, 1984; Diener & Larson, 1993; Diener et al., 2003; Jang, Livesley, & Vernon, 1996; Larsen & Ketelaar, 1991; McCrae & Costa, 1986), it was reasonable to expect that Extraversion would positively predict subjective well-being, while Neuroticism
would negatively predict subjective well-being. The results were consistent with previous research for the Asian American sample, although the direct path from Extraversion to subjective well-being was not statistically significant in the European American group. This does not mean, however, that Extraversion did not predict subjective well-being in the European American group. Note that in both ethnic groups, Extraversion predicted subjective well-being indirectly via its impact on problem-focused coping. Problem-focused coping fully mediated the effect of Extraversion on subjective well-being in the European American group, while only partially mediating the effect in the Asian American group.

Contrary to expectations, emotion-focused coping (i.e., restraint coping, positive reinterpretation and growth, acceptance) did not significantly predict subjective well-being in the Asian American group. In addition, emotion-focused coping was positively, not negatively, related to subjective well-being in the European American group. These findings appear inconsistent with previous research which has noted the negative psychological outcomes of emotion-focused coping styles (i.e., Endler & Parker, 2000; Folkman & Lazarus, 1984). Interestingly, Aryee, Luk, Leung, and Lo (1999) found that emotion-focused coping was positively related to life satisfaction among Hong Kong employed parents. However, coping was measured by an eight-item instrument that has not been validated. One possible explanation for my finding is the categorization of restraint coping as a type of emotion-focused coping in my study. In the original development of the COPE instrument, Restraint Coping was considered to be a problem-focused coping strategy. Its recategorization may have impacted the findings, by reconceptualizing emotion-focused coping in a less negative manner. Similarly, Litman (2006) also recategorized Restraint Coping as a type of emotion-focused coping strategy.
While previous research on coping has enhanced our understanding of the dynamics of coping processes, a limitation of much of this research is its focus on coping as a dispositional pattern. Overall, researchers have pointed to the need to conduct studies to examine the timing, order, combination, and duration of coping strategies and their impact on coping outcomes (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007). Although a complex process, it appears that coping strategies used during one point in time may prove ineffective at another moment. Or, the nature of stressors (e.g., experiences of oppression and poverty) that are more prevalent among ethnic groups may influence the types of coping behaviors used.

Although some significant paths in my integrated model were not originally hypothesized, it is still important to discuss them. There has been a paucity of research on Openness and its association with the coping process. However, some research has shown that Openness to Experience is negatively related to use of religion as a coping method (e.g., McCrae & Costa, 1986; Watson & Hubbard, 1996), which was also demonstrated in my results for the European American sample. Additionally, the present study found that Extraversion significantly predicted support coping in both ethnic groups, which appears consistent with previous research (i.e., Connor-Smith & Flachsbart, 2007; Watson & Hubbard, 1996). David and Suls (1999) also reported in their study that extraverted individuals were more likely to engage in emotional expression or venting when encountering stressful situations, which suggests that extraverted individuals may turn to others for support.

In summary, the relationships among personality, coping, and well-being are complex. Carver and Connor-Smith (2010) have pointed to many factors that may have moderated or complicated the relations between traits and coping and adjustment (e.g., age, severity of stressor, time between coping and report of coping). Therefore, future research should
investigate the complex interactions between personality traits, coping, and outcomes such as well-being and adjustment.

*Ethnic differences in predicting well-being from specific coping styles (Hypothesis 2 and 3).* I also examined ethnic differences in the relationship between specific coping styles and subjective and social well-being. In Hypothesis 2, I had originally predicted that the path coefficient relating emotion-focused coping to subjective well-being would be more negative for Asian Americans than for European Americans. However, because emotion-focused coping probably warrants a more positive interpretation in my study, emotion-focused coping was positively related to subjective well-being in both ethnic groups. Therefore, I instead tested whether the strength of the direct effect of emotion-focused coping on subjective well-being was less positive for the Asian American group than the European American group. In addition, Hypothesis 3, when considered in the context of the personality traits and other coping styles, was not supported because the path was actually more positive in the Asian American sample than in the European American sample (i.e., .38 versus .18). Also, when I tested this hypothesis by examining the relationship in isolation from the other variables in the integrated model, the path coefficient relating problem-focused coping to subjective well-being was not significantly different in the two ethnic groups.

Previous research (i.e., Endler & Parker, 2000; Folkman & Lazarus, 1984) has summarized that emotion-focused coping contributes to poor psychological outcomes, while problem-focused coping leads to positive psychological experiences. Additionally, the coping research clearly shows that individuals of Asian ethnicity are more likely to engage in emotion-focused coping strategies than their Caucasian peers. Therefore, my hypotheses were based on these findings. Specifically, it is plausible to expect that employing emotion-focused coping
strategies would negatively impact one’s level of life satisfaction and positive affectivity, while employing problem-focused coping strategies would positively impact subjective well-being. It is conceivable that acceptance and positive interpretation/growth may contribute to subjective well-being. One’s ability to exert acceptance and positive reappraisal and growth in the face of life’s challenges demonstrates maturity and wisdom that may then influence subsequent levels of life satisfaction and happiness.

*Mean differences in Big Five traits (Hypothesis 4).* Regarding mean differences in the Big Five personality traits, I predicted that European Americans would average higher in Extraversion and Openness to Experience and lower in Neuroticism, Agreeableness, and Conscientiousness than Asian Americans. Previous studies have found ethnic differences among the Big Five personality traits. For example, McCrae and colleagues (1996) reported that Hong Kong participants averaged higher in Neuroticism and lower in all six facets of Extraversion. Additionally, McCrae, Terracciano et al. (2005) reported significant differences in Neuroticism and Extraversion across 51 countries. They found that individuals in collectivistic countries (e.g., China, Japan) reported higher scores in Neuroticism compared to people from individualistic countries (e.g., United States, France). Individuals in European cultures and the United States score higher in Extraversion than people in other countries (McCrae & Terracciano, 2005). McCrae (2001) also found that culture-level individualism is associated with higher Extraversion. Therefore, the Extraversion results in the present study are consistent with previous research as European Americans did average higher scores on Extraversion, reporting more extraverted and gregarious tendencies than did Asian Americans. However, the other anticipated trait differences between European and Asian American participants were not supported. This may be because most previous studies of Big Five trait differences addressed differences
between individualistic and collectivistic cultures cross-nationally. In contrast, I investigated European and Asian Americans in the United States, which may reduce ethnic differences associated with cultural variables.

Additionally, previous research has found gender differences among the Big Five personality traits. McCrae (2002) found that women scored higher than men in Neuroticism, Openness to Experience, and Agreeableness in his investigation. The results of the present study were partially consistent with McCrae’s (2002) findings. Women were more agreeable and conscientious than men, while also being more susceptible to experience negative emotions. Future research could investigate the genetic or socio-cultural bases (e.g., gender norms or socialization practices) underlying these differences.

Allik and McCrae (2004) and McCrae, Terracciano et al. (2005) highlighted the need to address acculturative effects in discerning differences in personality characteristics. Additionally, McCrae and colleagues (1998) assessed personality in a sample of Chinese undergraduate students in Hong Kong and Vancouver and found significant acculturation effects. Hong Kong-born Chinese were significantly lower than Canadian-born Chinese in total Extraversion and its Warmth, Excitement Seeking, and Positive Emotions facets. In the present study, I assessed the acculturation level of Asian Americans. However, given the focus of the study, I did not investigate the impact of acculturation on mean differences in personality characteristics, which could be a focus of future analyses. Finally, some researchers have begun to question whether all of the Big Five dimensions can be identified in all cultural groups, particularly less literate groups (e.g., Gurven et al., 2012; De Raad et al., 2010). However, it is unlikely that these results have significant implications for the findings in the present study because Big Five measures such as the BFI have exhibited considerable validity for U.S. samples.
Mean differences in coping styles (Hypothesis 5). I also predicted that European Americans, as compared to Asian Americans, would report greater use of problem-focused coping strategies and lesser use of emotion-focused coping and disengagement coping strategies. Prior to testing my hypothesis, I used principal-axis factor analyses to investigate the higher-order structure of the coping scales and determine which coping styles clustered together as problem-focused, emotion-focused, and so forth. I selected a four-factor solution resembling results previously obtained by Litman (2006). One limitation of the four-factor solution was that the Turning to Religion subscale did not load well onto any of the factors so I opted to treat this scale separately, as did Litman (2006).

Previous research has noted the high prevalence of coping strategies considered to be emotion-focused, passive, indirect, and internally-targeted among individuals of Asian ethnicity (i.e., Kuo, 2011; Sastry & Ross, 1998; Tweed et al., 2004). The present study provided further support for the frequency of emotion-focused coping strategies in this ethnic group. However, Asian Americans did not report more use of disengagement coping strategies than European Americans, unlike in some earlier research findings (i.e., Jose, Liu, & Ward, 2004; Jung, 1995). Furthermore, inconsistent with previous research (i.e., Connor-Smith & Flachsbart, 2007), European Americans did not engage in more use of problem-focused coping styles. Interestingly, Cross (1995) and Chang (1996) previously did not find differences in problem-focused coping between these two ethnic groups. Additionally, researchers have speculated that the use of problem-focused coping may be dependent on the degree to which the individual perceives that they can somehow influence or control the stressful situation (i.e., Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). If the participants felt a sense of helplessness in dealing with stressors, it may result in the reduced effectiveness of problem-focused coping strategies. It
would also have been helpful to obtain additional outcome measures (e.g., self-esteem, personal control, depression) to ascertain how individuals negotiate stressful events (Kanner, Feldman, Weinberger, & Ford, 1987).

The most significant flaw of existing coping research is the diversity of operationalizations, instruments, and categorizations used, which has greatly hindered replication of results (see Table 2). For instance, Tweed et al. (2004) found that Asian Canadians and Japanese individuals employed more coping strategies such as accepting responsibility, accepting the problem, waiting things out, and self-control. European Canadians were more likely to use confrontation, which they defined as a problem-focused coping behavior. In contrast, Sastry and Ross (1998) reported that Indian students used more emotion-focused coping such as reappraisal, distancing, seeking social support, and confrontation.

In light of these findings, some considerations should be discussed. What was once considered “maladaptive” may not be so unhealthy or ineffective (i.e., emotion-focused coping). Positive Reinterpretation and Growth entails finding a more positive or rational way of thinking about a stressful situation or identifying possible benefits that may occur as a result of the stressful situation, which may subsequently lead to personal growth. Acceptance refers to coming to terms with particular aspects of the stressful situation beyond one’s control and learning to develop a sense of understanding. These skills are often not easily achieved by all individuals and can be viewed as a more mature way of coping. Consequently, it can certainly contribute to wisdom, enhanced life satisfaction, and insight. In more recent therapeutic models, such as Acceptance-Commitment Therapy, such skills can lead an individual to develop a different relationship with their emotional distress or suffering, allowing them to engage in behaviors consistent with their valued directions. In short, researchers may need to reconsider the
adaptive versus maladaptive nature of certain coping styles and whether their outcomes may depend on the context in which they are applied.

**Mean differences in subjective and social well-being (Hypothesis 6 and 7).** I expected that European Americans would average higher on the subjective well-being scales: Satisfaction with Life, Positive Affect, and Negative Affect. Interestingly, European Americans, who are presumed to value subjective well-being more than Asian Americans given the individualistic context in which they were raised, did not average higher on life satisfaction, positive affect, or negative affect. Thus, this hypothesis was not supported. Additionally, I also expected that Asian Americans would average higher on social well-being. Essential components of social well-being (e.g., interdependence, shared consciousness, social integration) are generally viewed as more valued within collectivistic cultures. Therefore, it was predicted that Asian Americans would endorse higher levels of social well-being. However, the results do not seem to suggest that this is the case.

What are the best explanations for these unexpected results? It is conceivable that when examining individuals’ subjective and social well-being, it is more important to examine the influences of intrinsic versus extrinsic goals and motivations. Some researchers have proposed that people in individualistic cultures are, on average, happier than people living in collectivistic cultures (i.e., Ahuvia, 2002; Kasser & Ryan, 1993, 1996, 2001). However, if individuals are able to achieve intrinsic goals and are intrinsically motivated for personal growth, meaningful relationships with others, social contribution, self-actualization, and maintaining one’s physical and mental health, it can result in higher levels of subjective well-being. Alternatively, the pursuit of extrinsic values such as financial success, social recognition, and ideal physical
appearance would not produce similar positive psychological outcomes (Kasser & Ryan, 1996; Sheldon & Kasser, 1998).

Furthermore, although social well-being highlights characteristics that may be more prevalent and valued in a collectivistic culture, I used an instrument constructed within a Western context. As a result, it may fail to validly represent the social well-being of Asian Americans. Another possibility is that the Asian Americans who immigrated to the United States may be less traditional given their desire to leave their home culture and tradition. Therefore, self-selection may partially explain the failure of the Asian American and European American participants to display average differences on the various well-being measures. Finally, level of acculturation is probably another important factor. My sample was fairly acculturated to mainstream U.S. society. My hypotheses about subjective and social well-being differences might be better supported in less acculturated samples.

**AAMAS-EA and AAMAS-CO as direct predictors of subjective and social well-being** 
(Hypothesis 8 and 9). Another aim of the present study was to examine whether levels of acculturation and enculturation directly predicted subjective and social well-being. As predicted, higher levels of acculturation had a positive direct effect on perceived subjective well-being. However, contrary to my hypothesis, higher levels of acculturation did not have a significant negative effect on social well-being. There is no research to date that examines the relationship between acculturation and social well-being. Descriptive results revealed that, on average, the first-generation immigrants moved to the U.S. in the age range of 1-38 years old. In addition, most of the participants in this study were currently in college or had at least a college education, suggesting that they are relatively acculturated to American society. This may have impacted the participants’ opportunities to acculturate to the United States, so that even first-generation Asian
Americans in the sample experienced limited shared harmony and interconnectedness to their respective communities and families (AAMAS-CO $M = 4.35$, $SD = .90$; AAMAS-EA $M = 4.72$, $SD = .71$)

Moreover, previous research found that Chinese American adolescents reported more distress involving their parents due to their increasing acceptance and assimilation to the American culture and values, which may be in opposition to the values of their parents (i.e., Jose & Huntsinger, 2005; Phinney, 1989). As a result, they are faced with navigating the balance of adopting the American culture while receiving pressure to preserve some of their Chinese identity. Additionally, Phinney (1989) showed that Chinese American teens tended to embrace assimilation rather than biculturalism, which produced greater strain and conflict with their first-generation parents. McCubbin, McCubbin, Phan, and Olson (2012) cautioned that, although social well-being considers the impact of social context and community on positive functioning, it is a Western construct that has not been validated with diverse ethnic groups. Therefore, it is premature to assert that it is a protective factor that may enhance psychological health among ethnically-different individuals. The researchers highlighted that more indigenous, collectivist orientations of well-being and their respective measures may produce more significant relationships with psychological health outcomes among Asian Americans.

Consistent with my hypothesis, greater ties to one’s cultural values and traditions significantly impacted social well-being. However, unexpectedly, levels of enculturation did not have a significant negative effect on subjective well-being. It was plausible to expect that Asian Americans newly immigrated to another country would most likely maintain their ethnic identity, while also favoring and adhering to social integration and coherence. Previous research has shown that greater American connection and association were positively related with well-
being (i.e., Mehta, 1998). Furthermore, researchers have reported a positive relationship between ethnic identity and overall sense of social connectedness and belonging, resulting in less psychological distress (i.e., Furham & Bochner, 1986; Lee & Davis, 2000; Lee & Yoo, 2004). As most of the participants were college-aged students at a predominantly White institution and town, it is possible that the Asian American participants perceived limited connectedness to their ethnic community from being surrounded by a limited ethnically-dense area. Yoon, Lee, and Goh (2008) found that social connectedness in one’s ethnic community fully mediated the relationship between enculturation and subjective-well-being. This is an encouraging finding, which suggests the importance of attending to one’s indigenous culture as a possible contributor to subjective well-being.

As applied to ethnic minority groups, a major criticism of the current research on well-being is the prominent neglect of cultural variations in the operationalization of well-being. This is particularly the case when investigating cultures in which the well-being of the community, or the “collective,” is given precedence over the well-being of the “individual” (McCubbin et al., 2012). Furthermore, there is currently a dearth of research examining social well-being as a protective factor that may enhance positive mental health among diverse individuals.

**Theoretical and Applied Implications**

To date, previous studies have not investigated both personality and coping in relation to subjective and social well-being. Previous research has illuminated the important relationships between personality and coping, personality and subjective well-being, and general coping and well-being in separate analyses (e.g., Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007; DeNeve & Cooper, 1998; McCrae & Costa, 1986). However, integrated models have rarely been tested. As such, it was a meaningful pursuit to integrate both personality
and coping styles as predictors of subjective and social well-being in this research investigation. The findings of my study will contribute to the existing theory and research on the complex relationships between personality, coping, and well-being. Furthermore, the present study can contribute to integrative theory and research by demonstrating how selected coping styles mediated the relationship between personality traits and subjective and social well-being.

The findings of the present study may also shed light on the long-standing etic-emic issue in cross-cultural assessment. For example, more recently developed coping instruments take into consideration the impact of the collective in coping processes. Researchers have begun to create such instruments with the view that coping is a culturally-mediated process (e.g., Kuo, et al., 2006; Yeh et al., 2004; Zhang & Long, 2006). However, future research is needed to establish the reliability and validity of these instruments within and between ethnic groups. McCubbin and colleagues (2012) further pointed to the importance of developing indigenous and cultural-specific instruments in the area of well-being to emphasize the role of family and community in one’s perceptions of well-being.

The results of the study also have significant applied implications for clinical practice. For instance, the results could be utilized to facilitate treatment interventions with clients. By helping clients develop and maintain healthy coping strategies, counselors can significantly contribute to an individual’s ability to experience positive emotions, life satisfaction, and adjust to change/stressors. As demonstrated by the findings of the current study, personality traits and coping styles were strongly related to the cognitive and affective components of well-being. Furthermore, particular coping styles mediated the relationship between personality and subjective and social well-being. Clinically, psychologists and other mental health professionals can collaborate with clients to assist them in improving their level of life satisfaction, quality of
relationships with others, coping repertoire, and ability to regulate negative emotions. From a global perspective, these interventions can also take into consideration clients’ personality characteristics and current coping behaviors. By doing so, counselors can help clients better understand the functionality or nature of particular coping strategies in the context of their upbringing, culture, and other environmental influences as well as create motivation to develop new and healthier habits. Consequently, such interventions and multicultural considerations can have positive and empowering effects on clients.

*Strengths and Limitations of Study*

As mentioned previously, one of the strengths of this study was the integration of personality and coping in a more comprehensive model of subjective and social well-being. The use of SEM allowed for estimates of simultaneous relationships among the variables in the present study. Furthermore, the application of SEM also enabled demonstration of the measurement equivalence of the instruments across ethnic groups. Additionally, this study focused on an ethnic group, Asian Americans, that has been underrepresented in the psychological literature. This study also included both subjective and social well-being, therefore contributing to the limited research available on social well-being. Previous research has focused on three primary components of subjective well-being, comprised of the presence and frequency of positive emotions, the absence of negative emotions, and cognitive perceptions about one’s overall level of life satisfaction. Although these components of well-being are foundational to all human beings, more collectivistic forms of well-being (e.g., shared harmony, quality of relationships with family and community) are also deserving of attention. Next, a large sample was used, which increased statistical power in estimating the path coefficients in the models, therefore decreasing the probability that the results occurred by chance. Other strengths
of the current study included recruitment of community members as well as college-aged students, which increased the external validity of the findings.

The study also had some limitations. First, the study used only self-report measures. Consequently, participants’ perceptions and endorsement of the items comprising the personality, coping, well-being, and acculturation variables were subjective and may have been influenced by various response biases (e.g., social desirability). A second limitation of the present study was the failure to use acculturation as a mediating, or intervening, variable in the relationship between personality and coping. Third, although efforts were made to recruit a representative sample of Asian Americans, most of the participants were at least college-educated and heard about this study through their university association (e.g., Asian American student social/cultural campus organizations). Additionally, previous research has demonstrated the heterogeneity of the Asian American group. Researchers have also emphasized the critical importance of disaggregating the Asian American group and examining each Asian ethnic subgroup individually to create a greater understanding of their psychological outcomes. Therefore, this study could have focused on one Asian subgroup or recruited a larger variety of Asian American participants. Next, approximately 71% of the Asian American participants identified as either first- or second-generation. Future studies can perhaps recruit individuals with additional generational statuses. Furthermore, the use of coping as a disposition construct in this study may have limited a more meaningful understanding of coping processes. Lastly, the correlational nature of the study does not make the direction of causality conclusive. Although McCrae and Costa’s (1996) theory of personality asserts that Basic Tendencies (i.e., personality traits) influence Characteristic Adaptations (i.e., coping skills) in the overall structural model, it
is also very plausible that cultural factors can impact personality and coping styles or that coping styles might even influence personality.

**Future Directions**

Despite the aforementioned limitations of the present study, the findings have important implications for future research. This study was designed to address some of the limitations of the extant research. However, future studies can explore other explanations or mediators of the relationship between personality, coping, and well-being such as personal control, self-esteem, and age. Although acculturation was examined to ascertain its effects on well-being, future research can also examine acculturative effects on personality and coping. As in most research on the association between personality and coping, this study used a broad and dispositional coping measure. Consequently, this may have contributed to self-report biases and neglect of the transactional process of coping. Many of the complex paths that arose in the study could have been made ambiguous by the use of a broad coping instrument. As highlighted by Connor-Smith and Flachsbart (2007), in order to truly expand our understanding of the relationship between personality and coping, future studies must consider improved assessment of personality and coping as well as more complex research designs and analyses. Employing alternative research designs in the coping process, which also examine event type, available resources, and stressor severity and controllability, would also enrich the body of literature on coping. Experience sampling designs, which assess coping strategies and well-being over a period of days or weeks, would also facilitate a more refined understanding of the dynamics between personality, coping and well-being. Furthermore, future research can also focus on disaggregating the Asian American group, as there is significant heterogeneity among this population. Lastly, the use of
culturally-specific instruments for coping and well-being would enhance the extant research base for understanding ethnic differences in coping and well-being.

**Conclusion**

This study has important implications for theory, research, and clinical practice. It is a meaningful research agenda to investigate the effects of personality characteristics and coping styles concurrently when exploring determinants of subjective and social well-being. Although there are many studies on personality, coping, and well-being, our understanding of the dynamic interactions between personality dispositions, coping styles, and outcomes such as subjective and social well-being is still limited. Obstacles to such understanding include problems in assessment of personality and coping; overreliance on cross-sectional and retrospective studies; neglect of attention to situational, contextual, and cultural factors; and lack of consideration to the complex interactions among personality, coping, and well-being. Nonetheless, the findings of this study highlight the importance of continued attention to personality and coping in predicting positive psychological outcomes, which can be integrated and utilized effectively in clinical practice. In conclusion, these findings further support the role of personality dispositions and cultural influences on coping and adaptational responses.
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Appendix A

Demographic Questionnaire

Age: __________

Gender: _____ Female _____ Male

What is your marital status?
   _____ Single
   _____ Married
   _____ Divorced
   _____ In Committed Relationship

What is your highest level of education? (Check one)
   _____ Some high school
   _____ High school graduate
   _____ Some college
   _____ College graduate
   _____ Some graduate school
   _____ Completed advanced degree (e.g., M.A., Ph.D., M.D., J.D.)

Please indicate your major area of study (Check one):
   _____ Business, Economics
   _____ Computer Science/Information Technology
   _____ Engineering, Architecture
   _____ Liberal Arts (Communication, Criminal Justice)
   _____ Social Sciences (Psychology, Sociology)
   _____ Education
   _____ Food Sciences, Nutrition
   _____ Agriculture, Forestry
   _____ Marine/Ocean Sciences
   _____ Medical, Public Health
   _____ Other: ___________________

What is your recent annual income?
   _____ Under $10,000
   _____ $10,000-25,000
   _____ $25,000-50,000
   _____ $50,000-80,000
   _____ Over $80,000

What is the current city and state of your residence?

   Name of City/Town: ______________________________
   Name of State: ___________________________________
What is your ethnic identification? (Check one)
   _____Caucasian or European American
   _____American Indian or Alaskan Native
   _____Asian or Asian American
   _____African American
   _____Native Hawaiian or Other Pacific Islander
   _____Hispanic or Latino/a

If you are Asian American, which subgroup do you identify with? (Check one)
   _____Chinese
   _____Taiwanese
   _____Korean
   _____Japanese
   _____Indian
   _____Cambodian
   _____Filipino/a
   _____Vietnamese
   _____Malaysian
   _____Laotian
   _____Thai
   _____Other (please specify: ______________________ )

Are you an international student or a permanent U.S. resident? ____Yes ____No

How many years have you lived in the United States? ______

Were you born in the United States? Yes   No

If you answered “No” in the previous question, please answer the three remaining questions:
   Where were you born (i.e., name of country)? ______________________
   How old were you when you moved to the U.S.? ____________________

Choose the generational status that best describes you: (Check one)
   _____1st generation = I was born in another country (e.g., China, Korea, Vietnam)
   _____2nd generation = I was born in the U.S., and at least one of my parents was born in
   a country other than the U.S.
   _____3rd generation = I was born in the U.S., both of my parents were born in the U.S.,
   and all of my grandparents were born in a country other than the U.S.
   _____4th generation = I was born in the U.S., both of my parents were born in the U.S.,
   and at least one of my grandparents was born in a country other than the U.S., and one of my grandparents was born in U.S.
   _____5th generation = I was born in the U.S., both of my parents were born in the U.S.,
   and all of my grandparents were also born in the U.S.
# Appendix B

## Intercorrelations for All Scales

| Scale | E   | N   | O   | C   | A   | AcC  | Plan | Supp | Rest | IS  | ES  | Grow | Acc | Rel | Vent | Den | BeD | MeD | AlD | AA  | EA  | CO  | SWL | PA  | NA  | SWR |
|-------|-----|-----|-----|-----|-----|------|------|------|------|-----|-----|------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|
|       |     |     |     |     |     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| E     | 1.00|     |     |     |     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| N     |     | -.26**|    |     |     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| O     |     |     | 1.00|     |     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| C     |     |     |     | 1.00|     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |     |
| A     |     |     |     |     | 1.00|      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |     |
| AcC   |     |     |     |     |     |      |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| Plan  |     |     |     |     |     | 1.00|      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |     |
| Supp  |     |     |     |     |     |     |      |      |      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |
| Rest  |     |     |     |     |     |     |     | 1.00|      |     |     |      |     |     |      |     |     |     |     |     |     |     |     |     |
| IS    |     |     |     |     |     |     |     |     |      | 1.00|      |      |     |     |      |     |     |     |     |     |     |     |     |     |
| ES    |     |     |     |     |     |     |     |     |     |     | 1.00|      |     |     |      |     |     |     |     |     |     |     |     |     |
| Grow  |     |     |     |     |     |     |     |     |     |     |     |      | 1.00|     |      |     |     |     |     |     |     |     |     |     |

**Note:** The table above shows the intercorrelations for all scales. The entries indicate the correlation coefficient between two scales, with significance levels denoted by asterisks: 
- **p < 0.05
- ***p < 0.01
- ****p < 0.001
| Correlation Coefficient | 0.01 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 | 0.75 | 0.80 | 0.85 | 0.90 | 0.95 | 1.00 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Acu                      | 0.34** | 0.28** | 0.22** | 0.16** | 0.10** | 0.04** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 |
| Rel                      | 0.28** | 0.22** | 0.16** | 0.10** | 0.04** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 |
| Vast                     | 0.22** | 0.16** | 0.10** | 0.04** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 |
| Des                      | 0.17** | 0.11** | 0.05** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 |
| RoD                      | 0.12** | 0.06** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| MeD                      | 0.07** | 0.01** | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| ADF                      | 0.02** | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| AaA                      | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| EaA                      | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| CO                       | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| SWE                      | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| PA                       | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| NA                       | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |
| SWE                      | 0.01 | 0.00 | 0.00 | 0.04 | 0.08 | 0.12 | 0.16 | 0.20 | 0.24 | 0.28 | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 | 0.52 | 0.56 | 0.60 | 0.64 | 0.68 | 0.72 |

**Correlation significant at the 0.01 level (2-tailed).**

*Correlation significant at the 0.05 level (2-tailed).