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Proactive Coping and its Relation to the Five-Factor Model of Personality

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ABSTRACT - Research on personality's role in coping is inconclusive. Proactive coping ability is one's tendency to expect and prepare for life's challenges (Schwarzer & Taubert, 2002). This type of coping provides a refreshing conceptualization of coping that allows an examination of personality's role in coping that transcends the current situational versus dispositional coping conundrum. Participants (N = 49) took the Proactive Coping Inventory (Greenglass, Schwarzer, & Taubert, 1999) and their results were correlated with all domains and facets of the Five-Factor Model (FFM; Costa & McCrae, 1995)**.** Results showed strong correlations between a total score (which encompassed 6 proactive coping scales), and Extraversion, Agreeableness, Conscientiousness, and Neuroticism, as well as between several underlying domain facets. Results also showed strong correlations between specific proactive coping subscales and several domains and facets of the FFM. Implications for the influence of innate personality factors in one's ability to cope are discussed.

An individual's methods of coping with adversity are important aspects of their overall adaptation. Although characteristic ways of coping likely reflect learned experiences and situational factors to some degree, it is also likely that innate dispositions contribute to specific coping styles and overall ability to cope. Thus, there may be systematic relationships between enduring personality traits and coping ability. To show the theoretical importance of such a relationship, an account of empirical data that highlights the fundamental role of personality will develop a rationale for the hypothesized influence of personality on overall adaptation, and reasons why personality is likely to affect coping ability.

Personality

Until recently, the field has lacked consensus regarding an overall, comprehensive theory of personality. The emergence of the Five-Factor Model (FFM) over the past 10 to 15 years has provided a valuable paradigm from which to gain deeper understanding of important adaptational characteristics. Though there is still some disparity with regard to the comprehensiveness and conversely the succinctness of the model, there is no other model as well supported by research than the FFM (McCrae & John, 1992). The Five-Factor Model (FFM) consists of five broad domains and 30 lower-order facets that surfaced over decades of research and factor analysis (see Cattell, 1943, for an in-depth review). Though debate ensues concerning the exact name of each domain (Loehlin,

1992), it is generally agreed that five is the true number of mutually exclusive domains. The five domain names used by Costa and McCrae (1995) will be described for our purposes: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness.

Neuroticism is best understood as "individual differences in the tendency to experience distress" (McCrae & John, 1992, p. 195). Further, Neuroticism is ways in which a person thinks about and deals with problems and experiences that arise due to their susceptibility to unpleasant experiences. The definition of Extraversion is historically not as parsimonious as that of Neuroticism, because Extraversion encompasses a broader theme. The tendency toward social interaction and positive affect (Watson & Clark, 1997) is usually evident in a person who is highly extraverted. The next domain, Openness to Experience, encompasses intellectual curiosity as well as other affinities that are not related to intellect; for example, this domain has shown to describe a person who appreciates aesthetic value and who has a creative lifestyle (McCrae & John, 1992). Agreeableness is a domain that has often been associated with morality and the ability to get along with others (McCrae & John, 1992). An agreeable person would tend to work well in a group setting, because agreeableness is often expressed as a person's tendency toward pro-social behavior (Graziano & Eisenberg, 1997). The final domain is Conscientiousness. Conscientious persons are "governed by conscious" and "diligent and thorough" (McCrae & John, 1992, p. 197). Further, Conscientiousness is often used to describe one's ability to be in command of their behavior; i.e., driven and goal oriented (Hogan & Ones, 1997).

The FFM is robust in several respects. First, the model suggests that personality is related to temperament, and is not influenced by environmental factors (McCrae et al., 2000). Instead, the ways traits are *expressed* are affected by culture, developmental influences, and situational factors. For example, a person's personality can produce several different response patterns depending on the environment. Therefore, personality can be considered an enduring and relatively stable trait.

Second, research on the FFM shows that the five factors are legitimate in a cross-cultural context (McCrae & Costa, 1987). McCrae and Costa showed that six different translations of their FFM-based personality test, the NEO-PI-R, supported the validity of the previously described five factors. Moreover, the same five factors were evident and dominant in many different cultures that utilize extremely diverse linguistic patterns (1987).

In a more recent study (McCrae et al., 2000) that investigated "intrinsic maturation", pan-cultural age-related changes in personality profiles were evidenced. The implication is that as people in diverse cultures age, uniform changes in their personality profiles are observed. The emergent pattern showed that levels of Neuroticism, Extraversion, and Openness to Experience decrease with age, and that levels of Agreeableness and Conscientiousness increase with age in many cultures (McCrae et al., 2000).

Gender differences in personality also seem to be cross-cultural. Williams, Satterwhite, and Best (1999) used data from 25 countries that had previously been used in the identification of gender stereotypes. A re-analysis of these data in the context of the FFM showed that the cross-cultural gender stereotype for females was higher on Agreeableness than it was for males, and the cross-cultural gender stereotype for males

was higher than females on the other four domains. Though these data do not represent actual male and female responses on a personality inventory, it is remarkable that gender stereotypes alone would relate so distinctly to the FFM.

The FFM has amassed plenty of evidence that personality is pervasive, enduring, and basic. Though individuals experience circumstances that cultivate certain abstract characteristics and promote particular outcomes, these tendencies and outcomes are derivatives of a diathesis that is created by personality traits (Costa & McCrae, 1992). Thus, it is practical to use personality to predict adaptational characteristics, such as coping ability.

Coping

Folkman and Lazarus (1980) defined coping as "the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them" (p. 223). The cognitive aspect of coping ability pertains to how threatening or important to the well-being of a person a stressful event is considered to be. The behavioral aspect of coping ability refers to the actual strategies and techniques a person employs to either change the situation (problem-focused coping) or to deal with the distressful emotions that arose due to the situation (emotion-focused coping).

Clearly, the concept of coping is multi-faceted. The ways in which people appraise situations vary, the ways in which situations influence the options a person has to contend with situations vary, and the person-centered characteristics that predispose a person to certain appraisals and responses at each stage of the coping situation vary. Accordingly, Lazarus and Folkman (1987) formulated a transactional theory of coping that considers both a person's coping response and their cognitive appraisal of the situation. This theory suggests that the person-environment interaction is dynamic and largely unpredictable.

Despite evidence for coping as a process and the impact of situational factors on coping, it is important to realize that exact strategies employed are highly variable from person to person (Folkman & Lazarus, 1985). In addition, Lazarus and Folkman (1987) suggest that person-centered characteristics are influential to coping at the most basic level. For example, they recognize that emotion-focused coping tends to be related to person-centered characteristics; for example, some people are not able to cognitively reduce their stress or anxiety, while others are. In addition, the concept of cognitive appraisal creates the possibility that some people will appraise events to be more threatening or more amenable than others. Moreover, different people employ diverse behavioral styles to cope with the same situation (Folkman & Lazarus, 1985).

Since the emergence and prominence of the FFM, the focus in coping research has moved increasingly toward an attempt to understand the dispositional basis of coping. Studies that employ dispositional coping measures (see Carver, Scheier, & Weintraub, 1989, for one such scale) have examined the relationship of self-reported coping tendencies to the FFM. One study (Watson & Hubbard, 1996) found that Neuroticism relates to maladaptive coping styles, Conscientiousness relates to problem-focused, action-oriented coping styles, Extraversion relates to social-support seeking, and Agreeableness shows only a modest correlation to coping style. O'Brien and DeLongis (1996) observed similar results, but continued to assert that the best understanding of the

role of personality in the coping process is one that takes situational and dispositional factors into consideration.

A new conceptualization of coping that focuses on proactive, goal-oriented, adaptive coping has been suggested by Schwarzer and Taubert (2002) and lends itself toward theoretical exploration that may circumvent the need for a dispositional versus situational coping distinction in certain cases. Proactive coping theory proposes that some people are more apt to live their lives in a way that accumulates assets and prepares for inevitable obstacles. However, proactive coping has been largely understudied; if someone is successful at coping proactively, then they rarely need to cope using traditionally studied coping styles such as venting and suppression (see Carver, Scheier, & Weintraub, 1989 for a description of these coping styles). Moreover, people with a high aptitude for proactive coping may have been inadvertently excluded from most coping studies to date (Aspinwall & Taylor, 1997).

Instead of viewing stressors as setbacks, people who utilize proactive coping view stressors as challenges and are motivated to succeed. However, which characteristics predispose certain people to global success at coping? Proactive coping theory does not attempt to delineate specific actions one will perform when faced with a certain stressor. Instead, it attempts to show the overall success certain people have at preventing and lessening their emotional distress with regard to stressful situations. The study of proactive coping is more adequately considered via examination of dispositional factors.

Proactive coping ability is arguably better understood in the context of the FFM than any other conceptualization of coping. People who consistently cope in a proactive manner are likely endowed with personality traits that allow for expression of successful coping. Already, proactive coping has shown to relate to many positive outcomes, such as functional ability and positive affect (Greenglass, Fiksenbaum, & Eaton, 2006), and the ability to "get on with life" (Greenglass, Marques, deRidder, & Behl, 2005). Thus, the current study seeks to find the relationship between proactive coping and the domains and facets of the FFM.

Proposed Relationships

The current investigation is largely exploratory, but some hypotheses are observed. It is expected that because Neuroticism is highly correlated with depression (Harkness et al., 2002) and maladaptive coping styles (Watson & Hubbard, 1996) that Neuroticism will negatively correlate with proactive coping. Conversely, because people who are high in Conscientiousness are characteristically driven and goal-oriented (McCrae & John, 1992), it is presumed that Conscientiousness will be positively correlated with proactive coping. Extraversion and Agreeableness are also hypothesized to positively correlate with proactive coping because proactive coping is highly associated with social support (Greenglass et al., 2005) and positive affect (Greenglass et al., 2006).

Method

Participants

Participants were 49 undergraduate psychology students from a public university in the southeast region of the United States (34 females). Informed consent was obtained.

Materials

The M5-336 Questionnaire (M5-336): The M5-336 is a 336-item public-domain self-report instrument based on Goldberg's (1999) IPIP item set, producing scores on the five major domains of the FFM (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) as well as six more specific facets under each domain (see Tables 2-6 for facet names per domain). Example questions are "am exacting in my work" and "respect others", and they are scored on a 5-point Likert-type scale that ranges from 1 = Inaccurate to 5 = Accurate. This instrument is still undergoing reliability and validity evaluation, but so far the measure has demonstrated adequate reliability and validity in prior studies (see Proctor, 2008 for a review).

The Proactive Coping Inventory (PCI): The PCI (Greenglass, Schwarzer, & Taubert, 1999) is a multi-dimensional instrument that contains 44 items and seven subscales: (1) The Proactive Coping Scale (α = 0.85); (2) Reflective Coping Scale (α = 0.79); (3) Strategic Planning (α = 0.71); (4) Preventive Coping (α = 0.83); (5) Instrumental Support Seeking (α = 0.85) (6) Emotional Support Seeking (α = 0.73); and (7) Avoidance Coping (no exact α available) (Greenglass, 2002). The PCI is a self-report measure that is scored on a 4-point Likert-type scale that ranges from 1 = not at all true to 4 = completely true. Example questions are "I turn obstacles into positive experiences" and "I make a plan and follow it". Subscale one is an exclusive measure of proactive coping. Subscales two through six measure adaptive, positive coping strategies that are highly correlated with proactive coping but that create distinct clusters and are thus evidence for the multidimensional nature of proactive coping. The seventh scale, Avoidance Coping, only contains three questions and is considered to measure strategies that are opposite to proactive coping such as delay of proactive behavioral responses (Greenglass, 2002). The PCI has shown "good construct validity, homogeneity, and acceptable reliabilities" (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999) for its seven subscales.

Procedure

After data were collected, M5-336 data were analyzed using norm-referenced data for sex and age group. The PCI items from scales one through six were summed to yield an overall coping score named Adaptive Coping for purposes of this study. The Adaptive Coping score was then analyzed in a bivariate, Pearson correlation analysis with scores for each of the five broad personality domains, as well as each of the six narrow facets underlying each domain. Likewise, scores of each of the seven subscales on the PCI were analyzed separately in bivariate, Pearson correlation analyses with scores for the five broad personality domains, as well as the six narrow facets underlying each domain.

Results

Results for Pearson correlations between the Adaptive Coping score and all domains and facets of the FFM are presented in Table 1. Statistically significant positive correlations were found between the Adaptive Coping score and Extraversion (r = .450, p < .05), Agreeableness (r = .497, p < .05), Conscientiousness (r = .720, p < .05) and between the Adaptive Coping score and 15 of the narrow facets of the three aforementioned domains (see Table 1). Statistically significant negative correlations were found between the Adaptive Coping score and Neuroticism (r = -.453, p < .05), and

between the Adaptive Coping score and four of the narrow facets of Neuroticism (see Table 1). The Adaptive Coping score and the seven subscale scores of the PCI were completely unrelated to Openness to Experience (see Table 1 and Table 6).

Table 1
Correlations: Five-Factor Model Domains and Proactive Coping Scores

Coping Scale	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to Experience
Adaptive	.450**	.497**	.720**	-.453**	.095
Proactive	.565**	.341**	.595**	-.365**	.197
Reflective	.200	.370**	.506**	-.408	.197
Strategic	.097	.344**	.604**	-.389**	-.173
Preventative	.033	.309**	.576**	-.280	-.018
Instrumental Support	.390**	.440**	.413**	-.191	.052
Emotional Support	.554**	.363*	.441**	-.386	-.031
Avoidance	-.231	.272	.039	.020	.245

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Pearson correlations were next computed between the first subscale of the PCI, Proactive Coping, and all domains and facets of the FFM. Statistically significant positive correlations were found between Extraversion (r = .565, p < .05), Agreeableness (r = .341, p < .05), and Conscientiousness (r = .595, p < .05) (see Table 1) and 15 of the narrow facets of the three aforementioned domains (see Tables 2-5). These correlations are almost exact to the correlations found with the Adaptive Coping score, just not as strong in most cases. Statistically significant negative correlations were found between the Proactive Coping subscale and Neuroticism (r = -.365, p < .05) and five of the narrow facets of Neuroticism (see Tables 3 & 5).

Table 2
Correlations: Extraversion Facets and Proactive Coping

Coping Scale	Friendliness	Gregariousness	Assertiveness	Activity Level	Excitement-seeking	Cheerfulness
Adaptive	.596**	.368**	.364*	.080	-.109	.606**
Proactive	.477**	.504**	.578**	.245	.055	.570**
Reflective	.365**	.037	.248	.075	-.213	.382**
Strategic	.238*	.024	.072	.155	-.242	.169
Preventative	.227	.006	-.036	-.079	-.241	.249
Instrumental Support	.557**	.370**	.205	-.062	.018	.504**
Emotional Support	.652**	.559**	.353*	-.003	.094	.625**
Avoidance	-.127	-.271	-.249	-.329*	-.045	.008

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Pearson correlations were also computed between the remaining five subscales of the PCI that together represented the Adaptive Coping score presented in this study. Similar results to those found for the Adaptive Coping scale and for the Proactive Coping subscale were found for these subscales, with slight modifications. For example, the Preventative Coping subscale and the Instrumental Support Seeking subscale did not show a significant negative correlation with Neuroticism. However, all subscales included in the Adaptive Coping scale had a significant positive correlation with Conscientiousness (see Table 1).

Table 3

Correlations: Agreeableness Facets and Proactive Coping

Coping Scale	Trust	Morality	Altruism	Cooperation	Modesty	Sympathy
Adaptive	.365**	.437**	.608**	.429**	-.125	.172
Proactive	.152	.341*	.551**	-.336*	-.261	.129
Reflective	.322*	.330*	.467**	.160	-.048	.185
Strategic	.278	.366**	.202	.255	.095	.099
Preventative	.320*	.268	.264	.303*	.064	.008
Instrumental Support	.270	.308*	.497**	.429**	-.034	.219
Emotional Support	.233	.327*	.528**	.377**	-.228	.118
Avoidance	.383**	.080	.034	.144	.249	.155

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Table 4

Correlations: Conscientiousness Facets and Proactive Coping

Coping Scale	Self-efficacy	Orderliness	Dutifulness	Achievement-Striving	Self-Discipline	Cautiousness
Adaptive	.527**	.549**	.522**	.665**	.559**	.388**
Proactive	.510**	.325*	.493**	.607**	.534**	.237
Reflective	.526**	.307*	.313*	.507**	.433**	.205
Strategic	.312*	.607**	.336*	.428**	.541**	.381**
Preventative	.320*	.517**	.291*	.509**	.473**	.396**
Instrumental Support	.201	.426**	.347*	.354*	.182	.299*
Emotional Support	.335*	.304*	.470**	.377**	.264	.250
Avoidance	.217	.172	.065	-.053	-.098	-.107

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Table 5

Correlations: Neuroticism Facets and Proactive Coping

Coping Scale	Anxiety	Anger	Depression	Self-Consciousness	Immoderation	Vulnerability
Adaptive	-.242	-.310*	-.560**	-.181	-.318*	-.331*
Proactive	-.214	-.117	-.474**	-.275	-.118	-.400**
Reflective	-.354*	-.265	-.411**	-.171	-.156	-.418**
Strategic	-.263	-.215	-.471**	-.057	-.446**	-.240
Preventative	-.103	-.270	-.262	.010	-.443**	-.122
Instrumental Support	-.044	-.187	-.330*	-.084	-.117	-.022
Emotional Support	-.076	-.373**	-.532**	-.174	-.262	-.189
Avoidance	-.166	-.125	.055	.241	.109	-.005

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Table 6

Correlations: Openness to Experience Facets and Proactive Coping

Coping Scale	Imagination	Artistic Interests	Emotionality	Adventurousness	Intellect	Liberalism
Adaptive	.055	.087	.281	.205	.255	-.438**
Proactive	.200	.184	.293*	.273	.284*	-.350*
Reflective	.124	.199	.266	.172	.370**	-.291*
Strategic	-.215	-.139	-.018	-.007	.012	-.365**
Preventative	-.039	.129	.025	-.056	.137	-.298*
Instrumental Support	.030	-.103	.310*	.232	.077	-.236
Emotional Support	-.059	-.058	.201	.168	.080	-.408**
Avoidance	.240	.206	.073	.099	.084	.360*

Note: [a]**Correlation is significant at the 0.01 level [b]*Correlation is significant at the 0.05 level

Finally, Pearson correlations were computed between the Avoidant Coping subscale and all domains and facets of the FFM. No significant results were found, but result trends were nearly opposite those found for both the Adaptive Coping scale and the Proactive Coping subscale (see Table 1). These non-significant findings further validate significant findings that the other six subscales and the Adaptive Coping scale yielded.

Discussion

Results suggest that personality is fundamental to the understanding of coping ability. The strong correlations found in this study make the dispositional influence of personality on coping ability hard to discount; for example, correlations exceeding .7 were found between the Adaptive Coping score and Conscientiousness (see Table 1), and correlations exceeding .6 were found between the Strategic Planning subscale and Conscientiousness and between seven other subscale/facet relationships (see Tables 1-6 for exact figures). High correlations with Conscientiousness, strong, differentially directed relationships between the Adaptive Coping score and Extraversion, Agreeableness, and Neuroticism, and the absence of a relationship between the proactive coping and Openness to Experience strongly support the idea that some people are better able to master life's challenges than others.

Specifically, these data suggest that the personality profile of a person who has exceptional coping ability is one who is high in Conscientiousness (especially achievement-striving), Extraversion (especially cheerfulness), and Agreeableness (especially altruism) and one who is low in Neuroticism (especially depression) (see Tables 3, 2, 4, & 5, respectively, for exact figures). High or low levels in these domains of personality may create the proper diathesis for the utilization of adaptive coping. Results seem logical in regard to what each of these personality domains represent. For example, it is logical that a person who is driven to succeed (conscientious), is cheerful (extraverted), is amenable to change (agreeable), and is not depressed (neurotic) would be motivated to set challenging goals and would be effective at reducing the emotional effect or incidence of life stressors. In fact, some researchers hypothesize that high levels of positive emotions (i.e., cheerfulness, a facet of Extraversion) is a precursor to resilience (Ong, Bergeman, Bisconti, & Wallace, 2006). Tables of data found in this study could serve as a starting point for specific hypotheses about the way innate differences serve as risk or protective factors.

Undoubtedly, these data are not comprehensive. First, these data do not represent the relationship of personality to all documented styles and ways of coping. However, the essence of the proactive coping theory (Schwarzer & Taubert, 2002) is that proactive coping is more of a modality than a list of specific coping strategies that will be used in regard to specific stressors. Second, it is understood that though these data describe people who are motivated to proactively respond to challenges, these data do not attempt to comprehensively explain how a person changes from one coping style to another during the coping process or which specific coping styles they will choose when forced into stressful circumstances. Also, they do not ignore the fact that incredibly strong situational factors can override natural tendencies. These results simply suggest that people who utilize proactive coping will use coping styles that serve as buffers to stress

or that are adaptive, and that this propensity toward adaptive coping is affected by personality.

Considering these data, one may choose to understand previous conceptualizations of coping within a theoretical context that appreciates the influential role of personality. Findings do imply that some people will experience less life stressors and fare better when faced with stressors due to the dispositional influence of personality. Whether or not one is likely to use adaptive, proactive coping is key in the study of many psychological sequelae, such as burnout (Greenglass, Fiksenbaum, & Burke, 1996), negative impact of traumatic events (Bryant, Marosszeky, Crooks, Baguley, & Gurka, 2000), and depression (Greenglass, et al., 2006).

These results make a contribution to a body of research that historically lacks consensus as to the role personality plays in the coping process. Some previous effort to this effect has been made. A meta-analysis by Connor-Smith and Flachsbart (2007) was a positive attempt at reconciling years worth of research on the relationship between personality and coping. Their findings include the following: that Extraversion and Conscientiousness predict problem-focused coping styles, that Neuroticism predicts maladaptive coping styles, that personality predicts coping best in a young sample, and that personality is a better buffer to life stressors in certain cultures. However, their meta-analysis did not include studies that took the proactive coping theory into consideration, and therefore may have excluded a way in which personality influences the coping process (2007).

Future research should focus on whether or not personality is a globally reliable predictor of adaptive coping ability. For example, these data were obtained with a college-age sample. It has been found that Conscientiousness and Agreeableness rise with age, and that Extraversion and Neuroticism decrease with age (McCrae et al., 2000). Thus, it would be important to know if similar correlations between proactive coping and the Five-Factor Model exist across the age span, and it would be especially beneficial to know if proactive coping ability increases as a function of age due to these aforementioned age-related personality changes.

In addition, future research should continue to find other constructs with which both personality and proactive coping relate. Some of this type of research has been conducted (for example, Greenglass et al., 2005), however, other issues need to be considered, such as the buffering effects of personality and proactive coping on the impact of traumatic events. Conversely, studies should be conducted to determine whether or not proactive coping is a characteristic that is evident in the entire population of people who have certain personality profiles such as the ones found in this study, or if proactive coping is more likely in populations that have experienced many traumatic events and have developed proactive coping as a byproduct of posttraumatic growth. Even so, the reason why some people experience posttraumatic growth and why some people do not could be explained by the influence of personality on overall adaptation. It will be hard to exhaust the need for a deeper understanding of how individual differences in coping ability, as predicted by personality factors, affect adaptation.

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