# Summary The Role of Big Five Personality on Predicting the Resilience: A Canonical Relation Analysis

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The main question of the early resilience studies focused on how some people cope with traumatic life events that change their lives. Some of them focused on exploring the personality characteristics of resilient people through comparing the successful ones and others (Garmezy, Masten, & Tellegen, 1984; Luthar, 2003; Masten, 2001; Werner & Smith, 2001). Werner and Smith (1982) proposed that being woman, agreeable, tolerant, success-oriented, and having good communication skills, higher self-esteem, higher physical health and higher social responsibility are the characteristics of some healthy children at risky situations. Moreover, other studies suggested that some of the contributing factors as becoming effective, having high expectations, having positive viewpoint, internal locus of control, high in consciousness, having problem solving capability, having critical thinking ability, and having humor sense are important for the resilient people (Garmezy, 1991; Garmezy, Masten, & Tellegen, 1984).

Besides the above mentioned characteristics, another factor is the "protective factors" in coping and surviving from the adversities and difficulties of the traumatic life events. Personal attributes and social environment are two basic protective factors in order to develop and sustain the resilience of people. Some of the personal protective attributions are cognitive ability, patience, autonomy, self-confidence, sociable, effective coping ability, and communication ability (Brooks, 1994; Luthar & Zigler, 1991; Masten & Coatsworth, 1998; Polk, 1997; Werner & Smith, 1982). Social environment factors are family structure, family affiliation, family coherence, emotional support, positive attributions, and close relationship with someone (Brooks, 1994; Garmezy, 1991; Luthar & Zigler, 1991; Masten & Coatsworth, 1998). Moreover, some studies proposed that the other social environment factors are positive school experiences, good peer relations and positive adult relations (Brooks, 1994; Cowen & Work, 1988; Garmezy, 1991; Werner &

Smith, 1982).

Along with the developments in the positive psychology, resilience has been considered as capability of bouncing back and adapting to serious traumatic life events. From this perspective, resilience is supported to be viewed as a positive adaptation in stressful and difficult situations. Wagnild and Young (1993) have proposed that interrelated attributions of temperance, decisiveness, self-confidence, interpretation, and existence of loneliness generate the structure of the resilience. Similarly some positive-oriented approaches define the features of the resilience as happiness, subjective well-being, optimism, belief, assertiveness decisiveness, wisdom, sense of excellence, hope, humility, and creativity (Baltes ve Staudinger, 2000; Buss, 2000; Diener, 2000; Lubinski & Benbow, 2000; Myers, 2000; Peterson, 2000; Ryan ve Deci, 2000; Schwartz, 2000; Simonton, 2000; Snyder, 2000; Tangney, 2000).

Some recent studies suggested that resilience is not only for difficulties and adversaries but also for a part of typical development process of the personality with containing core personal structures (Masten, 2001; Masten & Powell, 2003). This development process comprises of personal characteristics, achievement motivation, self-regulation, learning and cognitive development. Thereby, resilience can be considered as a complex interaction of the individual and his/her environment with including high levels of contextual effects. In the same vein Haase (2004) proposed that the basic structure of resilience consists of personal attributes, family support and coherence, and external supporting systems (social resources, social support, peers, etc.).

Thus, resilience with its multidimensional and dynamical structure might be thought as creativity or belief instincts of the human nature. Friborg et al. (2005) posited an integrated and psychometrically valid model for explaining this complex structure. This model suggested that resilience has six dimensions; perception of self,

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perception of future, structural style, family coherence, social resources and social competence. We employed this model for our research, because it proposed comprehensive model for integrated resilience structure.

Two main research tendencies have emerged for explaining the structure of resilience in the literature. The first one focused on personality characteristics of the resilient individuals with the purpose of finding out the qualifications of the resilience. The second one argued and examined that resilience is an evolving process and examined how to build these qualifications by the relevant processes. We adopted the first approach and explored the personality characteristics of people in this process. Personality reflects individual characteristic patterns of thoughts, feelings, and behaviors over time and across situations (Allport, 1961). The model of five factor personality (neuroticism, extroversion, agreeableness, conscientiousness and openness to experience) proved its reliability and validity for different samples across cultures (Schmitt, Allik, McCrae, & Benet-Martinez, 2007). The findings of the previous studies showed that there were positive relationship between resilience and extroversion, agreeableness, conscientiousness, openness to experience, and negative relations between resilience and neuroticism (Campbell-Sills, Cohan, & Stein, 2006; Nakaya, Oshio, & Kaneko, 2006). Moreover, Friborg et al. (2005) obtained positive relations between agreeableness and social resources, positive relations between conscientiousness and perception of self and structural style, and negative relations between perception of self and neuroticism.

The main purpose of this study was to analyze the role of big five personality in predicting the resilience and to determine the most influent dimensions of resilience in this process. Moreover, the distinctiveness of our study was to examine which personality characteristics played the main role in explaining the personalityresilience relationship and which sub-dimensions predicted better the structure of resilience and personality itself. We used canonical correlation analysis technique for exploring the basic roles of sub-dimensions.

### Method

# **Participants**

The survey was applied to 300 students from a Foundation University in Ankara. Fourteen questionnaires left unanswered and the sample was composed of 286 students. The ages ranged from 18 to 25 years (M = 21.82, SD = 1.77), and gender distribution was 55% male (157) and 45% female (129).

#### Instruments

Resilience Scale. Resilience scale was developed

by Friborg et al. (2005) and translated into Turkish by Basım and Çetin (2011). This scale includes six subdimensions as perception of self, perception of future, structural style, family cohesion, social competence and social resources. The scale uses a five-point semantic differential scale format, in which each item has two opposite attributes at each end of the scale continuum. The positive and negative attributes were distributed to both sides, in order to reduce the acquiescence bias. The Cronbach' Alfa coefficients of the sub dimensions were calculated as .73 for perception of self, .77 for perception of future, .71 for structural style, .81 for family cohesion, .80 for social competence, and .77 for social resources.

**Big Five Personality Scale.** Big five personality scale was developed by Benet-Martinez and John (1998) and translated into Turkish in a cross-cultural study (Schmitt et al., 2007). The 44 items-scale consists of five sub-dimensions as neuroticism, extroversion, agreeableness, conscientiousness and openness to experience. The Cronbach' Alfa coefficients of the sub dimensions were found as .70 for neuroticism, .75 for extroversion, .65 for agreeableness, .70 for conscientiousness and .69 for openness to experience.

## Results

We analyzed the role of big five personality on the resilience with using canonical correlation analysis. Results showed that significant canonical correlation coefficient was .69 (Wilks' Lambda < .05) between the variables. Standardized canonical correlation coefficient of sub-dimensions of the personality were calculated as .63 for extroversion, .38 for conscientiousness, -.23 for neuroticism, .15 for openness to experience, and .07 for agreeableness. Sub-dimensions of the resilience were found as .51 for perception of self, .51 for social resources, .17 for structural style, .13 for perception of future, .03 for family cohesion, and .01 for social competence.

Extroversion (.82) was found as the highest and agreeableness as the lowest (.37) canonical loadings of the sub-dimensions of the fig five personality structure. Similarly perception of self (.84) was found as the highest and family cohesion as lowest (.37) canonical loadings of the sub-dimensions of resilience structure. In addition, extroversion (.57), neuroticism (-.42), and conscientiousness (.40) were calculated as the most predictive ability role in explaining the resilience structure. Results showed that all sub-dimensions of the personality predicted 17.7% of the total variance of the resilience.

## Discussion

The main purpose of this study was to analyze

the role of big five personality in predicting the resilience. The findings of the canonical analysis confirmed that extroversion, agreeableness, conscientiousness and openness to experience are positively, and neuroticism is negatively related to the resilience.

The results of this research showed that *resilient people*: are *extrovert* as social, assertive, active, energetic and optimistic, are *low in neuroticism* as calm, eventempered, relaxed and able to face stressful situations without becoming upset; are *high in openness to experience* as unconventional, willing to question authority and willing to entertain novel ideas; *high in agreeable* as altruistic, sympathetic to others and eager to help them; are *high in consciousness* as self-control, purposeful, strong-willed, hardworking, planful and organized. All these results support the findings of previous studies in the literature.

Moreover, it was determined that perception of self, social resources and social competence dimensions of the resilience predicted the structure of resilience better than other sub-dimensions. This finding confirmed that structure of resilience comprises the interaction of both individual and environmental factors. In addition, extroversion and consciousness sub-dimensions predicted the structure of personality better than the others. This result supported that big five personality structure indicates two different factors as alpha and beta, both of which respectively shows the socializing and developing aspects of the personality.

Furthermore, the sub-dimensions of extraversion and neuroticism for the personality, and perception of self and social recourses for the resilience played the main roles in the personality-resilience relationship. This pattern implies that both of developing and socializing aspects of personality have significant role in explaining the resilience. In addition, it also implies that the socializing processes are complementary part of the resilience structure with the individual characteristics.

Ultimately our results proposed that big five personality have important effects in predicting the resilience structure which consists both the personal and environmental factors. All results should be interpreted with the constraints of the selected sample with the effects of the common method variance. Future studies should focus on the environment factors that influence the resilience.