The Relationship between Resilience and the Big Five Personality Traits in Emerging Adulthood

Hulya ERCAN

ARTICLE INFO

Article History:
Received: 16 December 2016
Received in revised form: 30 June 2017
Accepted: 15 July, 2017
DOI: http://dx.doi.org/10.14689/ejer.2017.70.5

Keywords
positive psychology, personality, big five model, resilience level

ABSTRACT

Purpose: The factors related with resilience, which is an important element of positive psychology, are still being discussed. The main purpose of this study is to examine the relationship between the resilience levels of individuals in emerging adulthood and the big five personality traits. Research Methods: Using a quantitative approach, the present study has been conducted based on a correlational descriptive model. The study group consists of 392 undergraduate students. The participants were selected through a purposeful sampling method. The participants were asked to fill out personal information forms and the Resilience Scale for Adults and take an Adjective-Based Personality Test. The correlation, t-test and multiple linear regression analyses were conducted to establish the relationships between the variables. Findings: As a result of the analyses, relationships were established between the sub-dimensions of resilience and the sub-dimensions of big five personality traits at various levels that appeared to support the body of literature. On the other hand, it was found that all the sub-dimensions of the big five personality traits presented statistically significant differences based on being resilient or non-resilient. Lastly, it was established that three sub-dimensions of the big five personality traits—namely conscientiousness, neuroticism and extroversion—together accounted for 34% of the total resilience scores of the participants. Implications for Research and Practice: It can be argued that the findings thus achieved present indicators as to the use of big five personality traits in accounting for psychological resilience. For future studies, it is recommended that longitudinal studies in particular, be included for the purview of the research and that intercultural comparative studies be carried out.

© 2017 Ani Publishing Ltd. All rights reserved

1 Cumhuriyet University, TURKEY, hulya.ekin@gmail.com, ORCID: http://orcid.org/0000-0002-0442-4121.
Introduction

When faced with various life challenges such as the death of a relative, chronic illnesses, harassment, assault, unemployment, etc., some individuals manage to cope with such conditions while others fail to do so. While one person has the strength to maintain their hopes and cling onto life in the face of an extremely painful situation, another person may not possess the same resolve and character when faced with even comparatively less painful situations, and they may quickly give up on life. The concept that is used to describe such difference in character between individuals is called resilience.

It can be said that resilience is one of the important subjects of positive psychology. Traditional psychology often emphasizes various negative conditions that give rise to the emergence of negative personality traits in people. However, such perspective is now being criticized by the discipline of positive psychology. Driven by a fundamentally humanistic point of view, positive psychology suggests that individuals may be able to preserve their mental health and cure their adjustment disorders through a number of innate and/or acquirable personality traits (Seligman & Csikszentmihalyi, 2000). As such, positive psychology dwells on the positive rather than the negative. Resilience, doubtless, represents a positive individual power.

The literature shows that the studies conducted on the concept of resilience go as far back as fifty years. It can be argued that the subject matter mostly falls into the purview of developmental psychologists and mental health professionals. More often than not, researchers focus on children at risk in terms of mental health and study their ability to stay alive, adjust to their conditions and develop positive personality traits despite the devastating experiences they went through (Goldstein & Brooks, 2005).

The studies on resilience go as far back as the mid-50s when 698 babies of various racial backgrounds and mental risks born on the Hawaiian island of Kauai in 1955 were singled out to be monitored well into their mid-adulthood. Conducted by Werner and Smith, the study found that one third of the children managed to become competent adults despite the various setbacks they had to suffer (Werner, 2005; Werner & Smith, 1992). The first wave of studies that followed thereafter focused largely on individual capacity. In those studies, risk factors and protective factors were associated with the individuals’ ability to cope with challenging conditions. The second wave of studies, on the other hand, dwelt mostly on contextual conditions, addressing the issue in terms of resilience and developmental and ecological systems (Exenberg & Juen, 2014; Ungar, 2012; Wright & Masten, 2005). This particular perspective supports the idea that resilience cannot be attributed to a single factor; it is, rather, a product of the mutual interaction between the individual and his/her environment.

In a similar vein, the studies conducted on resilience tend to approach the subject matter in terms of personal or familial characteristics or in terms of processing, functioning or outward behaviors. That being said, three factors stand out in these studies in general (Haase, 2004). The first of these factors is personal characteristics. They include general health, genetic predisposition, temperament, coping skills,
personality traits, communication skills, cognitive functions and so on. The second factor is familial characteristics, which include the household environment, parental approaches and close ties to certain family members. The third factor is the system of external support, which include friends, teachers, neighbours or others who lend a helping hand in overcoming the hardships one faces as well as various other social resources such as preschool programs, healthcare services and social services (Mandleco & Perry, 2000; Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003; Werner & Johnson, 1999; Wright & Masten, 2005; Zautra, Hall, & Murray, 2010). A model containing these three factors was developed by Friborg, Barlaug, Martinussen, Rosenvinge and Hjemdal (2005) with a view of accounting for resilience. The model in question includes six dimensions: perception of self, perception of future, structured style, social competence, family cohesion and social resources. Perception of self involves one’s view of his/her own identity. Perception of future concerns one’s positive outlook towards the future. Structured style involves such strong individual qualities as self-confidence and self-discipline. Social competence represents adequate support received from one’s immediate environment. Family cohesion is a factor associated with the harmonious relationships and family support maintained between an individual and his/her family. Social resources represent the quality of one’s social relationships.

Resilience is an interesting concept in that it addresses the question, why do some people become all the stronger due to the hardships they had to deal with while others are simply fall apart as a result of the same experiences (Neenan, 2009). At the same time, it is a tough concept because it is still yet to be conclusively defined (Kaplan, 2005; Neenan, 2009). One of the reasons for the latter is that the definitions developed thus far are mostly based on the findings of studies rather than on a theoretical framework (Ahern, Kiehl, Sole, & Byers, 2006). That being said, resilience can, nevertheless, be used to define a set of characteristics that would lead to shaping positive outcomes even when the development or cohesion of individuals is seriously threatened. Resilient individuals are capable of attaining physical, psychological and social balance in a shortly after stressful experiences (Masten, 2001; Rutter, 1987) and of moving forward even when they are faced with challenges (Bonanno, 2004; Goldstein & Brooks, 2005). For this reason, the following three types of persons are considered with respect to the concept of resilience: those who possess the desired qualities despite being under risk, those capable of maintaining positive cohesion despite stressful living conditions, and those who manage to preserve their mental well-being in the aftermath of the trauma they experienced (Masten, Best, & Garmezy, 1990). Such qualities that enable resilient individuals to cope with negative conditions may have to do with their contextual conditions or their own personal qualities. As a personal quality, personality traits are also one of the most significant determinants of resilience (Miller & Harrington, 2011).

Personality has always been one of the most interesting topics of psychology throughout the history of the discipline. The concept is currently used to describe the socially acceptable behaviour patterns and inner personality processes resulting from the individuals themselves (Burger, 2006). There are doubtless many theoretical
definitions on the subject of personality. Although not quite accepted as a typical
theory but nevertheless considered among the distinctive trait approaches, the Big Five
Model (Five Factor Model) has frequently been used in recent studies conducted on
personality (Peterson & Seligman, 2004). The present study also addresses the
personality trait variable, which is believed to be related to resilience, in line with the
big five perspective.

The origins of the big five model can be traced back to the ancient Greek
philosopher Theophrastus who tried to distinguish the most fundamental dispositions
and classify the types of personality. In the Big Five Model, personality is evaluated in
accordance with the lexical tradition (McCrae & Costa, 1997; Saucier & Goldberg,
2001). Established by Francis Galton, among others, this tradition argues that
significant individual differences can be codified according to the terms of a given
language (Goldberg, 1990). Despite some criticism (Block, 1995), various researchers
trying to identify basic personality traits based on this perspective have found
evidence of the existence of these five dimensions of personality by using various
different data sets (McCrae & Costa, 1997). Due to the frequent mention of such
dimensions in the relevant studies, they were named the “Big Five”.

Despite the fact that researchers have used various different concepts to designate
the five factors that stand out with respect to personality traits, the most frequently
used ones are neuroticism, extroversion, openness to experience, agreeableness and
conscientiousness (Burger, 2006). Neuroticism includes such traits as anxiety,
insecurity, self-doubt, short temper and instability. Extroversion includes such traits
as sociability, talkativeness, congeniality, liveliness, gregariousness and self-
confidence. Openness to experience is characterized by creativeness, imaginativeness,
curiosity, having a broad area of interest, willingness to take up challenges and being
intellectual. Agreeableness is characterized by helpfulness, courtesy, being
successful in interpersonal relationships and openness to cooperation.
Conscientiousness is described by qualities such as dutifulness, scrupulousness,
orderliness, resourcefulness, single-mindedness, accountableness, industriousness
and willingness to achieve goals (Goldberg, 1990; McCrae & Costa, 1987).

When the literature on resilience is reviewed, it is observed that the studies
conducted on the subject matter addressed the issue according to various variables,
including sense of well-being, cohesion, despair, perfectionism, self-respect,
satisfaction with life, focus on control, coping and social support (Gurgan, 2014; Kaba
& Keklik, 2016; Karairmak, & Sivis-Cetinkaya, 2011; Karatas & Savi Cakar, 2011;
Malkoc & Yalcin, 2015; Surucu & Bacanli, 2010; Terzi, 2008; Tumlu & Recepoglu, 2013).
However, despite the frequent use of the big five model in personality studies, the
actual number of studies conducted based on this model is few and far between
(Campbell-Sills, Cohan, & Stein, 2006; Nakaya, Oshio & Kaneko, 2006).

The present study assumes that resilience is a product of the interaction between
personality traits and environmental conditions and is of the opinion that personality
traits are important in terms of identifying resilience levels. This study seeks to find
answers to the following four questions:
1. Does the level of resilience differ based on sex?
2. Is there a relationship between resilience and the big five personality traits?
3. Do the big five personality traits differ based on the level of resilience?
4. Do the big five personality traits predict resilience?

Granted, there are always problems and risk factors for developmental and mental health that cannot be easily eliminated. However, it seems important to promote individuals’ ability to confront, cope with and overcome hardships and thereby achieve positive outcomes and attain good developmental characteristics. In this respect, it is believed that the present study may contribute to the literature with respect to the role of personal traits in resilience through the aforementioned study questions and present findings as to whether the individuals’ personality traits provide hints for predicting their resilience levels.

**Method**

**Research Design**

Using a quantitative approach, the present study has been conducted based on a correlational descriptive study. The correlational model aims to present the relationships existing between two or multiple variables without interference. More detailed information can be obtained regarding the relationships between the variables by using various different techniques should the need arise (Cresswell, 2009).

**Research Sample**

The study group consists of the students enrolled in a full-time undergraduate program at Cumhuriyet University during the 2013–2014 academic year. The participants were selected via a purposeful sampling method. In a purposeful sampling method, the researcher attempts to collect samples from the individuals whom he/she believes to possess the required demographic characteristics of the study population (Johnson & Christensen, 2014). In this study, data was collected from 410 individuals. Twelve of whom had to be excluded from the study as they failed to fill out the scales properly, and the data obtained from 6 individuals had to be excluded from the analysis as they represented extreme values (such as <1% and > 99%). As a result, the analyses were performed on the data obtained from 392 individuals. The demographic details pertaining to the participants are presented in Table 1.
Table 1
Demographic Details of the Participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>F</th>
<th>%</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>21.43</td>
<td>1.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>238</td>
<td>60.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>154</td>
<td>39.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational School of Higher Ed.</td>
<td>116</td>
<td>29.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Science</td>
<td>77</td>
<td>19.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>71</td>
<td>18.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Economics and Adm. Sciences</td>
<td>59</td>
<td>15.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Letters</td>
<td>44</td>
<td>11.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Engineering</td>
<td>25</td>
<td>6.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>392</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Instruments and Procedures

In order to collect data, a personal information form containing questions regarding age, gender and department, a “Psychological Resilience Scale for Adults” (Friborg et al., 2005) and an “Adjective-Based Personality Test” were used. The Psychological Resilience Scale for Adults was regarded as one of the three best psychometric assessment instruments by Windle, Bennet and Noyes (2011) in their study evaluating 19 existing psychological resilience scales. The scale in question was adapted to a Turkish context by Basim and Cetin (2010). The adaptation study was conducted with the participation of 350 university students and 262 employees. As a result of the confirmatory factor analysis, a six factor model—containing the dimensions of “Perception of Self”, “Perception of Future”, “Structured Style”, “Social Competence”, “Family Cohesion” and “Social Resources”—was verified ($x^2= 1104$, $df=480$, $x^2/df=2.3$; RMSA=.055; TLI=.90; CFI=.91). It was found that the test-retest reliability coefficients of the scale’s sub-dimensions ranged from .68 to .81 while the internal consistency coefficients ranged from .66 to .81. The Social Comparison Scale and Control Focus Scale were used to test the compliance validity of the scale. The reliability coefficients were recalculated based on data obtained from the aforementioned test, and the internal consistency coefficients of the scale’s sub dimensions were found to have ranged between .52 and .73, while the Cronbach’s Alpha coefficient for the entire scale was established as .84. The scale, consisting of a total of 33 items, is a 5-point likert type scale, in which 16 items are reverse scored. The total score obtained from the scale represents the individuals’ psychological resilience levels.

The Adjective-Based Personality Test was developed by Bacanli, Ilhan and Aslan (2009), based on a five-factor model, as a result of the study conducted with the participation of 285 university students. As a result of the Exploratory Factor Analysis, it was established that the five factors accounted for 52.63% of the variance pertaining to the ABPT. The five factors in question include following: extroversion, neuroticism, conscientiousness, agreeableness and openness to experience. It was found that the test-retest reliability coefficients of the scale’s sub-dimensions ranged from .68 to .86,
while the internal consistency coefficients ranged from .73 to .89. The following scales and assessment tools were used to test the compliance validity of the scale: Sociotropy Scale, Reaction to Conflicts Scale, Negative-Positive Emotion Scale and Continuous Anxiety Inventory. The reliability coefficients were recalculated based on data obtained from the aforementioned test, as a result of which the Cronbach’s Alpha coefficients of the scale’s sub dimensions were found to have ranged between .68 and .85, while the Cronbach’s Alpha coefficient for the entire scale was established to be .85. The scale, consisting of opposite adjective pairs, contains 40 items. As such, the scale items are bipolar and the responses are scored on a Likert type scale of 1 to 7.

The scales were distributed among the participants, who were briefed as to the purpose of the study. The implementation period varied between 20 and 25 minutes at each session. After the implementation, the scales filled out by the participants were collected by the researcher.

Data Analysis

The SPSS 17.00 software pack was used in the analysis of the research data. Descriptive statistics were initially developed based on the available data. As a result of the analysis, it was established that the missing data was distributed randomly, which was then completed by using a series average. The results of the descriptive statistics showed that the arithmetic mean, median, and minimum and maximum values of the scores obtained by the participants on the resilience scale were 131.70 (SD=.85), 133, 89 and 163, respectively. The values of kurtosis and skewness were found to be -.52 and -.46, respectively. Lastly, the Histogram and Q-Q Plot were drawn, and it was observed that the distribution of scores was close to normal. In this respect, it can be argued that the findings thus obtained met the assumption of normality. Figure 1 shows the Histogram, whereas the Figure 2 presents the Normal Q-Q Plot.

Since the analysis results adequately met the criteria specified by Can (2014), the data was considered to have been distributed normally. In order to classify people as resilient or non-resilient, their total resilience median values were taken as a point of reference (Can, 2014). To compare resilience levels in terms of sex and personality traits
in terms of being resilient or non-resilient, an unrelated sample t-test was performed. A correlation analysis was conducted among the sub-dimensions of both scales as well as between the total resilience score and the sub-dimensions of personality traits for the purpose of testing the relationship between resilience and personality traits. As for testing whether personality traits predict the level of resilience, a multiple linear regression analysis was conducted according to an enter method.

**Results**

The first question of the study concerns whether the participants’ resilience levels differed significantly based on sex. Table 2 presents the analysis results below.

**p<.01

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The t-Test Results for the Scores Obtained From the Sub-Dimensions of Resilience Based on Sex</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>Percept. of Self</td>
</tr>
<tr>
<td>Percept. of Future</td>
</tr>
<tr>
<td>Structured Style</td>
</tr>
<tr>
<td>Social Compet.</td>
</tr>
<tr>
<td>Family Cohesion</td>
</tr>
<tr>
<td>Social Resource</td>
</tr>
<tr>
<td>Resilience Total</td>
</tr>
</tbody>
</table>

According to the analysis results, the scores of one particular sub-dimension of the scale, namely ‘perception of self’, present a statistically significant difference in terms of sex ($t_{(390)}$=-3.92, p <.01). The average scores obtained by the male participants in the perception of self sub dimension (M=24.83, SD=3.78) are significantly higher than those of the female participants (M=22.99, SD=4.99). That being said, no statistically significant difference was observed in terms of sex in the scores obtained from the sub-dimensions of perception of future, structured style, social competence, family cohesion or social resources. A comparison of the total resilience scores (TRS) in terms of sex, too, failed to present any statistically significant difference.

The second question of the study concerns whether there is a statistically significant relationship between the participants’ resilience levels and their personality traits. Table 3 presents the analysis results below.
Table 3

The Correlation between the Scores of Resilience and Personality Traits

<table>
<thead>
<tr>
<th>Variables</th>
<th>Neuroticism</th>
<th>Extroversion</th>
<th>Openness to Experience</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Self</td>
<td>-.30**</td>
<td>.39**</td>
<td>.32**</td>
<td>.09</td>
<td>.36**</td>
</tr>
<tr>
<td>Perception of Future</td>
<td>-.26**</td>
<td>.24**</td>
<td>.20**</td>
<td>.20**</td>
<td>.35**</td>
</tr>
<tr>
<td>Structured Style</td>
<td>-.13*</td>
<td>.13*</td>
<td>.16**</td>
<td>.20**</td>
<td>.48**</td>
</tr>
<tr>
<td>Social Competence</td>
<td>-.28**</td>
<td>.48**</td>
<td>.37**</td>
<td>.25**</td>
<td>.12*</td>
</tr>
<tr>
<td>Family Cohesion</td>
<td>-.24**</td>
<td>.13*</td>
<td>.13*</td>
<td>.18**</td>
<td>.23**</td>
</tr>
<tr>
<td>Social Resources</td>
<td>-.18**</td>
<td>.25**</td>
<td>.21**</td>
<td>.21**</td>
<td>.28**</td>
</tr>
<tr>
<td>TRS</td>
<td>-.35**</td>
<td>.41**</td>
<td>.35**</td>
<td>.28**</td>
<td>.44**</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Table 3, presenting the correlation between the participants’ scores of resilience and personality traits, reveals relationships between the sub-dimensions of resilience and personality traits at various different levels. According to the findings, there are statistically significant relationships among all personality traits save for the sub-dimensions of perception of self and agreeableness (ranging from r=.30 to r=.39). Statistically significant relationships were established between the sub-dimension of perception of future and all the sub-dimensions of personality traits (ranging from r=-.26 to r=.35). Similarly, statistically significant relationships were established between the sub-dimension of structured style and all the sub-dimensions of personality traits (ranging from r=-.13 to r=.48). Statistically significant relationships were found between the sub-dimension of social competence and all the sub-dimensions of personality traits (ranging from r=-.28 to r=.48). Statistically significant relationships were identified between the sub-dimension of family cohesion and all the sub-dimensions of personality traits (ranging from r=-.24 to r=.23). Lastly, statistically significant relationships were established between the sub-dimension of social resources and all the sub-dimensions of personality traits (ranging from r=-.18 to r=0.28). Moreover, the following types of relationships were established between the TRS and the following five personality traits: a moderately negative and significant relationship between the TRS and neuroticism (r=.35); a moderately positive and significant relationship between the TRS and extroversion (r=.41); a moderately positive and significant relationship between the TRS and openness to experience (r=.35); a low positive and significant relationship between the TRS and agreeableness (r=.28); and a moderately positive and significant relationship between the TRS and conscientiousness (r=.44). According to these findings, the scores of extroversion, openness to experience, agreeableness and conscientiousness increase...
proportionally with an increase in the resilience scores, while the scores of neuroticism decrease by the same ratio.

The third question of the study concerns whether the big five personality traits differ depending on individuals’ being resilient or not. Those who were below the median value (median= 133.00) were classified as non-resilient individuals, while those at and above the median value were classified as resilient individuals. According to this classification, the average scores of non-resilient individuals were found as $M=117.36$ (SD=11.60), and the average scores of resilient individuals as $M=144.92$ (SD=7.61). Table 4 presents the analysis results below.

### Table 4

*The t-Test Results for the Big Five Personality Traits in terms of Resilience*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Non-resilient (N=188)</th>
<th>Resilient (N=204)</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>26.20 (SD=7.56)</td>
<td>21.65 (SD=7.06)</td>
<td>390</td>
<td>6.17**</td>
<td>.00</td>
</tr>
<tr>
<td>Extroversion</td>
<td>44.41 (SD=9.84)</td>
<td>51.02 (SD=7.69)</td>
<td>390</td>
<td>-.745**</td>
<td>.00</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>39.56 (SD=7.50)</td>
<td>44.24 (SD=5.86)</td>
<td>390</td>
<td>-.691**</td>
<td>.00</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>46.53 (SD=8.78)</td>
<td>50.63 (SD=8.51)</td>
<td>390</td>
<td>-.470**</td>
<td>.00</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>35.90 (SD=7.39)</td>
<td>41.37 (SD=5.80)</td>
<td>390</td>
<td>-.819**</td>
<td>.00</td>
</tr>
</tbody>
</table>

**p <.01

According to the results of the analysis, all the sub-dimensions of big five personality traits present statistically significant differences based on being resilient or non-resilient. The average scores of non-resilient individuals in the sub-dimensions of extroversion ($t_{(390)}$=-7.45, p<.01), openness to experience ($t_{(390)}$=-6.91, p<.01), agreeableness ($t_{(390)}$=-4.70, p<.01) and conscientiousness ($t_{(390)}$=-8.19, p<.01) are lower than those of resilient individuals. Only the average scores of non-resilient individuals in the sub-dimension of neuroticism are higher than the average scores of resilient individuals ($t_{(390)}$ = 6.17, p<.01).

The fourth question of the study concerns whether the participants’ personality traits predict their resilience levels. In this respect, a multiple linear regression analysis was performed by entering the five dimensions of personality traits into the analysis as predictor variables. The initial analysis found that the dimensions of agreeableness ($B=.03, SE_{B} = .09, \beta =.02, t=.35, p>0.05$) and openness to experience ($B=.10, SE_{B} = .14, \beta =.04, t=.74, p>0.05$) were not statistically significant predictors of resilience level. Having removed the dimensions of agreeableness and openness to experience from the analysis, the results of the subsequently conducted analysis are presented in Table 5 below.
The results reveal a statistically significant relationship between the variables of conscientiousness, neuroticism and extroversion and the participants’ resilience scores \((R=.58, R^2=.34, p<.01)\). These three personality traits together account for 34% of the total variance in resilience \((F(3,388)=66.73, p<.01)\). According to the standardized regression coefficient \((\beta)\), the order of relative importance of predictor variables on resilience is as follows: neuroticism \((\beta=-.30, p<.01)\), conscientiousness \((\beta=.30, p<.01)\) and extroversion \((\beta=.25, p<.01)\).

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SEa</th>
<th>ß</th>
<th>t</th>
<th>p</th>
<th>Zero-ord. r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>98.91</td>
<td>5.05</td>
<td></td>
<td>19.58</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.70</td>
<td>.11</td>
<td>.30</td>
<td>6.35</td>
<td>.00</td>
<td>.44</td>
<td>.31</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-.67</td>
<td>.09</td>
<td>-.30</td>
<td>-7.31</td>
<td>.00</td>
<td>-.35</td>
<td>-.35</td>
</tr>
<tr>
<td>Extroversion</td>
<td>.45</td>
<td>.08</td>
<td>.25</td>
<td>5.36</td>
<td>.00</td>
<td>.41</td>
<td>.26</td>
</tr>
</tbody>
</table>

The results reveal a statistically significant relationship between the variables of conscientiousness, neuroticism and extroversion and the participants’ resilience scores \((R=.58, R^2=.34, p<.01)\). These three personality traits together account for 34% of the total variance in resilience \((F(3,388)=66.73, p<.01)\). According to the standardized regression coefficient \((\beta)\), the order of relative importance of predictor variables on resilience is as follows: neuroticism \((\beta=-.30, p<.01)\), conscientiousness \((\beta=.30, p<.01)\) and extroversion \((\beta=.25, p<.01)\).

### Discussion and Conclusion

This study was conducted based on the premise that resilience is the product of the interaction between personal traits and environmental conditions. This study examined whether the resilience scores differed based on sex, if there was a relationship between the sub dimensions of resilience and the sub dimensions of the big five personality traits, whether the sub dimensions of personality traits differed depending on individuals being resilient or not resilient and whether the big five personality traits were instrumental in predicting resilience levels.

After having developed descriptive statistics based on the available data, an unrelated sample t-test analysis was performed to compare the resilience scores in terms of sex. As a result of the analysis, it was found that the average scores of resilience sub-dimensions did not differ significantly based on sex except for the dimension of perception of self. In a similar vein, the TRS failed to present a significant different based on sex. The finding that resilience scores did not differ in any sub-dimension with the exception of perception of self is consistent with the findings of previous studies (Chan, 2003; Crowley et al., 2003; Cetin et al., 2015; Harrison et al., 2002; Maddi et al., 2006). The fact that male participants’ scores in the sub-dimension of perception of self were higher than that of female participants may have to do with the societal characteristics of the group participating in the study. Boys are still, to some extent, favored over girls in undereducated Anatolian families, especially in rural areas, and this attitude is evidently influential in raising children in said regions.
Thus the aforementioned fact may have played a role in driving male participants to present a more positive self-perception as compared to the female participants.

The present study also examined the relationship between the sub-dimensions of resilience and the sub-dimensions of personality traits by using the correlation technique. As a result of the analysis, a relationship was established in both groups of variables at various levels. This finding, in general, supports the notion that resilience is related to personality traits. The fact that the neuroticism dimension of personality traits is in a negatively significant relationship with all the sub-dimensions of resilience is consistent with the findings of previous studies (Campbell-Sills, et al., 2006; Cetin et al., 2015; Friborg et al., 2005; Shi, Liu, Wang, & Wang, 2015). Resilience is about being capable of finding a balance and moving on in a short space of time following stressful life events. The sub-dimensions of neuroticism, on the other hand, include such qualities as negative emotions, anxiety, insecurity, weak coping skills and having difficulty maintaining control over one’s impulses. While individuals with higher neuroticism levels are more easily affected by emotional stress and the cases of affective disorder, those with lower neuroticism levels are capable of coping with stress a lot easier and have the ability to preserve and maintain their emotional balance (Costa & McCrae, 1992). In this respect, it is not that surprising that there should be a negative relationship between the scores of neuroticism and resilience.

On the other hand, a statistically significant and positive relationship was established between almost all the sub-dimensions of resilience and the remaining personality traits: extroversion, openness to experience, agreeableness and conscientiousness. Such findings are consistent with the findings of previous studies. (Campbell-Sills et al., 2006; Cetin et al., 2015; Friborg, et al., 2005; Shi et al, 2015). Since extroversion involves predisposition to positive emotions, maintaining close interpersonal relationships, high social interaction skills and activities, it is expected to be relevant to resilience. It can be argued that positive emotions play a significant role particularly in enabling individuals to deal with stressful experiences (Tugade & Fredrickson, 2004). Since the individuals who possess positive emotions have a wide variety of intellectual and practical tools at their disposal even under stressful situations, such experiences may even further strengthen their resilience (Fredrickson, 2001). Having the ability to think more flexibly and possessing a wider range of options, it stands to reason that extroverted individuals will have more personal resources to employ when faced with challenges and hardships. Moreover, thanks to social skills and maintaining close personal relationships, extroverted persons will also have the advantage of reaching out for the social support they need when coping with hardships. Therefore, their tendency to build strong social support networks makes it easier for extroverted individuals to attain such important protective factors in times of stress (Rutter, 1985). Of the aforementioned personality traits, openness to experience is perhaps the most difficult dimension to identify, and the scholarly debates regarding this dimension are still ongoing (Somer, 1998). Those who are open to experience stand against rigid rules, do not tend to obey rules without questioning them; have a critical mind, are not conservative in orientation, and are willing to
experience new and different things; they tend to be intellectual, autonomous, independent and unique in their own right. In this respect, the ability on the part of the individuals who are open to experiences to take a critical stance in the face of challenging life events, to have the courage to try out different options, and to be willing to come up with their own solutions and be creative may explain why they are more resilient than other types of people. Agreeableness is yet another personality trait that is related to resilience. Agreeable individuals are compassionate, helpful, open to cooperation and courteous. Such qualities they possess may play a role in enabling them to experience less conflict in their interpersonal relationships, to be accepted more eagerly by their social environment and receive more emotional support therefrom. The individuals receiving more support are expected to be more resilient. The last personality trait that is related to resilience is conscientiousness. Conscientiousness is characterized by being plan-oriented, organized, patient, diligent, tenacious and resolute. Conscientious individuals are goal-driven and success-oriented people who zero in on their objectives and take action. Conscientiousness enables individuals to both take action and focus on certain points. While the desire for success and single-mindedness diligence represent the progressive side of conscientiousness, being guarded and scrupulous is related to being focused (Somer, 1998). Therefore, such individuals have a significant potential that will help them achieve success. It can be suggested that such individuals are equipped with significant qualities that are likely to help them overcome undesirable circumstances when faced with challenging life events. From this perspective, conscientiousness can be regarded as a quality that contributes to their level of resilience.

The third step of this study involved the comparison of the scores obtained from the sub-dimensions of personality traits based on the classification of resilient/non-resilient by using the unrelated samples’ t-test. As a result of the analysis, it was established that all the sub-dimensions of personality traits significantly differed in terms of being resilient or non-resilient. While the average scores of those who were classified as resilient individuals in terms of four personality traits (extraversion, openness to experience, conscientiousness and agreeableness) were significantly high, the average scores of those who were classified as non-resilient individuals in terms of only one personality trait (neuroticism) was significantly high as well. In their study where they compared resilient and non-resilient individuals, Riolli, Savicki and Cepani (2002) found statistically significant differences in the dimensions of neuroticism, openness to experience, conscientiousness and extraversion. In a similar vein, addressing the subject matter of resilience at three different levels (low, medium and high), Davey, Eaker and Walters (2003) found statistically significant differences in all dimensions of big five personality traits, which appear to be in parallel with the findings of this study. This particular finding of the study appears to be in support of the theoretical explanations. While resilient individuals are more extroverted, open to experience, conscientious and agreeable, the non-resilient individuals may be more neurotic in comparison.
Finally, a multiple linear regression analysis was conducted to test whether the big five personality traits predict resilience. The initial analysis result suggested that the dimensions of agreeableness and openness to experience were not significant predictors of resilience. The second analysis conducted thereafter found that the dimensions of conscientiousness, neuroticism and extroversion accounted for 34% of the total variance of resilience. The order of the relative importance of variables is as follows: neuroticism, conscientiousness and extroversion. This finding appears to be consistent with the findings of Nakaya et al. (2006), who conducted a study on adolescents, and the findings of the study conducted by Campbell-Sills et al. on young adults. Again, in the study where Cetin et al. (2015) examined the role of big five personality traits in account for resilience, they calculated the canonical loadings of variables and found that the dimensions of extroversion, neuroticism and self-discipline played a role in accounting for resilience. Renowned for their studies on the topic of resilience, Werner and Smith (2001) suggest that resilient individuals possess high social skills. Extroverted individuals are those who enjoy being in social environments, leave a positive impression on others and have the ability to smoothly engage in social interaction. In this respect one can predict that people having such social skills will be likely to have higher levels of resilience. Extroverted people are equipped with social skills and resources that will help them get the support they need whenever they are forced to cope with hardships. By this line of reasoning, it can be argued that extroversion may have a role in shaping resilience. The second personality trait that is regarded as an important predictor of resilience is neuroticism. Neurotic individuals tend to have a more negative self-perception of themselves, a lower self-respect, poor skills of organizing their emotions; they may find it harder to come to grips with the experiences that others take for granted and thus they may despair more easily. In this respect, the prevalence of qualities associated with neuroticism would appear to have a negative correlation with resilience. The third personality trait that predicts resilience is conscientiousness. Conscientious individuals are plan-oriented, patient and diligent (Werner & Smith, 1992). Owing to such characteristics, they may persist in their resolve and maintain their success even in the face of setbacks and inhibitions. Therefore, more conscientious individuals are expected to be more resilient.

In conclusion, it can be argued that the findings of this study present indicators suggesting that the big five personality traits can be employed functionally to account for resilience. Due to the fact that the findings of this study are consistent with those of the domestic and international literature, it can be suggested, as stated by Çetin et al. (2015), that the analysis offers evidence as to the generalizability of characteristics pertaining to resilience and personality. That being said, and as mentioned earlier, recent studies on resilience have mostly focused on contextual conditions. However, it can be argued that the notion put forward by the first wave of studies into resilience—that personality traits are a significant predictor of resilience—is still a valid one. The relatively stable personality traits that people possess are the significant determinants of their resilience levels. Moreover, the fact that personality traits only predict a certain percentage of resilience can be taken to mean that some other personal characteristics and contextual conditions other than personality traits may be at work.
in determining resilience. This points to the suggestion made by Deater-Deckard, Ivy and Smith (2005) that resilience is not an innate characteristic, nor something that is acquired through experience; but rather, it is a product of the mutual interaction of the both elements.

Lastly, it should be mentioned there are some limitations to this study. First of all, the study group does not represent the entire population. For this reason, caution should be exercised in making generalizations of any kind. Second, by the very nature of the cross-sectional study pattern, it is possible to make a number of statements merely on the basis of the relationship between the variables. Third, since the data of this study is based mostly on the personal statements provided by individuals, one should not lose sight of the fact that there can always be a certain degree of margin of error in them.

A focus on longitudinal studies is encouraged for future research on the subject matter. Moreover, it is recommended that personality traits be addressed through various perspectives other than that of the big five; the subject matter be re-examined with different groups; and intercultural comparative studies, in particular, be carried out. Beyond a shadow of a doubt, an increase in volume and depth of studies on resilience will continue to provide significant data particularly in the field of developmental and mental health.

References


Beliren Yetişkinlik Döneminde Dayanıklılığın Büyük Beşli Kişilik Özellikleri ile İlişkisi

Ateş:


Özet

Problem Durumu: Dayanıklılık, pozitif psikoloji alanının önemli araştırma konularından biridir. Konuya ilişkin henüz bütüncül bir kuram ortaya konamasa da çeşitli modeller ileri sürülmekte ve kavramın farklı tanımları yapılmaktadır. Bununla birlikte kavramın genel olarak bireyle rlerin gelişim ve uyumlarının ciddi şekilde tehdit altında olduklarını durumda bile olumlu çıktıların şekillenmesine yol açacak bir grup özelliği tanımlamak için kullanıldığı söylenebilir.


**Araştırmanın Bulguları:** Araştırmanın ilk bulgusu, dayanıklılık ölçüleri kendiliği alt boyutu puanlarının, cinsiyete göre anlamlı bir farklılık gösterdiği şeklindedir ($t_{(390)}=-3.92$, $p<.01$). Erkeklerin kendilik algısı puan ortalamaları, kadınların kendilik algısı puan ortalamalarından anlamlı düzeyde yüksektir. Bununla birlikte gelecek algısı, yapısal stil, sosyal yeterlilik, aile uyumu ve sosyal kaynaklar alt boyutları cinsiyete göre anlamlı farklılık göstermemektedir.

Araştırmanın ikinci bulgusu, dayanıklılık ölçüleri kendiliği alt boyutu ile uyumluluk alt boyutu arasında kalan bütün kişilik özellikleri arasında anlamlı ilişkiler görülmüştür ($r_{(390)}=-.30$ ile $r_{(390)}=.36$). Gelecek algısı alt boyutu ile kişilik özelliklerinin bütün alt boyutları arasında anlamlı ilişkiler bulunmaktadır ($r_{(390)}=-.26$ ile $r_{(390)}=.35$ arası). Yine yapısal stil alt boyutu ile kişilik özelliklerini alt boyutlarının hepsi arasında anlamlı ilişkiler ortaya çıkmıştır ($r_{(390)}=-.13$ ile $r_{(390)}=.48$ arası). Sosyal yeterlilik alt boyutu ile kişilik özelliklerini alt boyutlarının tamamı anlamlı ilişkiler göstermiştir ($r_{(390)}=-.28$ ile $r_{(390)}=.48$ arası). Aile uyumu ve sosyal kaynaklar alt boyutu ile kişilik özelliklerini alt boyutlarının hepsi arasında anlamlı ilişkiler ortaya çıkmıştır ($r_{(390)}=-.18$ ile $r_{(390)}=.28$ arası). Bu çalışmaların yanında dayanıklılık ölçülerinden elde edilen toplam puan (DTP) ile nevrotiklik puanları arasında orta düzeyde negatif ve anlamlı ($r_{(390)}=.35$), DTP-dışadönüklük arasında orta düzeyde pozitif ve anlamlı ($r_{(390)}=.41$), DTP-deneyime açıklık arasında orta düzeyde pozitif ve anlamlı ($r_{(390)}=.35$), DTP-uyumluluk arasında düşük düzeyde pozitif ve anlamlı ($r_{(390)}=.28$) DTP-sorumluluk arasında orta düzeyde pozitif ve anlamlı ($r_{(390)}=.44$), ilişkiler olduğu sonucuna ulaşılmıştır.

Araştırmanın üçüncü bulgusu, dayanıksız bireylerin kişilik özelliklerinin dışadönüklük ($t_{(390)}=-7.45$, $p<.01$), deneyime açıklik ($t_{(390)}=-6.91$, $p<.01$), uyumluluk ($t_{(390)}=-4.70$, $p<.01$) ve sorumluluk ($t_{(390)}=-8.19$, $p<.01$) alt boyutlarının puan ortalamalarının, dayanıklı bireylerin puan ortalamalarından daha düşük olduğunu göstermektedir. Sadece nevrotiklik alt boyutunda dayanıksız bireylerin puan ortalamaları dayanıklı bireylerin puan ortalamalarından daha yüksektir ($t_{(390)}=6.17$, $p<.01$).

Araştırmanın dördüncü bulgusu, sorumluluk, nevrotiklik ve dışadönüklük değişkenlerinin birlikte katılımcıların dayanıklılık puanları ile anlamlı ilişkiler gösterdiğini tespit edilmiştir ($R=.58$, $R^2=.34$, $p<.01$). Üç kişilik özelliği birlikte dayanıklılıktaki
toplam varyansın %34’ünü açıklamaktadır ($F(3,388)=66.73$, $p<.01$). Standardize edilmiş regresyon katsayısına ($\beta$) göre yordayıcı değişkenlerin dayanıklılık üzerindeki görelı önem sırası nevrotiklik ($\beta=-.30$, $p<.01$), sorumluluk ($\beta=.30$, $p<.01$) ve dışadönüklüktür ($\beta=.25$, $p<.01$).

**Araştırmanın Sonuç ve Önerileri:** Sonuç olarak elde edilen bulguların, dayanıklılığı açıklamada büyük ölçüde kişilik özelliklerinin işlevsel olarak kullanılabileceğine ilişkin göstergeleyici olduğunu dile getirebilir. Bulguların ulusal ve uluslararası alan yazılarda tutarlılık göstermesi, dayanıklılık ve kişilikle ilgili özelliklerin genellenebilirliğiine ilişkin kanıtlar sunduğunu şeklinde yorumlanabilir. Araştırmanın sonuçları, dayanıklılık konudaki çalışmaların birlikte birlikte bulgulara dayalı olarak, kişisel özelliklerin de dayanıklılığın önemli bir etken olduğunu gösterdiği varsayımı destekleyebilir. Kişilerin sahip oldukları nevrotik, sorumluluk, dışadönüklü kişilik özelliklerinin dayanıklılığın sadece belirleyici bir etken olduğunu gösterdiği ve dayanıklılığın sadece doğrultusunun, belirli bir yüzdesini yordadığı bulgusu, kişilik özellikleri dışındaki belirleyicilerin ve bağlamalarda dayanıklılığın ilişkisini işaret ettiği şeklinde yorumlanabilir. Bu durumda dayanıklılık ne sadece doğrultusunun getirilen bir özellik, ne de deneyimle kazanılır; dayanıklılık her iki ögenin karşılıklı etkileşiminin bir ürünüdür.