The Relationship Between Resilience Degree and Perceived Parental Relationship, Cognitive Emotion Regulation and Personality Traits in the Emerging Adulthood *

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Abstract

This study examines the relationships between resilience level and perceived parental relationship, cognitive emotion regulation, and personality traits in emerging adulthood. The sample of the research consists of undergraduate students whose age range is 18-25. The study was conducted with 609 people, 317 (52%) female and 292 (48%) male students. Resilience Scale (RS), The Barrett-Lennard Relationship Inventory (BLRI), Cognitive Emotion Regulation Questionnaire (CERQ), Big Five Inventory (BFI) and Demographic Information Form were applied to the participants. One-way ANOVA analysis, Pearson's Correlation Coefficient Analysis and Hierarchical Linear Regression analysis were used to analyse the data. In the study, resilience mean scores of female students were found to be higher than male students. A positive relationship was found between the resilience scores of university students and their perceived parental relationship scores. A significant negative relationship was found with self-blame, which is the sub-dimension of cognitive emotion regulation. A positive and significant relationship was found with the other sub-dimensions of cognitive emotion regulation, respectively; acceptance, rumination, positive refocusing, re-focus on the plan, positive reappraisal, putting into perspective, other-blame and catastrophising. At the same time, a significant positive correlation was found between resilience scores and personality traits dimensions. According to the hierarchical regression analysis findings, it was concluded that perceived parental relationship, especially perceived father relationship, the catastrophising sub-dimension of cognitive emotion regulation, and personality traits predicted resilience. The study findings were discussed according to the relevant field, and recommendations were presented.

Keywords: Resilience, Perceived Parental Relationship, Cognitive Emotion Regulation, Personality.

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INTRODUCTION

Emerging adulthood is a period in which the person tries to explore him/herself, the search for identity continues, many opportunities and options in love, education, work and world views are compared and evaluated (Arnett, 2004). The emerging adulthood period is defined as a period in which positive and negative effects occur in terms of providing the opportunity to shape certain aspects of life, and it may provide a more durable life or may end up with destructive results for the person (Werner, 2005). Many changes and stresses of the emerging adulthood period suggest a level of endurance, which is thought to be related to the concept of the resilience of individuals. Today, the concept of resilience and resilient personality trait appears as an issue emphasised and started to be discussed more frequently in many areas, from traumatic events to daily stressful events. Resilience corresponds to the definitions of self-recovery, ability to overcome difficulties, having endurance and quick recovery (Bezmez, Blakney, & Brown, 1999). Resilience is defined as the ability to shape the capacity of change and adaptation in healthy and constructive ways when faced with stressful situations (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002). The concept of resilience, which is a process product rather than a specific prototype and can be shaped by daily decisions, is considered the ability to overcome the situation instead of being vulnerable to stress (Masten, 2001). In situations considered as personality traits, it is seen that resilience is considered as one of the factors that make up the personality structure in some studies. In some studies, it is examined independently from personality. Although resilience has been addressed in different studies according to many factors, it is noteworthy that the variables affecting the resilience process are relatively less discussed. (Werner & Smith, 2001; Gizir, 2004; Gooding, Hurst, Johnson, & Tarrier, 2012; Lee et al., 2013; Erarslan, 2014; Tozer et al., 2015). The present study aims to address the level of resilience in the context of the development process, perceived parental relationships, emotion regulation strategies and personality traits. In tendencies that treat resilience as a process rather than a specific character trait, resilience; described as a complex concept consisting of risk and protective factors at the individual, family, and society level. Resilience is evaluated based on a secure base, good self-esteem and self-efficacy (Fiona, 2011). While some people may adapt well in the face of difficulties, some people may have trouble adapting. Examining individual differences gives an idea about the risk, and protective factors are (Garmezy, 1983). Gürgan (2006), the risk factors considered within the scope of resilience; In the context of individual factors, negative experiences, illnesses, familial factors, physical diseases or psychopathologies of the parents, separation of parents, early loss of one or both parents, negligent parental attitudes. Environmental risk factors include factors such as homelessness, unemployment, substance use and academic failure. Conditions and processes that try to regulate the negative effects of risk factors are defined as protective factors. Protective factors help reduce risks, mitigate the effects of risk factors, and expand coping skills (Carbonell et al., 2002). Protective factor groups are divided into three groups as individual (internal), family and environmental (situational) (Brooks, 1994). Family and school are among the most important protective factors affecting resilience. The supportive parent and school environment, the care provided to the child, commitment, openness, being a positive role model, and the absence of risk factors are critical (Trufino, 2010). In a study by Zakeri, Jowkar and Razmjooee (2010), the relationships between parenting styles and resilience were examined. According to the results, a positive and significant relationship was found between accepting and participatory parenting style and resilience. In another study conducted by Yalım (2007), with students in their first year of undergraduate education, the relationship between coping styles, resilience, optimism and gender was investigated. It was found that high scores from resilience and optimism predicted the ability to adapt to the university. Transitioning from high school to university years may involve many stressful situations, both due to their transition to a different stage as a developmental period and being exposed to new life events different from their everyday lives (Yorke, 2000). For some, living in a dormitory or a house on their own corresponds to a life event that they have not encountered before. Considering emotional stress factors such as school change, separation from friends and social environment, and family breakup, it points to the existence of a challenging process as both an age period and a new life event.
Perceived Parental Relationship

The perceived parental relationship is another variable examined in the scope of the study. The family is accepted as the most critical structure in the child's life, and the relationship between the child and the family affects the child's emotional health (Mahalihali, 2006). A good parent-child relationship has the potential to strengthen the child's healthy social relationships and at the same time prevent the negative effects of events including risks and problems (Masten & Powell, 2003). According to Fergusson and Horwood (2003), the child's resilience is placed on a tighter foundation thanks to a warm, nurturing, supportive relationship with the parent. According to Rohner (2000), parents' empathic approach and effective communication are used to raise resilient children who can cope with difficulties; it is expected that parents adopt a style that guides children in issues including taking decisions and responsibilities, and that parents set realistic expectations and goals and have problem-solving approach rather than being demanding parents. A positive home environment and warm family relationships are considered as dimensions associated with resilience (Bowes, Maughan, Caspi, Moffitt, & Arseneault, 2010). Parents' positive and supportive attitudes are among the crucial factors that shape the child's emotions and emotional development (Eisenberg et al., 2005). Baumrind (1996) determined three typologies regarding parental attitude are grouped as democratic style, authoritarian style, and permissive style. In a democratic family environment, it is stated that individuals can develop ideas as opposed to their parents and adopt different types from them; however, their ties with their families are not damaged. Parents with authoritarian attitudes can often have a strict and disciplined attitude towards their children. The permissive parenting style is considered a parental structure in which the expectations demanded from children is low (Maccoby & Martin, 1983). In a study conducted by Farrant et al. (2012) with 72 children, it was stated that the empathy level of mothers was associated with directing their children to be open to the perspective of others, and empathic parenting predicted higher social behaviours for the advanced ages of children. In a study conducted by Jaffe et al. (2009), the relationships between temperament and perceived parental behaviours and emotion regulation strategies were examined in 293 children. Research findings revealed the importance of the family environment in which there is nurturing and supportive care in creating harmonious emotion regulation strategies regardless of temperament type. In the study conducted by Gürçan (2015), the relationships between perceived parental relationship, ego differences, personality structures and psychological well-being were examined. According to the study's findings, a significant relationship was found between perceived parental relationship, ego differences, personality structures and psychological well-being. In addition, it was concluded that personality structures play a mediator role in self-differences and psychological well-being.

Cognitive Emotion Regulation

Cognitive emotion regulation is another variable investigated within the scope of the research. The ability to flex or delay a person's reactions in situations they encounter is called emotion regulation (Cole, Michel, & Teti, 1994). Emotion regulation includes controlling and regulating behavioural, internal and external components (Zeman, Cassano, Perry-Parrish, & Stegall, 2006). The cognitive strategies of emotion regulation consist of nine categories: self-blame, acceptance, rumination, positive refocusing, positive reappraisal, putting into perspective, catastrophising, and other-blame (Garnefski, Kraaij, & Spinhoven, 2001). Parents participate in their children's emotional regulation during the emotional development process by trying various ways, such as being directly involved with selective reinforcement or being a model. In this process, the values and beliefs of the parents give the children an idea about the acceptable feelings or the feelings that should be ignored. Thus, the emotional culture of the child begins to form (Gordon, 1989). Parents who are open to their children's emotional reactions/expressions and accept their emotions play a role in supporting the child's emotional awareness and emotion regulation strategies (Schultz, Izard, Ackerman, & Youngstrom, 2001). If children feel parental support when they express their negative emotions, they can use more effective strategies in coping with similar difficulties (McDowell & Parke, 2000). Otherwise, emotional arousal may increase, and avoidance of emotions may occur in children whose negative emotions are punished (Eisenberg, Cumberland, & Spinrad, 1998). It is suggested that in the early period, the emotional climate, the quality of parent and child relationship affects children.
positively, and children who grow up in a positive emotional home environment prefer constructive emotion regulation strategies more than children who grow up in environments with anger and hostility (Halberstadt & Eaton, 2003). When children of overprotective and controlling families express their negative emotions, parents can direct their children to negative emotion regulation strategies (Bell & Calkins, 2000; Fox & Calkins, 2003). When children who grow up in families with supportive family attitudes express their negative emotions, parents can verbally direct their children to emotion regulation strategies that support, encourage, distract and encourage problem-solving (Calkins & Johnson, 1998). In the study conducted by Aldao, Nolen-Hoeksema, and Schweizer (2010), the relationships between emotion regulation strategies (acceptance, avoidance, problem-solving, refocusing, rumination and suppression) and psychopathology (depression, anxiety, eating disorders) were examined. Avoidance and rumination were positively associated with psychopathological symptoms; On the other hand, acceptance and problem-solving strategies were found to be negatively related. Another study by Duartea, Matosb, and Marquesc (2015) examined the relationship between cognitive emotion regulation strategies and depressive symptoms in adolescents. It was found that female participants tend to prefer rumination and self-blame strategies among emotion regulation strategies when experiencing negative life events. It was found that getting high scores from the positive reappraisal dimension of cognitive emotion regulation strategies was associated with positive mood. In another study by Akyunus-İnce (2012), the effects of personality traits, cognitive emotion regulation, and interpersonal problems on the cognitive dimension in personality disorders were examined. The research findings showed that personality traits, openness to experience, and neuroticism were related to cognitive emotion regulation. Openness to experience was found to be associated with positive cognitive emotion regulation and neuroticism with negative cognitive emotion regulation. In a study by Birttek (2019), the relationships between social anxiety symptoms and personality traits, coping styles, and cognitive emotion regulation strategies were examined. According to the research findings, among the predictors of social anxiety, the helpless approach and submissive approach, which are among the styles of coping with stress were found; on the other hand, self-blame and reducing the value of the event were found to be among the cognitive emotion regulation strategies.

Personality Traits

Personality traits are another variable examined within the scope of the research. Personality is defined as a person's responses that differ from someone else in cognitive, emotional and physical areas, and these responses represent consistent behavioural patterns at a certain level (Burger, 2006). In this context, the commonly used Five-Factor Model tries to understand the sources of individual differences (McCrae & John, 1992). Five factors and features are thought to be; extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. In the study conducted by Gresham and Gullone (2012), the relationships between the five-factor personality model, parent attachment styles and emotion regulation strategies were examined. The study concluded that male participants used emotion suppression strategy more than female participants, and getting higher scores on the dimensions of extraversion and openness to experience predicted the use of cognitive positive reappraisal emotion strategy. The relationship between emotion regulation and parental attachment concluded that getting lower scores in attachment to parent dimensions than communication dimension and higher scores in avoidance dimension was related to emotion suppression strategy. In another study by Çetin, Yeloğlu, and Basım (2015), it was found that the participants with high levels of extraversion, conscientiousness, openness to experience and agreeableness personality traits, had high levels of resilience; however, the neuroticism dimension was found to be related in the opposite direction.

In the literature, resilience is discussed from many different perspectives. In the present study, resilience will be considered together with a development period. Although the studies conducted so far have revealed different variables related to resilience, there are very few studies examining the parental relationship, cognitive emotion regulation strategies and personality traits in terms of resilience. In this context, the study's primary purpose is to explore how the level of resilience is
related to: the perceived parental relationship, the agreeableness degree, empathy, cognitive emotion regulation strategies, and personality traits.

The questions formed in line with the general purpose of the research are listed below.

1. Do the resilience scores of the university students differ significantly according to the students' demographic variables?

2. Is the resilience level of university students related to the perceived parental relationship, cognitive emotion regulation and personality traits?

3. Does the parental relationship of university students predict their level of resilience?

4. Do university students' emotion regulation scores predict resilience levels significantly?

5. Do the five-factor personality traits of university students predict their level of resilience significantly?

**METHOD**

**Research Design**

The relational screening model, which aims to determine the existence and degree of change between two or more variables, was used as the research design (Karasar, 2018).

**Participants**

The working group consists of 609 university students who continue their preparatory and undergraduate education at Dicle University in the 2019-2020 academic year. There are 317 (52%) female and 292 (48%) male students in the sample. The age range of the participants in the sample is 18-25, and the average age is 21.6. Half of the sample is attending the preparatory and first year, while the other half is in the 2nd, 3rd and 4th year. 26% of the participants started university in their first year. Half of the sample has spent most of his life in Istanbul, Ankara, Izmir or the big city.

**Demographic Information Form**

In the form prepared by the researcher in order to learn the demographic information of the participants, the participants were asked about their age, gender, department, study year, whether they were placed in the university in the first year, educational status of their parents, whether they received psychological help before or not etc.

**Resilience Scale (RS)**

The resilience scale was developed by Gürgan (2006). There are 50 items on the scale, and the items have a Likert-type scale ranging from 1 to 5. High scores from the scale can range from 50 to 250 and the scores obtained indicate the resilience level of university students. In the conducted studies, the Cronbach Alpha coefficient is respectively 0.78 and 0.87. The Cronbach alpha coefficients of the scale according to 8 factors are as follow; personal power: 0.89, initiative: 0.82, positive outlook: 0.80, relationships: 0.77, foresighted: 0.75, purpose in life: 0.72, leadership: 0.68, investigative: 0.66. The Cronbach's Alpha coefficients of the current study were found as personal power: 0.94, initiative: 0.89, positive outlook: 0.74, relationships: 0.69, foresighted: 0.59, purpose in life: 0.68, leadership: 0.64, investigative: 0.58.

**Barret-Lennard Relationship Inventory (BLRI)**

Barrett-Lennard Relationship Inventory (BLRI) is a tool initially developed by Barrett-Lennard (1964) to measure the quality of the therapist-client relationship based on the Rogerian
Psychotherapy approach. The scale was used to understand the relationship between the therapist-client and adapted to examine interpersonal relationships, including romantic partner, parent, friend, and teacher relationships. The Barrett-Lennard Relationship Inventory consists of 64 items with four factors: five postulated factors of advice-giving, empathy, unconditionality of regard, and congruence (Barrett-Lennard, 2015). The adaptation study of BLRI to Turkish was done by Gürçan (2015). The internal consistency coefficients of the scale were calculated separately for the mother and father forms. For the mother form, the Cronbach Alpha coefficients for advice-giving, empathy, unconditionality of regard and congruence were respectively; .93, .90, .77 and .88. For the general form, the Cronbach Alpha coefficient of BLRI is .96 for both mother and father forms. In the present study for the mother form, the Cronbach Alpha coefficients for advice-giving, empathy, unconditionality of regard and congruence were respectively; .88, .80, .52 and .75. For the father form, the Cronbach Alpha coefficients for advice-giving, empathy, unconditionality of regard and congruency were respectively; .90, .81, .49 and .77. For the general form, the Cronbach Alpha coefficient of BLRI is .91 for the mother form and .92 for the father form.

Cognitive Emotion Regulation Questionnaire (CERQ)

The Cognitive Emotion Regulation Scale (CERQ) is a tool developed by Garnefski, Kraaij and Spinhoven (2002) that measures the cognitive emotion regulation strategies used by the person in the event of a stressful and threatening event. The scale has 36 items and nine sub-dimensions. The sub-dimensions are self-blame, acceptance, rumination, positive refocusing, re-focus on the plan, positive reappraisal, putting into perspective, catastrophising, and other-blame (Garnefski, Kraaij, & Spinhoven, 2002). The adaptation study of CERQ to Turkish was done by Onat and Otrar (2010). As a result of the analysis for the internal consistency reliability of the Cognitive Emotion Regulation Scale, the Cronbach Alpha coefficient was found to be .78. Cronbach Alpha coefficients of the sub-dimensions of the scale; self-blame .56, acceptance .56, rumination .62, positive refocusing .42, re-focus on the plan .68, positive reappraisal .66, putting into perspective .51, catastrophizing .71, and other-blame .71. In the present study, the Cronbach Alpha coefficient of the Cognitive Emotion Regulation Scale was found to be .84. The Cronbach alpha coefficients of the sub-dimensions were as follows; self-blame .47, acceptance .48, rumination .62, and positive refocusing .77, refocus on the plan .77, positive reappraisal .73, putting into perspective .59, catastrophizing .69, and other-blame .62.

Big Five Inventory

The Big Five Inventory Scale (BFI), developed by Benet-Marinez and John (1998), is a tool that measures the basic characteristics of the five-factor personality structure. The scale consists of 44 items with Five sub-dimensions; extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The adaptation process of BFI to Turkish was made by Sümer and Sümer (2005). In the adaptation study of the scale, Cronbach Alpha coefficients vary between .64 and .77. In the present study, the Cronbach's Alpha coefficients were found as .85 for the general form; and for the sub-dimensions of extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were found, respectively .53, .62, .72, .73, and .57.

Data Analysis

Before analyzing the data in the study, the arithmetic means, standard deviation, skewness and kurtosis values of the variables were examined. It can be said that the data show a normal distribution since the skewness kurtosis values given for the variables of resilience level, perceived parental relationship, cognitive emotion regulation, and personality traits variables presented in Table 1 are between -1.5 and +1.5 (Tabachnich & Fidel, 2013). Since the data show a normal distribution, the Pearson Correlation Coefficient method was used to examine whether there is a relationship between demographic variables and essential variables such as resilience level, perceived parental relationship, cognitive emotion regulation and personality traits. Independent sample t-test analysis was conducted to examine whether the resilience levels of the participants differed in terms of gender. Analysis of
variance (ANOVA) was used to reveal whether the level of resilience varies according to parents' education level. VIF (Variance Increase Factors) values were examined to determine whether there was a multiple linear connection problem between the independent variables, which is one of the basic assumptions of the multiple regression analysis among the independent variables. It was found that the VIF values for the independent variables were below 10, and it was found that the data without a multiple linear connection problem were suitable for the multiple regression assumptions (Paulson, 2007). A hierarchical regression analysis was used to examine the prediction of resilience in terms of demographic variables, perceived parental relationship, sub-dimensions of cognitive emotion regulation, and personality traits. Before hierarchical regression analysis, Mahalanobis distance was calculated to examine multivariate normality. 9 participants outside the range of (-36.12, +36.12) were excluded from the sample and the analysis continued with 600 participants. Since all Cook values of the variables are less than 1 and their leverage values are in the range of 0-1, it has been decided that the sample meets the multivariate normality assumption. According to the assumption of correlation of variables, there should not be a higher level of correlation than 70 between predictor and predicted variables (Meyers, Gamst, & Guarino, 2013). The analysis of the data was done with IBM SPSS 21.00 package program.

**FINDINGS**

Table 1. Information on Mean, Standard Deviation, Skewness, Kurtosis Values of the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>S</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach Alfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>504</td>
<td>184</td>
<td>31</td>
<td>-0.455</td>
<td>-0.17</td>
<td>.94</td>
</tr>
<tr>
<td>Perceived Parent Relationship Mother</td>
<td>193</td>
<td>56</td>
<td>50</td>
<td>-0.777</td>
<td>0.477</td>
<td>.91</td>
</tr>
<tr>
<td>Perceived Parent Relationship Father</td>
<td>157</td>
<td>45</td>
<td>52</td>
<td>-0.395</td>
<td>-0.470</td>
<td>.92</td>
</tr>
<tr>
<td>Extraversion</td>
<td>567</td>
<td>28</td>
<td>5</td>
<td>-0.457</td>
<td>-0.020</td>
<td>.53</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>598</td>
<td>34</td>
<td>5</td>
<td>-0.558</td>
<td>1.047</td>
<td>.62</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>586</td>
<td>32</td>
<td>6</td>
<td>-0.348</td>
<td>0.217</td>
<td>.72</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>592</td>
<td>25</td>
<td>6</td>
<td>-0.184</td>
<td>-0.392</td>
<td>.73</td>
</tr>
<tr>
<td>Openness to experience</td>
<td>589</td>
<td>36</td>
<td>5</td>
<td>-0.402</td>
<td>0.221</td>
<td>.57</td>
</tr>
<tr>
<td>Cognitive emotion regulation</td>
<td>461</td>
<td>116</td>
<td>15</td>
<td>-0.176</td>
<td>0.953</td>
<td>.84</td>
</tr>
</tbody>
</table>

Table 2. T-Test Results on Comparison of Resilience Average of Women and Men

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>mean</th>
<th>S.</th>
<th>t(502)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>392</td>
<td>186</td>
<td>32.4</td>
<td>1.920</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Male</td>
<td>297</td>
<td>181</td>
<td>29.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To evaluate the level of resilience according to gender, a t-test analysis was performed for independent samples. According to the analysis results, the average resilience of women (Mean = 186, S = 32.4) was found to be statistically significantly higher than the average resilience of men (Mean = 181, S = 29.7) (t (502) = 1.920, p = .05)
Table 3. Variance Analysis Results Regarding the Comparison of Resilience Mean According to Mother Education Level

<table>
<thead>
<tr>
<th>Mother education level</th>
<th>n</th>
<th>mean</th>
<th>S.</th>
<th>F(5.497)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>187</td>
<td>182</td>
<td>31</td>
<td>2.569</td>
<td>.03</td>
</tr>
<tr>
<td>Literate</td>
<td>45</td>
<td>190</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school graduate</td>
<td>126</td>
<td>185</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle school graduate</td>
<td>54</td>
<td>180</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>60</td>
<td>190</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University and postgraduate</td>
<td>31</td>
<td>169</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One-way analysis of variance was conducted to evaluate the level of resilience according to the mother's education level. A statistically significant difference was found in the level of resilience compared to mother education (F (5, 497) = 2.569, p = .03). According to the Bonferroni test conducted to examine the source of the difference, the resilience level of the participants whose mother's education level was at the high school level was found to be statistically higher than the participants whose mother's education level was university and postgraduate (p = .03) (see Table 3).

Table 4. Relationships of Perceived Parent Relationship, Cognitive Emotion Regulation, Personality Traits and Resilience Variables

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>.35***</td>
<td>.38***</td>
<td>.56***</td>
<td>.32***</td>
<td>.54***</td>
<td>.54***</td>
<td>.59***</td>
<td>-.26***</td>
<td>.81***</td>
<td>.78***</td>
<td>.78***</td>
<td>.81***</td>
<td>.78***</td>
<td>.81***</td>
<td>.78***</td>
<td></td>
</tr>
<tr>
<td>2. Perceived parental relationship mother</td>
<td>.35***</td>
<td>.38***</td>
<td>.56***</td>
<td>.32***</td>
<td>.54***</td>
<td>.54***</td>
<td>.59***</td>
<td>-.26***</td>
<td>.81***</td>
<td>.78***</td>
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<td>.81***</td>
<td>.78***</td>
<td>.81***</td>
<td>.78***</td>
<td></td>
</tr>
<tr>
<td>3. Perceived parental relationship father</td>
<td>.38***</td>
<td>.56***</td>
<td>.32***</td>
<td>.54***</td>
<td>.54***</td>
<td>.54***</td>
<td>.59***</td>
<td>-.26***</td>
<td>.81***</td>
<td>.78***</td>
<td>.78***</td>
<td>.81***</td>
<td>.78***</td>
<td>.81***</td>
<td>.78***</td>
<td></td>
</tr>
<tr>
<td>4. Extraversion</td>
<td>.56***</td>
<td>.32***</td>
<td>.28***</td>
<td>.32***</td>
<td>.32***</td>
<td>.32***</td>
<td>.32***</td>
<td>-.28***</td>
<td>.28***</td>
<td>.28***</td>
<td>.28***</td>
<td>.28***</td>
<td>.28***</td>
<td>.28***</td>
<td>.28***</td>
<td></td>
</tr>
<tr>
<td>5. Agreeableness</td>
<td>.28***</td>
<td>.32***</td>
<td>.32***</td>
<td>.32***</td>
<td>.32***</td>
<td>.32***</td>
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<td>6. Conscientiousness</td>
<td>.31***</td>
<td>.39***</td>
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<td>7. Neuroticism</td>
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<td>.35***</td>
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<td>8. Openness to experience</td>
<td>.29***</td>
<td>.53***</td>
<td>.42***</td>
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<tr>
<td>9. Self-blame</td>
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<td>-.07</td>
<td>.28**</td>
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<td>-.05</td>
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<td>10. Acceptance</td>
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<td>.53***</td>
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<td>.46***</td>
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<td>11. Rumination</td>
<td>.30***</td>
<td>.38**</td>
<td>.21**</td>
<td>.38**</td>
<td>.21**</td>
<td>.38**</td>
<td>.21**</td>
<td>-.12**</td>
<td>-.12**</td>
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<td>-.12**</td>
<td>-.12**</td>
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<td>12. Positive refocusing</td>
<td>.18***</td>
<td>.25**</td>
<td>.41**</td>
<td>-.12**</td>
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<td>.60***</td>
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<td>13. Re-focus on the plan</td>
<td>.13***</td>
<td>.16**</td>
<td>.38**</td>
<td>-.12**</td>
<td>.60***</td>
<td>.60***</td>
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<td>14. Positive reappraisal</td>
<td>.13***</td>
<td>.16**</td>
<td>.38**</td>
<td>-.12**</td>
<td>.60***</td>
<td>.60***</td>
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<tr>
<td>15. Putting into perspective</td>
<td>.15***</td>
<td>.15***</td>
<td>.15***</td>
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</table>
The relationship between resilience and perceived mother-father relationship, sub-dimensions of cognitive emotion regulation, and sub-dimensions of the five-factor personality inventory was investigated by Pearson correlation analysis. According to the analysis results, there was a low positive correlation between resilience and the perceived mother relationship \( r = .35, p < .001 \) and the perceived father-parent relationship \( r = .38, p < .001 \). When personality traits were evaluated, extraversion \( r = .56, p < .001 \), conscientiousness \( r = .54, p < .001 \), neuroticism \( r = .54, p < .001 \), openness to experience \( r = .59, p < .001 \) it is found that there was a moderate positive correlation between the variables and resilience, while there was a low-level positive correlation between agreeableness and resilience \( r = .32, p < .001 \). Among resilience and the sub-dimensions of cognitive emotion regulation: a low level of negative relationship was found with self-blame \( r = -.26, p < .001 \); with acceptance \( r = .81, p < .001 \), rumination \( r = .78, p < .001 \), positive refocusing \( r = .81, p < .001 \), re-focus on the plan \( r = .81, p < .001 \), positive reappraisal \( r = .78, p < .001 \), putting into perspective \( r = .78, p < .001 \), and other-blame \( r = .82, p < .001 \) a high level; with catastrophizing \( r = .69, p < .001 \) a moderate level positive correlation was found. (see Table 4)

### Table 5. Hierarchical Regression Models for Predicting Resilience Level

<table>
<thead>
<tr>
<th>Block</th>
<th>R²</th>
<th>b</th>
<th>SH-b</th>
<th>Beta</th>
<th>Pearson r</th>
<th>( \sigma^2 )</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>.01</td>
<td>Constant</td>
<td>212.224</td>
<td>19.275</td>
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<tr>
<td></td>
<td></td>
<td>University entrance year</td>
<td>-4.443</td>
<td>6.698</td>
<td>-0.069</td>
<td>-.045</td>
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<tr>
<td></td>
<td></td>
<td>year</td>
<td>-2.038</td>
<td>2.339</td>
<td>-0.090</td>
<td>-.067</td>
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<tr>
<td></td>
<td></td>
<td>Family income</td>
<td>-3.364</td>
<td>3.627</td>
<td>-0.094</td>
<td>-.08</td>
</tr>
<tr>
<td>2</td>
<td>.20</td>
<td>Constant</td>
<td>146.598</td>
<td>23.342</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Perceived parent relationship mother</td>
<td>-0.110</td>
<td>0.108</td>
<td>-0.190</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceived parent relationship father</td>
<td>0.303</td>
<td>0.095</td>
<td>0.587</td>
<td>.42</td>
</tr>
<tr>
<td>3</td>
<td>.47</td>
<td>Constant</td>
<td>146.598</td>
<td>23.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-blame</td>
<td>-1.411</td>
<td>0.810</td>
<td>-0.141</td>
<td>-.27</td>
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<tr>
<td></td>
<td></td>
<td>catastrophizing</td>
<td>4.794</td>
<td>0.796</td>
<td>0.504</td>
<td>.62</td>
</tr>
<tr>
<td>4</td>
<td>.69</td>
<td>Constant</td>
<td>32.328</td>
<td>24.473</td>
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<tr>
<td></td>
<td></td>
<td>Extraversion</td>
<td>1.431</td>
<td>0.558</td>
<td>0.229</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agreeableness</td>
<td>-0.585</td>
<td>0.389</td>
<td>-0.108</td>
<td>.27</td>
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<tr>
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<td></td>
<td>Conscientiousness</td>
<td>0.961</td>
<td>0.345</td>
<td>0.211</td>
<td>.56</td>
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<tr>
<td></td>
<td></td>
<td>Neuroticism</td>
<td>0.807</td>
<td>0.318</td>
<td>0.185</td>
<td>.46</td>
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<tr>
<td></td>
<td></td>
<td>Openness to experience</td>
<td>1.483</td>
<td>0.477</td>
<td>0.240</td>
<td>.57</td>
</tr>
</tbody>
</table>

In the first block, university entrance year, year, family income was evaluated as the middle variable (covariate). The model was not found to be significant \( F (3, 97) = 0.559, p > .05 \). The second
block includes the variables of perceived mother-parent relationship and perceived father-parent relationship. Model was found to be significant ($F(5, 95) = 4.806, p = .001$). The model explains 16% of the resilience variance ($R^2 = 0.20$). Perceived father-parent relationship is a significant predictor ($p = .002$). The perceived father-parent relationship explains 9% of the resilience variance. The perceived mother-parent relationship is not a statistically significant predictor. In the third block, self-blame and catastrophising sub-dimensions of cognitive emotion regulation were evaluated. The model was found to be significant ($F(7, 93) = 11.573, p <.001$). The model explains 42% of the resilience ($R^2 = 0.47$). The disruption sub-dimension of cognitive emotion regulation is a significant predictor ($p <.001$). The destruction sub-dimension of cognitive emotion regulation explains 28% of resilience. Self-blame is not a significant predictor. In the fourth and last block, the sub-dimensions of the big five inventory: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were analysed. The model was found to be significant ($F(12, 88) = 16.420, p <.001$). The model explains 65% of the resilience ($R^2 = 0.69$). The model explains 65% of the resilience ($R^2 = 0.69$). Extraversion ($p = .01$), conscientiousness ($p = .007$), neuroticism ($p = .01$) and openness to experience ($p = .003$) are statistically significant predictors. Extraversion explains 6%, conscientiousness 8%, neuroticism 7%, and openness to experience 10% of resilience. Agreeableness is not a statistically significant predictor.

**DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

In the present study, the relationships between the resilience level of university students in emerging adulthood and the perceived parental relationship, cognitive emotion regulation, and personality traits were examined. According to the results, it was found that the level of resilience differs according to gender. Resilience mean scores of female students were found to be higher than male students. It is consistent with the study results in the literature that women have higher levels of resilience than men (Bauman, 2002; Heyman & Legare, 2004; Hampel & Petermann, 2005). In a longitudinal study conducted by Werner (1989) on resilience, it was concluded that women were more effective in coping with difficulties compared to men in terms of empathy in interpersonal communication, demanding help, safe and effective communication styles, and self-esteem. Masten (2001) stated that to develop resilience, it is necessary to be in a normal development course and to adapt successfully to risk factors. According to Bradshaw (2014), while being a woman is not considered a risk factor as a biological gender, it is among the risk factors in social gender roles. The effort of women in both their personal and social lives against the existence of gender roles and cultural stereotypes and their ability to produce adaptive solutions to challenging situations will increase their self-confidence, make them more courageous, and increase their self-esteem and positively affect their development of resilience (Jordan, 2013). Similarly, it is thought that in Turkish culture, various disadvantaged situations in terms of domestic responsibilities or social status that started to be given to women at early age lead girls to effective coping styles and positively motivate the level of resilience against gender risk factors.

One of the results obtained was that the resilience level of the participants whose mother education level was at the high school level was found to be statistically higher than the participants whose mother education level was university and postgraduate. Although the mother's education level and resilience level does not contradict the literature, it is thought that the finding is related to the sample studied. When parents with a high level of education were asked about their children's strengths, they explained it with their school success; It is stated that less-educated parents emphasize the abilities of their children more frequently (Räty, Kasanen, & Kärkkäinen, 2006; Rytkönen, Nurmi, & Aunola, 2005). The patterns used by the parents in their citations and explanations represent their educational backgrounds, and highly educated parents reflect their belief in the child's academic competence and increase their self-confidence and resilience levels (Räty & Kasanen, 2013).

A positive and low-level significant relationship was found between the resilience scores of university students and the perceived parental relationship scores. In addition, it was concluded that perceived parental relationship predicted resilience. In particular, it was observed that the perceived father relationship was an important predictor of the relationship between the level of resilience. It was
concluded that as the level of resilience increased, the total scores obtained from the sub-dimensions of parental relationship, acceptance degree, empathy, unconditionality of regard and congruence, increased. This finding is consistent with other studies in the literature (Carlo et al., 2010, Quinton, 2004, Svendsen, Griffin, & Forkey, 2020, Nair et al., 2020). Despite the disadvantageous conditions, it is stated that the competent, satisfying and warm approach of parents towards their children positively affects their development and protects them from disruptive effects against their resilience (Masten, 2015). In a study conducted by Sheridan et al. (2005), it was concluded that the empathic reflections of the parents' interest and warmth increased the child's resilience and adaptability. It is stated that effective communication in the parent-child relationship, child acceptance behaviours, positive supportive feedback, and realistic expectations and directions shaped accordingly with the child's skills improve the child's resilience level (Goldstein & Brooks, 2013). Considering the sub-dimensions of the parental relationship, it is thought that the sincerity, positive acceptance, empathy and respect shown to the child contribute to the power of coping with possible negative conditions, encourage for more adaptable behaviours and reduce the impact of environmental risk factors. It was found that the perceived parent relationship of the mother was not a statistically significant predictor. These findings support that especially the father relationship is important in predicting resilience of the perceived parental relationship. Kağıtçıbaşı (1981) emphasizes the belief that in Turkish culture, external control is less in men than in women. It is thought that the firmer beliefs of males in internal control are related to social roles and culture, and freedom offered to men in social life affects this situation. Considering the place of the father in the Turkish family structure, instead of giving in to the difficulties encountered or to the struggles, it is expected that the personal networks that the father can reach to find solutions are wider and stronger. In this context, it is thought that when the father-child relationship is satisfactory, the father's role modelling and its positive reflection on the child's resilience skill may be effective. According to another result, a significant negative relationship between resilience level and self-blame was found; however, with acceptance, rumination, positive refocusing, re-focus on the plan, positive reappraisal, putting into perspective, other-blame, and catastrophising a positive significant relationship was found. It was concluded that the destruction sub-dimension of cognitive emotion regulation is an important predictor of resilience. The results obtained are consistent with the relevant literature (Troy & Mauss, 2011; Kay, 2016; Lee et al., 2016). Positive emotions can develop individuals’ thoughts and create resilience that positively affects their well-being. Many studies supporting this approach have shown that emotion regulation strategies can directly affect the level of endurance to distress (Bardeen et al., 2015; Gratz & Roemer, 2004). Min et al. (2013) examined the relationships between cognitive emotion regulation and resilience levels in individuals diagnosed with depression and / or anxiety disorder. Research findings show that there is a positive relationship between cognitive emotion regulation strategies and resilience level. It is stated that more use of positive reappraisal strategy and less use of rumination increases the level of resilience. Tugade and Fredrickson (2007) point out that prolonging and increasing the duration of feeling positive emotions positively affect the resilience level of the person under adverse conditions. In different studies, it was concluded that directing emotions as more positively focused (compatible) in the evaluations made regarding stress, despite stress factor, helps to have a higher level of resilience (Troy & Mauss, 2011; Mestre et al., 2017). The use of cognitive emotion regulation coherent strategies is thought to increase the use of the skills of adapting to stressful conditions, getting rid of negative events, and coping with distress, which are among the definitions of the concept of resilience. According to another result obtained from the current research; In the context of personality traits, a significant positive relationship was found between resilience level and the dimensions of extraversion, conscientiousness, neuroticism, openness to experience, agreeableness. While these results show similarities with the results of a positive relationship between the resilience level and personality traits, extraversion, agreeableness, conscientiousness and openness to experience dimensions in the studies in the literature, it contradicts with the positive relationship between the neuroticism dimension and the level of resilience (Campbell-Sills, Cohan, & Stein, 2006, Johns, Chavers, & Labbé, 2013, Mohammed & Mostafa, 2015; Sarubin, 2015). In a study by Riolli, Savicki, and Cephani (2002), it was found that the level of resilience is associated with high optimism, low level of neuroticism, extraversion, openness to experience and conscientiousness. A meta-analysis study conducted by Oshio et al. (2018) on personality traits and resilience level found that resilience level while with neuroticism negatively correlated; with extraversion, agreeableness,
conscientiousness, and openness to experience was found positively correlated. It is known that high emotional consistency, in other words, low neuroticism, has a facilitating effect on adaptation and recovery in situations such as dealing with stressful life events, disruption of the usual flow of daily life under risk factors (Connor & Davidson, 2003). The positive significance of the relationship between resilience level and extraversion dimensions supports the literature. In the study conducted by Campbell-Sills et al. (2006), the relationships between resilience in young adulthood, personality traits, coping styles, psychiatric symptoms were examined, and resilience level was positively associated with extraversion and agreeableness dimensions. The personality trait of extraversion is thought to be among the protective factors for resilience in issues such as establishing interpersonal relationships easily, maintaining social networks, having social support resources, and seeking help. The findings of this study show that perceived parental relationship and cognitive emotion regulation strategies significantly predict resilience level. Based on these results, informative training on the parent-child relationship, especially on child-rearing attitudes, development of emotions in childhood, emotion regulation, can be provided to parents who have children in kindergarten, primary school, and secondary school. Likewise, psychoeducational studies can be conducted with university students for cognitive emotion regulation strategies.

REFERENCES


