

# Do You Feel Hopeless? The Mediation Role Of Self-efficacy Between Resilience and Hopelessness in Adults

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## Abstract

The main purpose of this study is to investigate the relationships between psychological resilience, perception of self-efficacy and hopelessness. In this context, it is aimed to examine the mediating role of self-efficacy between resilience and hopelessness. For this purpose, the data were collected online from 362 volunteer participants (217 female, 145 male) by using snowball sampling method. In accordance with the scope of the study, a questionnaire consisting of 'Demographic Information Form', 'Beck Hopelessness Scale', 'Short Psychological Resilience Scale' and 'General Self-Efficacy Scale' were applied to the participants. Firstly, the assumptions of normality and homogeneity were tested for the analyzes to be carried out on the obtained data. In order to test the statistical significance of the proposed mediation model, the Bootstrapping Method was used through the software developed by Hayes. Obtained results showed that psychological resilience was significantly and negatively related to hopelessness; but positively related to self-efficacy. In fact, self-efficacy perception was found to be negatively related to hopelessness. Lastly, according to the analyzes carried out within the framework of mediation models, it was found that self-efficacy had a mediation role in the relationship between psychological resilience and hopelessness. All findings were discussed within the framework of the related literature.

**Keywords:** Resilience, Hopelessness, Self-Efficacy.

## Öz

Bu çalışmanın temel amacı; psikolojik sağlamlık, öz-yeterlik ve umutsuzluk arasındaki ilişkileri incelemektir. Bu bağlamda, öz-yeterliğin psikolojik sağlamlık ve umutsuzluk arasındaki aracı rolünün incelenmesi amaçlanmıştır. Bu amaç doğrultusunda veriler, 362 gönüllü katılımcıdan (217 kadın, 145 erkek) kartopu örnekleme yöntemi kullanılarak çevrimiçi ortamda toplanmıştır. Araştırma kapsamında katılımcılara 'Demografik Bilgi Formu', 'Beck Umutsuzluk Ölçeği', 'Kısa Psikolojik Dayanıklılık Ölçeği' ve 'Genel Öz-Yeterlik Ölçeği' uygulanmıştır. Elde edilen veriler üzerinde yapılan analizler öncesinde normallik ve homojenlik varsayımları test edilmiştir. Önerilen aracılık modelinin istatistiksel anlamlılığını test etmek için ise Hayes tarafından geliştirilen yazılım aracılığıyla Bootstrapping Yöntemi kullanılmıştır. Elde edilen bulgular, psikolojik sağlamlığın umutsuzluk ile anlamlı ve negatif, psikolojik sağlamlık ile öz-yeterlik arasında ise pozitif yönde bir ilişki olduğunu ortaya koymuştur. Dahası, öz-yeterlik algısının umutsuzluk ile negatif ilişkili olduğu tespit edilmiştir. Son olarak, aracılık modelleri çerçevesinde yapılan analizler, öz-yeterliğin psikolojik sağlamlık ile umutsuzluk arasındaki ilişkide aracı rolünün olduğunu ortaya koymuştur. Elde edilen tüm bulgular ilgili literatür çerçevesinde tartışılmıştır.

**Anahtar Kelimeler:** Psikolojik Sağlamlık, Umutsuzluk, Öz-Yeterlik.

## Introduction

Hope emerges as an important concept that helps individuals cope with many different situations, provides motivation for the future, and contributes to mental and physical resilience in the face of difficulties. Hope is a mechanism that paves the way for individuals to have confidence that they will have a good future and thus have positive expectations about themselves and their future (Hernandez & Overholser, 2021; Özmen et al., 2008). Hopelessness is defined as a cognitive experience that expresses the negative and fatalistic perspectives of individuals that their current situation will not change in the future (Beck, 1986). According to Beck, the concept of hopelessness includes negative emotions, negative expectations about the future and loss of motivation. According to this conceptualization, an individual's negative emotions, negative future expectations and low motivation for any kind of engagement, indicate a high level of hopelessness (Weishaar and Beck, 1992). The level of hopelessness is closely related to individuals' reactions to various life events, psychopathological disorders, and perception of life satisfaction. Within the studies, hopelessness and depression (e.g., Padmanabhanunni & Pretorius, 2021), anxiety (e.g., Eker, 2019), suicide (e.g., Lew et al., 2019), life satisfaction (e.g., Dang, Zhang & Nunez, 2021; Kim et al., 2021) has been found to be associated with many psychological concepts. In the current study, despair was examined within the framework of its relationship with the concepts of psychological resilience and self-efficacy, two important components of psychological health.

Psychological resilience is an ability to maintain or regain mental health despite difficulties experienced which are defined as a positive psychological adaptation (Hermann et al., 2011). In other words, psychological resilience refers to the ability of individuals to recover after stressful events they encounter in life, return to their previous situations, and cope with stress (Hoşoğlu et al., 2018; Ramirez, 2007; Brooks & Goldstein, 2003). Although resilience was initially considered as a personality trait as a concept, it was later stated

that this concept is a dynamic feature and can be changed and developed (Hernandez et al., 2011). In short, resilience is a kind of dynamic mechanism that contributes to self-renewal and coping with negative life events. It is also clearly known that this term was related to many variables such as depression (e.g., Mcdermott et al., 2020; Erarslan, 2014;), anxiety (E.g., Hjemdal et al., 2011), well-being E.g., Bajaj & Pande, 2016) when examined the relevant literature.

When the literature is examined, it is seen that many studies find a negative relationship between psychological resilience and hopelessness. In this context, Collazzoni and his colleagues (2020) reported that there were significant negative relationships between resilience and hopelessness and that resilience significantly predicted the level of hopelessness. Similarly, Hjemdal, Friborg, and Stiles (2012) showed resilience was an important predictor of hopelessness in the current sample, even after controlling for other variables (stressful life events, personality). The results of a study by Hofer and his colleagues (2016), in which the resilience and hopelessness levels of individuals diagnosed with psychopathology in two different samples were examined, emphasize that there are significant negative relationships between hopelessness and resilience in both samples. Besides, each sub-dimension of psychological resilience (emotional coping, situational coping, social support, and positive self), it was found that there were significant negative relationships between the level of hopelessness and the level of hopelessness (Johnson et al., 2010) There are also studies in the Turkish literature on the relationship between psychological resilience and self-efficacy. To illustrate, Gökçe and Dilmaç (2020) exploring the relationships among the values, resilience, and hopelessness levels of individuals reported that resilience significantly predicted the level of hopelessness and values of individuals (such as responsibility, tolerance). Another study examined the relationships between resilience and hopelessness in teacher candidates indicated psychological resilience and hopelessness were significant predictors of prospective teachers' life satisfaction (Çelik, Sanberk, & Deveci, 2017).

Öztürk and Maçkalı (2022) found a mediating role of problem-focused coping strategies between hopelessness and resilience and hopelessness and resilience is negatively significant with each other. Akşit-Aşık (2018) also conducted research within this framework and tested the predictive power of hopelessness and psychological resilience levels of hotel employees on life satisfaction. The researcher reported a negatively significant relationship among psychological resilience, hopelessness, and resilience and, in fact; hopelessness explained 29% of the variance in life satisfaction of hotel employees.

In addition to psychological resilience, self-efficacy is another concept regarding individuals' level of hopelessness. Self-efficacy is a factor explained by Bandura within the framework of "Social Learning Theory." It expresses the belief that the individual can successfully perform the tasks that he/she needs to perform (Bandura, 1997). In other words, self-efficacy is conceptualized as the belief that an individual can achieve and do (Bandura, 2006). There are number of research that showed the concept of self-efficacy was positively correlated with resilience and negatively related with hopelessness. For instance, Yang and his colleagues (2019) examined the power of self-control to predict self-efficacy perception through resilience. Within the framework of the Structural Equation Model, it was found that resilience predicted the level of self-efficacy positively. Similarly, Keye and Pidgeon (2013) reported a significant positive relationship between the level of self-efficacy and the level resilience of participants. Ulaş and Yıldırım (2019) also conducted research with university students studying in different departments and dealing with the relationship between self-efficacy perception and hopelessness. Researchers reported that the level of self-efficacy was negatively related to hopelessness. In a similar outline, other study examining university students' perceptions of intolerance to uncertainty, hopelessness, self-efficacy, and future job finding. It was revealed that there was a significant negative relationship between the hopelessness level of the participants and their self-efficacy perceptions (Bozkur, Kiran, & Cengiz, 2020).

Consequently, although these concepts are handled separately in different studies, no research has been found that examines these three variables within the framework of a mediation model. In the current research it was expected the power of psychological resilience predicted hopelessness through self-efficacy was tested. Considering that nearly all individuals are exposed to many stimuli and stressful life events in their daily lives so it is thought that it would be very useful to examine the relationships between their psychological resilience, self-efficacy perceptions and hopelessness levels. As a matter of fact, the findings to be obtained have the potential to be used in applications to be developed in order to reduce the hopelessness levels of individuals and to increase their psychological resilience and self-efficacy perceptions. For this reason, it is thought that this study will contribute to the field both theoretically and practically.

### **Purpose of the Study and Research Questions**

The main purpose of this study is to examine the relationships between the psychological resilience, self-efficacy, and hopelessness levels of the participants within the scope of the current sample. In other words, it was aimed to test the mediator role of self-efficacy between resilience and hopelessness sub-dimensions (feelings about the future, loss of motivation, future expectations).

Considering that individuals live in a period when they are exposed to many stimuli and stressful life events, it is thought that it will be very essential and practical to examine the relationships between psychological resilience, self-efficacy perception and hopelessness level. As a matter of fact, it is predicted that the findings will be very useful in the creation of applications and intervention programs to be developed to reduce the hopelessness levels of individuals and to increase their perceptions of psychological resilience and efficacy. For this reason, it is thought that the present study will contribute to the field at both theoretical and practical levels.

The present study sought answers to the following research questions:

1. How do resilience and self-efficacy affect the level of hopelessness in adults?

2. How is the relationship between self-efficacy and resilience in adults?
3. Does self-efficacy have a mediating role in the relationship between resilience and the level of hopelessness?

## Method

In the method part, information about the research design, study group, data collection tools and data analysis are presented.

## Research Design

The research design of the current study was a correlational research design.

## Research Sample

The study group of the research consisted of 362 adults, 217 (59.9%) females and 145 (40.1%) males, between the ages of 18 and 81 ( $M=33.8$ ;  $S=13.50$ ). The data of the current study were determined using the snowball sampling method. Since the data of the study was collected online, it was decided to use snowball sampling method in order to reach more participants.

## Data Collection Process

The current data were collected online by using Google Survey from 362 volunteer participants (217 female, 145 male). Before analyzing the data, four participants who were under the age of 18 were excluded from the data due to the age pre-condition. All participants were informed about the purpose and nature of the research with the "Informed Consent Form" determined by the Mersin University Social and Human Sciences Research Ethics Committee.

## Data Collection Materials

**The Brief Resilience Scale (BRS):** The Brief Resilience Scale (BRS) was developed by Smith, Dalen, Wiggins, Tooley, Christopher, and Jennifer Bernard (2008) to assess the level of an individual's

resilience and was adapted into Turkish language by Doğan (2015). The scale consists of 6 items and is evaluated with a 5-point Likert-type scale. Scale items; (1) totally disagree to (5) totally agree. Scores obtained from the scale is between 6 and 30. High scores obtained from the scale indicate high level of resilience. The Cronbach's alpha coefficient obtained from the adaptation study was reported as .81 (Doğan, 2015). For this study, the Cronbach's alpha coefficient is .89.

**Beck Hopelessness Scale (BHS):** Beck Hopelessness Scale (BHS) was developed by Beck, Weissman, Lester, and Trexler (1974), and Turkish version validity and reliability studies were carried out by Durak and Palabıyıkoglu, (1994). BHS composes of a 20-item measurement tool that evaluates the level of hopelessness of an individual for the future. The scale includes three sub-dimensions which are feelings about the future (1, 6, 13, 15, 19. items), loss of motivation (2, 3, 9, 11, 12, 16, 17, 20. items) and future expectations (4, 7, 8, 14, 18. items). The items are evaluated with "Yes" and "No" options. For some items, yes is evaluated as 1 point and not as 0 points and for the others, no is evaluated as 1 point and yes as 0 points. Scores obtained from the scale vary between 0 and 20. In the original study, Cronbach's alpha internal consistency coefficients of the scale; .78 for feelings about the future, .72 for loss of motivation, and .72 for future expectations. In the current study, Cronbach's alpha internal consistency coefficients were .82 for feelings about the future, .78 for loss of motivation, and .74 for future expectations.

**General Self-Efficacy Scale:** The General Self-Efficacy Scale is an instrument developed by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers (1982) and adapted into Turkish by Yıldırım and İlhan (2010). The scale consists of 17 items and is evaluated with a 5-point Likert-type rating (1) none - (5) very good. Items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16 and 17 in the scale are scored reverse. Scores obtained from the scale vary between 17 and 85. High scores obtained from the scale indicate high self-efficacy belief. Cronbach's alpha internal consistency coefficient of the scale

was reported as .80 (Yıldırım & İlhan, 2010). In the current study, Cronbach's alpha internal consistency coefficient was determined as .91.

**Demographic Information Form:** Such information about the participants as gender, age, and socio-economic status were obtained through the Demographic Information Form prepared by the researchers.

## Data Analysis

For the data analyses, it is recommended to test assumptions such as sample size and missing data, missing data, normality, linearity, multicollinearity and singularity, and the absence of outliers in order to test the data for the structural equation modeling (Cokluk, Şekercioglu & Büyüköztürk, 2012).

Within the scope of the research, the mediating role of self-efficacy in the relationship between resilience and hopelessness in adults over the age of 18 was tested. The data of the research were analyzed using the SPSS21 program. To test the statistical significance of the mediation models, the Bootstrapping Method was used through the software developed by Hayes (Preacher & Hayes, 2008). In this current research, three different mediation models were tested. While testing indirect effects in each mediator model, the 95% confidence interval and 5000 resampling methods were used.

The Mahalanobis Distance Analysis was performed to determine the extreme values of the data. It was founded that eight participants were extreme values and excluded from the data. In addition, skewness-kurtosis values were performed to determine whether the data exhibited a normal distribution. It was found that the kurtosis skewness scores of all the variables are in the range of -1.5 to +1.5 values, except for the loss of motivation variable. Tabachnick and Fidell (2013) emphasize that the values of kurtosis and skewness in the normal distribution of the data should be between -1.5 and +1.5. Therefore, the values obtained from the analysis indicated that the data exhibited a normal distribution. Normality assumptions are seen in Table 1.

To test multicollinearity problem in the data, tolerance and variance increase factor (VIF) values were examined. It was found that the tolerance values were above .20 and the VIF values were less than 5. On the other hand, Durbin-Watson value was calculated to examine the independence of errors. According to Kalaycı (2005), a Durbin-Watson value between 2 and 2.5 indicates there is no auto-correlation problem. Since the Durbin-Watson value obtained from the present study was found to be 2.13, it can be interpreted that the errors were independent.

**Table 1. Normality assumptions and descriptive statistics**

Variable	$\bar{X}$	SD	Kurtosis	Skewness
Resilience	19.66	4.86	.053	-.128
Self-efficacy	63.01	12.43	.42	-.57
Feelings about the future	1.47	1.67	-.565	.88
Loss of motivation	1.96	2.02	1.10	1.34
Future expectations	2.20	1.67	-1.11	.37

Mediation analyzes were tested with Model 4 proposed by Hayes (2018). The Bootstrapping Method was used to test the indirect effects in the model. According to Pracher and Hayes (2008), the bootstrapping method is a very powerful and convenient method while obtaining confidence limits for indirect effects in the model. In testing its indirect effects, 95% confidence interval and 5000 resampling methods were performed. In order to interpret the mediating effect as significant in the 95% confidence interval, the values should not contain zero (Hayes 2018). In this context, three different models were developed to test the mediating roles of self-efficacy in the relationships between resilience and sub-dimensions of hopelessness (feelings about the future, loss of motivation, and future expectations).

## Results

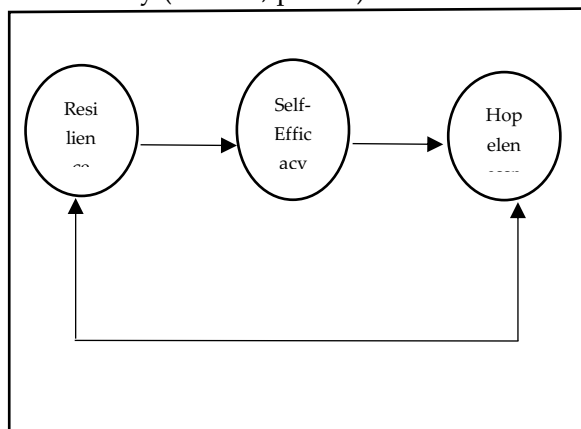
The main purpose of the current research was to examine the mediating role of self-efficacy in the relationship between the psychological resilience and hopelessness levels of adults who were over the age of 18. In the scope of the research, the relationships between the variables were examined.

**Table 2. Pearson correlation coefficient values between variables**

Variable	1	2	3	4	5
1.Resilience	-				
2 Feelings about the future	-.421**	-			
3.Loss of motivation	-.472**	.696**	-		
4.Future expectations	-.488**	.741**	.701**	-	
5.Self-efficacy	.609**	-.433**	-.523**	-.416**	-

\*\* $p < .001$

The relationships between variables were examined by Pearson Correlation Analysis. Accordingly, the obtained findings indicated a negative significant relationship between resilience and feelings about the future sub-dimension ( $r = -.421, p < 0.01$ ), a negative significant relationship between resilience and the loss of motivation sub-dimension ( $r = -.472, p < 0.01$ ), and a negative significant relationship between resilience and future expectations sub-dimension ( $r = -.488, p < 0.01$ ). A positive significant relationship between resilience and self-efficacy was found ( $r = .609, p < 0.01$ ). In fact, the findings showed a negative significant relationship between feelings about the future sub-dimension and self-efficacy ( $r = -.433, p < 0.01$ ), a negative significant relationship between the loss of motivation sub-dimension and self-efficacy ( $r = -.523, p < 0.01$ ) and a negative significant relationship between future expectations sub-dimension and self-efficacy ( $r = -.416, p < 0.01$ ).



**Figure 1. Theoretical model**

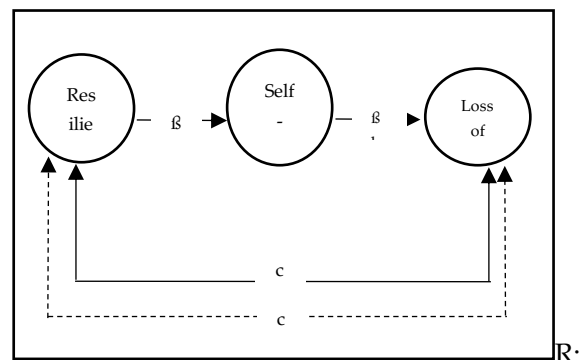
Mediation analyses were conducted using Model 4 proposed by Hayes (2018) in order to determine whether resilience predicted hopelessness (feelings about the future, loss of

motivation and future expectations) through self-efficacy. The theoretical model of the current research is presented in Figure 1.

**Table 3. Findings on the mediating effects of self-efficacy in the relationships between resilience and feelings about the future, loss of motivation and future expectations sub-dimensions**

Model	Estimate	SE	t	p	%95 Confidence Interval (CI)	
					LL	UL
<b>Paths</b>						
R	.5195	.0385	13.5038	<0.001***	.4438	.5951
SE	-.1144	.0265	-4.3096	<0.001***	-.1666	-.0622
<b>FAF</b>						
Total effect	-.1548	.0198	-7.8230	<0.001***	-.1937	-.1159
Direct effect	-.0954	.0237	-4.0184	<0.001***	-.1421	-.0487
<b>LM</b>						
Total effect	-.1333	.0146	-9.1529	<0.001***	-.1619	-.1046
Direct effect	-.0706	.0170	-4.1573	<0.001***	-.1040	-.0372
<b>FE</b>						
Total effect	-.0659	.0253	-2.6084	<0.05**	-.1155	-.0162
Direct effect	-.1412	.0226	-6.2540	<0.001***	-.1857	-.0968
<b>UL</b>						
R	-.0594	.0152			-.0899	-.0302
<b>FAF</b>						
R	-.0627	.0124			-.0874	-.0395
<b>LM</b>						
R	-.0342	.0133			-.0605	-.0077

N=362; CI, confidence interval; LL, lower limit; UL, upper limit.



**Figure 2. Indirect effects of self-efficacy with unstandardized coefficients on the effects of resilience on feelings about the future**

Resilience; SE: Self-efficacy; FAF: Feelings about the future; LM: Loss of motivation; FE: Future expectations

\*\*\* $p < 0.001$ ; \*\* $p < 0.05$ ; Bootstrap sample size = 5000.

As seen in Figures 2, 3 and 4, the mediating roles of self-efficacy in the relationship between resilience and sub-dimensions of hopelessness (feelings about the future, loss of motivation, and future expectations) were examined. Socio-economic level variable was also included in the analysis as covariate in mediator models.

Mediation analyses findings indicated that the direct path from resilience to self-efficacy was significant and positive ( $\beta = 0.51$ ,  $t(358) = 13.503$ ,  $p < .001$ ). The direct path from self-efficacy to feelings about the future was also significant and negative ( $\beta = -0.11$ ,  $t(357) = -4.309$ ,  $p < .001$ ). It was seen that the direct paths from self-efficacy to both loss of motivation ( $\beta = -0.12$ ,  $t(357) = -6.355$ ,  $p < .001$ ) and future expectations ( $\beta = -0.06$ ,  $t(357) = -2.608$ ,  $p < .05$ ) are also significant and negative. In addition, it is seen that the level of socio-economic status (covariate variable) have significant effects on feelings about the future ( $\beta = -0.11$ ,  $t(357) = -4.027$ ,  $p < .001$ ), loss of motivation ( $\beta = -0.07$ ,  $t(357) = -3.697$ ,  $p < .001$ ), and future expectations ( $\beta = -0.15$ ,  $t(357) = -5.930$ ,  $p < .001$ ) (see Table 3).

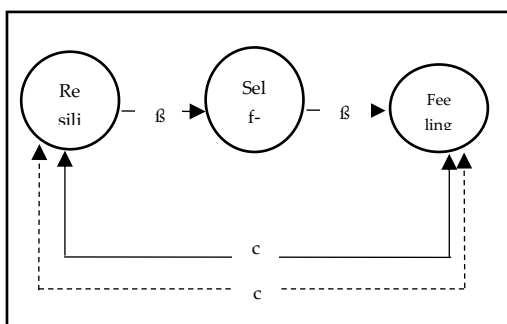


Figure 3. Indirect effects of self-efficacy with unstandardized coefficients on the effects of resilience on loss of motivation

\*\*  $p < 0.001$ .

\*\*  $p < 0.001$ .

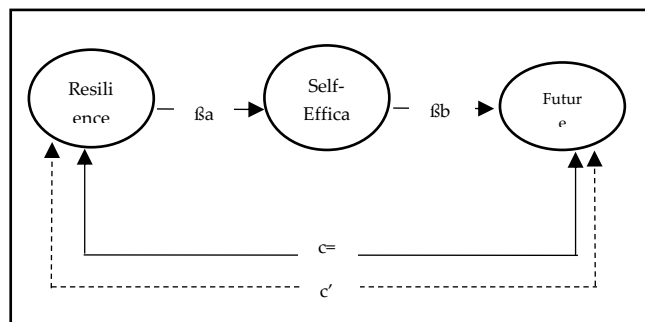


Figure 4. Indirect effects of self-efficacy with unstandardized coefficients on the effects of resilience on future expectations

\*\*  $p < 0.001$ , \*  $p < 0.05$

In the research, mediation roles of self-efficacy were tested separately in three models by examining whether the indirect effects were significant or not. Accordingly, when the indirect effect of self-efficacy between resilience and feelings about the future was examined, it was determined that self-efficacy had a mediating role in the relationship between resilience and feelings about the future (Indirect effect=  $-0.0594$ ,  $SE = 0.0237$ , %95 CI  $[-0.0899, -0.0302]$ ). Similarly, self-efficacy was found to mediate the relationship between resilience and loss of motivation (Indirect effect=  $-0.0627$ ,  $SE = 0.0124$ , %95 CI  $[-0.0874, -0.0395]$ ). Lastly, in the third model, the indirect effect of self-efficacy between psychological resilience and future expectations was examined and found self-efficacy had a mediating role between psychological resilience and future expectations (Indirect effect=  $-0.0342$ ,  $SE = 0.0133$ , %95 CI  $[-0.0457, 0.0350]$ ).

## Discussion

The main purpose of the current research was to test the relationships between resilience, self-efficacy perception and hopelessness in adults. In addition, within the scope of the research, it was examined whether psychological resilience affects the level of hopelessness through self-efficacy perception.

Firstly, within the scope of this study, the relationships between psychological resilience and sub-dimensions of hopelessness (feelings about the future, expectations about the future, and loss of motivation) were examined. The obtained results

indicated significant negative relationships between psychological resilience and all the sub-dimensions of hopelessness. Accordingly, it is appointed that this finding is consistent with the literature. Also, the relationship between resilience and hopelessness was tested in a wide age range within the framework of the current sample and obtained findings compatible with the relevant literature. Similar to our findings, a study conducted by Gambaro and his colleagues (2020) examined resilience, hopelessness, depression, and traumatic experiences of immigrants and reported moderate negative relationship between the level of psychological resilience of immigrants and their hopelessness levels. Another study also examined the relationships between resilience and hopelessness level of the participants and compared participants according to the age levels (18 to 98). It was found that the level of psychological resilience of young participants were higher than the older ones. On the contrary, the hopelessness level of young participants was lower than the older age group. In addition, it was determined that there was a negative relationship between psychological resilience and hopelessness for both age groups (Nieto et al., 2022). Similarly, in research dealing with the relationships between resilience, spirituality, and hopelessness levels of individuals during the Covid-19 Pandemic in Turkey, reported resilience predicted the level of hopelessness in a negative way, and spirituality was a mediator role on this relationship (Gümeye & Maraj, 2021). In the light of the past research, it can be clearly seen that psychological resilience is a psychological coping and adaptation mechanism (Hermann et al., 2011). Therefore, based on both our results and relevant literature, we can interpret the relationship between these two variables as follows: Psychological resilience is a protective mechanism that helps individuals cope with problems and increases one's motivation and future expectation. In other words, the increase level of psychological resilience of an individual can positively affect his/her motivation and expectations for the future by enabling him/her to cope with various difficulties encountered in life events.

In this study, the relationship between psychological resilience and self-efficacy is discussed. According to the findings, there is a significant positive relationship between resilience and self-efficacy perception. Examining the relevant literature, it is clearly seen that this finding is in parallel with the previous studies. For instance, Li, Eschenauer, and Persaud (2018) investigated the relationships between university students' perceptions of resilience, self-efficacy, stress, problem-solving skills, and social support. The researcher reported that there was a positive relationship between students' resilience and self-efficacy. In fact, self-sufficiency and resilience significantly predicted students' problem-solving skills. Sagone and his colleagues (2020) also evaluated the level of resilience, empathy, and self-efficacy perceptions for problem solving and revealed that resilience was highly correlated with self-efficacy, participants who had a high perception of empathy and a high level of self-efficacy in problem solving had a higher level of resilience compared to those with a low perception of self-efficacy. It is also reasonable for individuals who have a high level of resilience to also have a high belief in achievement in their lives (i.e., their self-efficacy). Depending on the individual's level of resilience, self-confidence and the perception of self-efficacy will become greater. Although limited studies have been conducted on this subject in the literature, the obtained findings support our study. In line with all these research findings, it can be interpreted that psychological coping skills and self-efficacy perception are structures that support each other in a direct way.

In this study, the relationship between self-efficacy and hopelessness level was examined. It was found to be statistically significant and negative correlations among perception of self-efficacy and feelings about the future, expectations about the future and loss of motivation which is consistent with past research findings. Study examining individuals' general self-efficacy perceptions, job satisfaction and hope levels reported participants' self-efficacy perceptions significantly affected their levels of hope (Duggleby, Cooper, & Penz, 2009). Similarly,



O'Sullivan (2011) indicated significant relationships between self-efficacy and level of hope in a study examining the relationships between university students' stressful situations, life satisfaction, self-efficacy perceptions and hope levels. In this direction, one of the ways of increasing individuals' hope is to increase their level of self-efficacy. It can be said that individuals' perceptions of themselves, their beliefs about success and handling with negative situations appear as factors that increase their hopes for the future. Therefore, self-efficacy can be a quite crucial concept to maintain the motivation of individuals for the future in their lives and to regulate their future behaviors.

In current study, the mediating role of self-efficacy perception between psychological resilience and hopelessness level was tested. Thus, the mediation role of self-efficacy perception was tested in three separate models. It has been determined that self-efficacy perception has a significant mediating role between each sub-dimension of psychological resilience and hopelessness. The obtained findings pointed out that self-efficacy had a mediating role between resilience and hopelessness in all mediation models. As the relevant literature examined, the past studies indicated significant relationships among resilience, self-efficacy, and hopelessness (E.g., Nieto et al., 2022; Sagone et al., 2020; Li et al., 2018). Mostly, past studies reported resilience predicted self-efficacy positively and self-efficacy predicted hopelessness in a negative way. However, no study was found in the mediator role of self-efficacy in the relationship between resilience and hopelessness variables. Reference studies conducted with this context have reported the perception of hope and self-efficacy as predictors of resilience (Wu et al., 2021; Liu et al., 2020). Psychological resilience refers to the capacity of individuals to adapt and cope with the difficulties (Hoşoğlu et al., 2018; Hermann et al., 2011). At the same time, resilience emerges as an important mechanism that carries individuals' self-perceptions to a more positive level and prepares the ground for their self-confidence. On the other hand, some studies conducted on psychological resilience was negatively associated with many psychopathological conditions such as depression,

anxiety disorder, and post-traumatic stress disorder (E.g., Awano et al., 2020; Portnoy et al., 2018). Other than that, several studies reported hope, self-efficacy, and resilience named as psychological capital components and discussed as a whole (e.g., Di Sipio et al., 2012; Herbert, 2011). Within this framework, it is clear that the findings of the past studies on this subject vary considerably. With the findings of current research, it can be interpreted that the increase in the level of psychological resilience of the individual is very important in terms of coping with negative situations and acting as a buffer against psychopathological situations. In this case, it is quite possible that resilience affects the perception of self-efficacy and hope level.

In the current study, socio-economic status was included in a covariate variable, considering that may affect hopelessness. As a matter of fact, there were number of studies that showed the level of hopelessness varied depending on the socio-economic levels of the individuals. One of the studies that focused on the relationships between hopelessness and socioeconomic levels indicated the effects of socioeconomic status on hopelessness (Oyekcin, Sahin & Aldemir, 2017). Similarly, another study determined that the percentage of participants who hoped for the future depends on their monthly income level and that many of those in low-income groups are relatively more hopeless (Zafer, 2019). Another study found that the quality of life increased according to the family's income, and the level of hopelessness decreased as the quality of life improved (Demiray, 2019). Based on the findings of those studies, the socioeconomic levels of the participants might have a confounding effect so we thought that it should be included in the analysis as a confounding variable. According to our findings, socioeconomic level affects hopelessness in line with the literature. Accordingly, this finding can be explained as follows; individuals with higher socioeconomic status may feel less anxiety about the future and have more positive expectations and thoughts about the future. Also, socioeconomic status affects individuals' being in a socially advantageous/disadvantaged position. Individuals who are more advantageous at the social level are more likely to have more positive

expectations about the future, to experience fewer feelings of anxiety and fear about the future, and to have higher motivation for the future.

The present study has some limitations. One of the limitations of the study is the data collection method. The current data were obtained by snowball sampling method. Due to the fact that snowball sampling method may cause generalizability problem, it is recommended that future studies should use different sampling methods to solve this issue. The other limitation of the research is collection of the data. Participants may have presented themselves as they wanted to be because they thought they were being evaluated. For this reason, it may be helpful to collect data with such methods as observation and interview as well as self-report in the future studies.

## Conclusion

The present study examined the relationship between individuals' levels of resilience, self-efficacy and level of hopelessness. With the current research, it was revealed how important psychological resilience is in influencing individuals' feelings, thoughts and expectations about the future. In fact, it is clearly seen that self-efficacy has a significant role in one's resilience level and hopelessness. To conclude, examining the relationships among resilience, self-efficacy, and hopelessness is very important to protect and maintain for one's psychological health, and to determine the strength and direction of the relationship between these factors. We also believe that this research will contribute to the relevant literature and guide the intervention programs to be developed in this regard.

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