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# The Mediating and Moderating Role of Self-efficacy in the Relationship between Hope and Peace Attitudes

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ABSTRACT

The current study was designed to investigate the mediating and moderating role of self-efficacy in the relationship between hope and peace attitudes. The participants were 293 adolescents who are continuing their high school education. 57% of the students were females, 43% of them were males. Their ages were between 14 and 16. The following inventories were used to collect data: Turkish version of Children's Hope Scale to assess hope, Self-efficacy Scale for Children to evaluate self-efficacy, and Peace Attitudes Scale to measure attitudes towards peace. Hierarchical regression analysis was used to investigate the mediator and moderator role of self-efficacy. The results pointed out that self-efficacy fully mediated the relationship between hope and peace attitudes, and plays also a moderator role in this relationship. Mediation indicates that as hope increases peace attitudes increase as well and self-efficacy has a mediator effect in this enhancement. Moderator role indicates that that self-efficacy strengthened the relation between hope and peace attitudes. The importance of the results is discussed in the light of literature.

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Keywords:
Peace attitudes, Mediator, Moderator, Self-efficacy, Hope, Adolescence

## Introduction

Currently, we are witnessing societies suffering from the destruction of wars and violence in different geographies. Violence affects and damages in psychological, social, and spiritual domains of human life. Therefore, peace has become essential for both individuals and communities at this time. In societies with a well-established peace culture, people have the opportunity for self-realization and to discover and actualise their capacities. Moreover, members of such societies support each other and work for the happiness of others (Navarro-Castro & Nario-Castre, 2010). Education is the core element in establishing a culture of peace in societies. Scientific studies investigating the psychological features associated with students' attitudes towards peace could make an important contribution to the education field in particular and to the literature in general.

Literature regards peace as a positive human domain such as love, virtue, and altruism. On the other hand, there are also negative human experiences, such as violence, aggression, and bullying that have been subject to scientific inquiries in the recent decades. The studies that focused on pathology suggested that humans tend to experience aggression, which causes violence, and a lack of strength that provides positive life experiences (Eryılmaz, 2014). Therefore, the first studies on peace psychology focused on prevention of aggression and violence (Suffla, Van-Niekerk, & Duncan, 2004). In the past century, there has been a noticeable increase in studies that focus on positive human experiences to understand how these valuable characteristics enable individuals to increase their well-being and prevent pathology formation. In parallel to this, peace is also one of the widely studied fields in positive psychology following the introduction of

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theoretical explanations of peace and peace psychology (Fitz-Gibbon, 2010; Roffey, 2012). For example, Danesh (2006, p. 60) proposed the integrative theory of peace and described it as a "psychological, social, ethical and spiritual state with expressions at intrapersonal, interpersonal, intergroup and international areas of human life". The theory states peace attitudes are the outcome of human capacities for knowing, loving, and choosing. Similarly, Wagner, Rivera, and Watkins (1998, p.198) described peace as "an active structure based on the intimacy and cooperation between individuals and nations." According to Wagner et al. (1988), having a positive attitude towards peace means that one who has positive attitudes towards peace desires peace effectively, behaviourally and cognitively. Apart from these theoretical explanations, positive correlations have been found between peace attitudes and self-esteem (Eryılmaz, 2009a), and the personality traits of conscientiousness, extraversion, and agreeableness (Eryılmaz, 2014), hope (Sarı & Kermen, 2015a), and subjective well-being (Diener & Tov; 2007, Sarı & Kermen; 2015b).

Parallel to theoretical explanations and research findings, the concept of peace education has gradually been accepted as a necessary dimension of progressive communities. The United Nations Education, Scientific, and Cultural Organization (UNESCO, 1998, p. 1) states, "first and foremost, a culture of peace implies a global effort to change how people think and act to promote peace". Based on the analysis of a Peace Education Project in 112 schools in Bosnia and Herzegovina, Danesh (2006) advocated peace education as a facilitator of a higher level of peace among adolescents. Danesh (2007) also reported three main features of a peace culture in terms of its implementation in schools. These are mutual trust, security and the hope of having better future, and being able to deal with future conflicts without resorting to violence.

Hope has been studied in the literature since the 1950s. French (1952) and Menninger (1959) mentioned the role of hope in desired change, motivation to learn, and well-being. Snyder (1995, p.355) defined hope as "the process of thinking one's goals, along with the motivation to move forward (agency) and the ways to achieve (pathways) those goals." People who have a higher level of hope believe that they can find various ways to reach their goals (Snyder et al., 1991). This belief system has a significant influence on such individuals, which becomes noticeable when people encounter difficulties (Snyder, 2002).

In the literature, the hope construct was investigated in physical and mental health settings (Snyder, Feldman, Taylor, Schroeder, & Adams, 2000; Pekrun, Goetz, Titz, & Perry, 2002). Several studies focused on hope in the context of problematic behaviour, and as an important psychological factor related to well-being (Beck, Brown, Berchick, Stewart, & Steer, 2006). In a recent study conducted with adolescents aged between 15 and 18, Toner, Haslam, Robinson and Williams (2012) found that hope is a strong and reliable predictor of well-being. Similarly, Peterson, Rush, Beerman, Park and Seligman (2007) indicated that hopeful individuals demonstrate a higher level of resilience in times of adversity. Moreover, research findings indicated a positive correlation between hope and higher grade points (Curry, Snyder, Cook, Ruby, & Rehn, 1997), better-coping strategies (Irving, Snyder, & Crowson, 1998), higher self-efficacy, optimism and overall well-being (Magaletta & Oliver, 1999). Reviewing Turkish literature on hope, it was found that hope was related to self-esteem and resilience (Kaya, 2007) and self-efficacy (Kemer, 2006), and was negatively related to test anxiety (Denizli, 2004) and bullying behaviour (Atik, 2009). In a recent study, a significant positive correlation was found between hope and peace attitudes (Sarı & Kermen, 2015a). In summary, research findings indicate that hope leads to better functioning and greater well-being in general.

**Self-efficacy as a Mediator and a Moderator**

As with the research investigations on the role of hope in different dimensions of well-being, self-efficacy became a subject of inquiry in various samples in literature. Research findings revealed that both aspects contributed significantly to people's well-being (Magaletta & Oliver, 1999). Bandura (1997, p. 39) defined self–efficacy as "individuals' judgments of their capabilities to organize their action to reach the performance level they desire". Belief in efficacy is vital to perform efficient functioning (Bandura, 1997). The influence of perceived self-efficacy determines the level of commitment of individuals' to their goals when they face an obstacle (Vrugt & Keonis, 2002). The self-efficacy construct was based on the social cognitive theory that depicts human beings as active shapers of their environments (Bandura, 1997). According to the perspective of cognitive theory, self-efficacy addresses people's faith in their ability to manage their behaviour and to control events that affect their lives. These beliefs about efficacy play a significant role in

the way people take action when a problem occurs. Bandura (1986) asserted that is unlikely that an individual will find motivation to act when problems arise in the absence of this core belief of self-efficacy. It was found that self-efficacy had a positive effect on positive expectations among adolescents (Capra, Steca, Gerbino, Paciello, & Vecchio, 2006). Moreover, Rutter (1990) pointed out that self-efficacy enhancement can promote successful adaptation for children and adolescents while coping with challenging experiences.

Overall, self-efficacy is one of the most important constructs for gaining an understanding of human cognition, action, motivation, and emotion. Hence, the literature has investigated this topic extensively. Many studies have found a positive relationship between high self-efficacy and dimensions of both physical and mental health (Tozdan & Briken, 2015). To summarise, self-efficacy was found to be positively associated with subjective well-being (Bergman & Scott, 2001; Cicognani, Albanesi, & Zani, 2008; Gupta & Kumar; Magaletta, & Oliver, 1999; Strobel, Telef & Ergün, 2013; Tumasjan & Sporrle, 2011), abstinence from alcohol (Solomon & Annis, 1990), life satisfaction (İkiz & Telef, 2013), happiness (Suldo & Huebner, 2006), and social skills (Canbay, 2010; Luszczynska, Gutierrez-Dona, & Schwarzer, 2005). On the other hand, self-efficacy was negatively related to test anxiety (Kemer, 2006), fear (Öst, Thulin, & Ramnerö, 2004; Takaki et al., 2003), adolescent involvement in problematic behaviour (Aas, Klepp, Laberg, & Aaro, 1995; Chung & Elias, 1986), and depressive symptoms (Brody, Roch-Levecq, Kaplan, Moutier & Brown, 2006). Since Bandura's first publications, many meta-analyses have been conducted, and self-efficacy has been found to be a robust predictor of behaviour (Holden, 1991). Referring to the results of relevant research, Bandura (1997) claimed strongly that self-efficacy beliefs constitute a crucial element of human agency. To conclude, studies on self-efficacy are widely conducted all around the world, and the summary of the current findings in the field of self-efficacy reveals that self-efficacy contributes to one's affection, thoughts, and behaviours. In other words, self-efficacy influences how individuals behave, think, feel and become self-motivated. Given the fact that self-efficacy beliefs seem to play a vital role in human emotion, cognition, action, and motivation, it could be predicted that self-efficacy would play a role in attitudes towards peace as well.

To conclude, education is the key element in bringing human beings together, enhancing their well-being and establishing a culture of peace. Scientific studies on peace and students' peace attitudes could support the establishment of a peace culture in the education field in particular and in societies in general. Moulden and Marshall (2005) indicated that both hope and self-efficacy might be protective factors against potential criminal behaviour. Moreover, research results reported that hope and self-efficacy contribute significantly to the well-being of individuals (Magaletta & Oliver, 1999). As the brief summary of the literature suggests, it could be argued that hope and self-efficacy may be significant predictors of peace attitudes. In a recent study, a positive relationship has been found between hope and peace attitudes (Sarı, & Kermen, 2015a). In the light of the given relationship between self-efficacy and adaptive constructs such as social skills (Canbay, 2010), and maladaptive constructs such as problematic behaviour (Aas et al., 1995), it could be argued that self-efficacy may contribute to the association between hope and peace attitudes. Accordingly, the central hypothesis of the current study is that as hope increases, peace attitudes may increase, and that self-efficacy may play a role in this increase. Thus, the primary purpose of this study is to investigate the mediating and moderating roles of self-efficacy on the relationship between hope and peace attitudes.

## Method

### Research Design

The study was conducted based on quantitative research, conducted in a relational screening model. The relational screening is a research model which aims to determine the existence and/or the extent of change that occurs among two or more variables together (Creswell, 2012). Hope was the independent variable, peace attitudes were the dependent variable and self-efficacy was the proposed mediating and moderating variable in the study.

### Participants

The participants in this study were 293 high school students aged between 14 and 16 (57% females, 43% males) who continued their education in a high school in the northern part of Turkey in the academic year 2015-2016. The study group was determined by the convenience sampling method. The average age of

the students was 15.25 years (SD = .68). Twenty-eight parents of the participants were either divorced or living separately, while the rest of the parents (265) were currently married. Regarding the educational status of the mothers of the participants, 20 (6.8 %) of the mothers did not have any education and could neither read nor write, 153 (52.2 %) were elementary school graduates, and 120 (41) were high school graduates. Four (1.4 %) of the fathers did not have any education and were illiterate, 106 (36.2 %) were elementary school graduates, 172 (58.7 %) were high school graduates, and 11 (3.8 %) had bachelor's degree.

**Measures**

**Children's Hope Scale.** The original Children's Hope Scale (CHS) was developed by Snyder et al. (1997) to evaluate students' degree hope regarding particular, present goal-related situations. The scale could be applied to the students whose age ranged between 8 and 16. It consists of 20 items (for example, I think I can find many ways to reach the things that are important to me). Responses are given according to a six-point scale from "Never"=1 to "All the time"= 6. The total score of hope could be from 6 to 36. Higher scores on the scale indicate higher levels of hope. Atik and Kemer (2009) performed the Turkish adaptation study of the scale. The Cronbach alpha coefficient of the Turkish version was .74 and the test-retest reliability coefficient was .57. The scale's confirmatory factor analysis revealed that the model fit well with the Turkish sample (RMSEA= .06, SRM = .03, CFI= .98, GFI = .91). In the present study, the Cronbach alpha coefficient was found to be .70.

**Peace Attitudes Li' Scale (PALiS).** PALiS was developed by Eryılmaz (2008) to investigate individuals' attitudes towards peace. It is a Likert-type scale with five items (for example, I live in harmony with people). Higher scores indicate a higher level of peace attitudes, while lower scores indicate a negative attitude towards peace. The variance of the scale was 47.58%, and its Cronbach's alpha coefficient was 0.71. The test and re-test reliability were 0.78. The eigenvalue of the scale was 2.37. Regarding the criterion validity, the Domain General Perceived Control Scale was found to be significantly correlated with PALiS ($r=0.44$, $p<0.001$). In the current study, the Cronbach alpha coefficient was found to be .70.

**The Self-efficacy Scale for Children.** The Self-efficacy Scale for Children was developed by Muris (2001) to evaluate the social, academic and emotional self-efficacy of adolescents aged between 12 and 19 years old. It consists of 21 items (for example, how well do you manage to motivate yourself when things do not go in the way you wish?). Responses are given on a five-point scale from "None" = 1 to "Very good" = 5. The total score of the scale could be between 21 and 105. Higher scores indicate higher levels of self-efficacy. The Turkish adaptation of the scale was conducted by Telef (2011). The Cronbach alpha coefficient for the Turkish version was .86, and the test-retest reliability coefficient was .89. The confirmatory factor analysis showed that the model fit well with the Turkish sample (RMSEA= .04, SRMR= .06, NFI= .95, GFI= .94). In the present study, Cronbach's alpha coefficient was found to be .81.

**Procedure**

The researcher administered the self-report measures to the students in classroom settings and provided relevant information regarding the voluntary nature of the study and the objectives before distributing the questionnaires. The students needed approximately 15 minutes to complete the task.

Before going forward with the statistical analysis, data screening was undertaken to identify and deal with outliers, and all of the outliers were removed from the data. The assumptions of the regression analysis were then checked. Firstly, a linear relationship between the independent and dependent variables was checked by creating scatterplots. The assumption of homoscedasticity was also checked via a visual examination of scatterplots, and it was found that residuals were scattered around zero (the horizontal line), providing an even distribution which showed that the data meet this assumption reasonably well. Finally, to check the assumption of normality, skewness ad kurtosis statistics were examined. According to the results, the skewness values ranged between -.556 and .211, whereas the kurtosis values ranged between -.555 and .138. These results suggest that normality was a reasonable assumption. Normality was also checked via histograms of the standardised residuals.

To test whether self-efficacy mediated and moderated the relationship between hope and peace attitudes, the recommendations for testing mediation and moderation provided by Baron and Kenny (1986)

were followed. Baron and Kenny suggested a four-step model for mediation analysis. These are as follows: (1) The independent variable (hope) significantly predicts the dependent variable (peace attitudes), (2) The independent variable (hope) significantly predicts the proposed mediator (self-efficacy), (3) The proposed mediator (self-efficacy) significantly predicts the dependent variable (peace attitudes), controlling for the independent variable (hope), and (4) The effect of the independent variable (hope) on the dependent variable (peace attitudes) decreases when controlling for the mediator.

Full mediation is demonstrated if the correlation is reduced to a non-significant level. If the correlation is reduced but still significant, then partial mediation occurs. In the present study, these conditions were tested using hierarchical regressions (stepwise method) to discover whether self-efficacy functioned as a mediator between hope and peace attitudes. The Sobel test was also utilised to investigate the significance of the mediated path (Baron & Kenny, 1986; Preacher & Hayes, 2004; Soper, 2015).

Regarding the moderation analysis, Baron and Kenny (1986) suggested a model including the impact of the independent variable as a predictor, the effects of controllability as a moderator and the interaction of these two. The moderator hypotheses are supported if the interaction is significant. There can be significant effects for the predictor and the moderator, but these are not directly relevant for testing the moderating hypotheses. All of these conditions were tested using ordinary hierarchical regression analysis. The analysis was carried out using SPSS Statistics 20.

## Results

### Descriptive Data and Inter-correlations

Before the main analysis, the data were investigated with regard to the assumptions (linearity, normality, homoscedasticity, independence of errors of prediction, and no multicollinearity) for the hierarchical regression analysis, and it was found that the main assumptions were proven. Table 1 shows the means, the descriptive statistics, and the Pearson product moment correlations among the study variables.

**Table 1.** Descriptive statistics and inter-correlations of the variables

| Variables | Hope | Self-efficacy | Peace attitudes | Mean | SD | Skewness | Kurtosis |
|---|---|---|---|---|---|---|---|
| Hope | 1.00 | | | 25.51 | 5.57 | -.223 | -.555 |
| Self-efficacy | .64** | 1.00 | | 12.11 | 12.11 | .211 | -.390 |
| Peace attitudes | .26** | .33** | 1.00 | 5.57 | 2.21 | -.556 | .138 |

** $p < .01$

As can be seen, hope is significantly and positively correlated with self-efficacy ($r = .64$, $p < .01$) and peace attitudes ($r = .26$, $p < .01$). As expected, self-efficacy is significantly and positively correlated with peace attitudes ($r = .33$, $p < .01$).

### Testing the Mediating Role of Self-efficacy on the Relationship between Hope and Peace Attitudes

The significance of the mediated path was investigated in four steps, as recommended by Baron and Kenny (1986). In the first step of the mediation process, it was verified that hope significantly predicted peace attitudes ($\beta = .263$, $t = 4.64$, $p < .01$). In the second step, it was found that hope significantly predicted self-efficacy ($\beta = .64$, $t = 14.14$, $p < .01$). In the third step, it was verified that self-efficacy (the mediator variable) significantly predicted peace attitudes ($\beta = .27$, $t = 3.78$, $p < .01$). The results of the hierarchical regression analysis done in step three indicated that hope positively predicted peace attitudes ($\beta = .26$, $t = 4.65$, $p < .01$). However, when self-efficacy and hope were considered together in the regression analysis, the significance of the relationship between hope and peace attitudes ($\beta = .086$, $t = 1.19$, $p > .05$) disappeared. In other words, the relationship between hope and peace attitudes was not significant, which indicated that subjective happiness fully mediated the relationship between hope and peace attitudes. The results of the hierarchical analysis conducted in step three explained above are presented in Table 2.

**Table 2.** Moderating role of self-efficacy in the relationship between hope and peace attitudes

| Variable | *B* | *SEB* | *β* | *t* | *p* | $R^2$ | *Adjusted* $R^2$ |
|---|---|---|---|---|---|---|---|
| **Step1** | | | | | | | |
| Hope | 104 | .022 | .263 | 4.65 | .000 | .069 | .066 |
| **Step 2** | | | | | | | |
| Hope | .034 | .029 | .086 | 1.19 | .234 | .113 | .106 |
| Self-efficacy | .050 | .013 | .273 | 3.78 | .000 | | |

**Dependent Variable:** Peace attitudes

In addition to the hierarchical analysis, a Sobel test was done to determine the estimated significance of the mediation effect. The Sobel (1982) test is characterised as a t-test that assures the verified results are not obtained via collinearity issues. The results of the Sobel test in the present study indicated that the test value was *Z*= -3.18; p = .001. This finding indicated that the verified findings of the mediation analysis were not obtained via collinearity issues.

The results of the regression analysis testing the mediating effects of self-efficacy on the relationship between hope and peace attitudes are presented in Figure 1. As seen in Figure 1, the beta weight given in parenthesis demonstrates the relationship of hope and peace attitudes when self-efficacy is included in the regression model. When hope was alone used in the regression model, the beta weight was .26. The beta weight decreased to .08 when self-efficacy was included in the model.

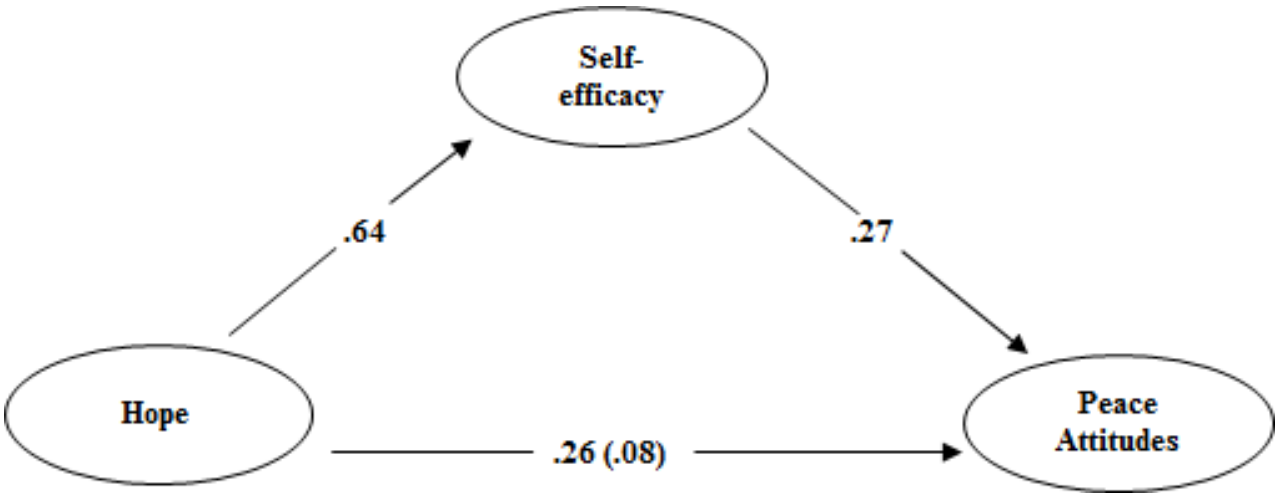



**Figure 1.** Model of the mediating function of self-efficacy in the relationship between hope and peace attitudes.

**Testing the Moderating Role of Self-efficacy on the Relationship between Hope and Peace Attitudes**

The moderating effect was tested using hierarchical analysis in the context of a three-step model, as recommended by Baron and Kenny (1986). Before testing the moderating effect, the two predictor variables (hope and self-efficacy) were standardised to reduce problems regarding multicollinearity between the interaction term and the main effects (Frazier, Tix, & Baron, 2004). Therefore, z-scores were calculated for hope and self-efficacy before investigating the moderating role of self-efficacy. In the first step of the regression analysis, only the hope independent variable was included in the analysis, and it was found that hope significantly predicted peace attitudes (β= .26, p> .01). In the second step, both hope and peace attitudes were included, and it was found that the relationship between hope and peace attitudes was not significant (β= .086, p> .05), whereas the relationship between self-efficacy and peace attitudes was significant (β= .273, p< .01). In the last step, all of the variables, and the interaction of hope and self-efficacy (the interaction of independent and proposed moderator variables) were involved in the analysis. The results indicated that, when all of the variables were included, the relationship between hope and peace attitudes was not significant (β= .112, p> .05), and the relationship between self-efficacy and peace attitudes was significant (β= .242, p< .01). However, there was a significant interaction between hope and self-efficacy (β= .145, p< .01).

These findings indicated that self-efficacy had a moderating role on the relationship between hope and peace attitudes.

**Table 3.** Moderating role of self-efficacy in the relationship between hope and peace attitudes

| Variable | *B* | *SEB* | *β* | *t* | *p* | $R^2$ | $R^2$ change | *F change* |
|---|---|---|---|---|---|---|---|---|
| **Step1** | | | | | | | | |
| Hope | .104 | .022 | .263 | 4.65 | .000 | .069 | .069 | 21.58 |
| **Step 2** | | | | | | | | |
| Hope | .034 | .029 | .086 | 1.19 | .234 | | | |
| Self-efficacy | .050 | .013 | .273 | 3.77 | .000 | .113 | .44 | 14.24 |
| **Step 3** | | | | | | | | |
| Hope | .044 | .029 | .112 | 1.54 | .124 | | | |
| Self-Efficacy | .044 | .013 | .242 | 3.33 | .001 | .133 | .20 | 6.78 |
| Hope X Self-Efficacy | .304 | .117 | .145 | 2.60 | .010 | | | |

**Dependent Variable:** Peace attitudes.

The results of the regression analysis testing the moderating effects of self-efficacy on the relationship between hope and peace attitudes are presented in Figure 2. As seen in Figure 2, the given value in parenthesis is $R^2$ when the interaction of hope and self efficacy is included in the model. When hope was used alone in the regression model, the $R^2$ was .069. The $R^2$ increased to .133 when the interaction was included in the model.




**Figure 2.** Diagram of the conceptual model that the relationship between hope and peace attitudes changes as a function of self-efficacy as a moderator.

## Discussion

Consistent with the expectations, the findings of the present study showed that self-efficacy fully mediated the relation between hope and peace attitudes. Mediation indicates that as hope increases peace attitudes increase as well and self-efficacy has a mediator effect in this enhancement. In other words, the results revealed that mediator function of self-efficacy represented the generative mechanism through which hope can influence peace attitudes. The present study also indicates that self-efficacy had a moderator role in the relationship between hope and peace attitudes. That means that self-efficacy strengthened the relationship between hope and peace attitudes.

Previous studies on self-efficacy revealed that it was positively related to psychological variables such as subjective well-being (Bergman & Scott, 2001; Caprara, Steca, Gerbino, Paciello, & Vecchio, 2006; Cicognani, Al-Banesi, & Zani, 2008; Gupta & Kumar; Magaletta & Oliver, 1999; Strobel, Tumasjan, & Sporrle, 2011; Tong & Song, 2004), life satisfaction (İkiz & Telef, 2013), happiness (Suldo & Huebner, 2006), and social skills (Canbay, 2010; Luszczynska, Gutierrez-Dona, & Schwarzer, 2005). It was negatively related to test anxiety (Kemer, 2006); fear (Öst, Thulin, & Ramnerö, 2004; Takaki et al., 2003), adolescent involvement in problematic behavior (Aas et al., 1995; Chung & Elias, 1996), and depressive symptoms (Brody et al., 2006; Takaki et al., 2003). Similarly, numerous studies were carried out on hope, and research results indicated that high level of hope leads to superior well-being in general. As an example, Magaletta, & Oliver (1999) found out that hope was positively correlated with self-efficacy, optimism, and general well-being. There has been an enormous amount of research conducted on hope and self-efficacy both on the relationship between two

of them and their relations to other psychological constructs, but few studies exist on peace attitudes. To this point, peace attitudes were found to be positively correlated with self-esteem (Eryılmaz, 2009), agreeableness (Eryılmaz, 2014), hope (Sarı & Kermen, 2015a), and subjective well-being (Diener & Tov, 2007; Sarı & Kermen, 2015b). As the brief summary of the research indicates, both self-efficacy and peace attitudes were found to be positively related to different domains of well-being including subjective well-being. However, no research was carried out to this point investigating the relations between these three constructs; hope, and self-efficacy and peace attitudes. The results of this study, therefore, gives valuable insight. Regarding the role of self-efficacy in the relationship between hope and peace attitudes, some explanations could be done with respect to hope theory (Snyder et al., 1991) and self-efficacy theory (Bandura, 1986).

Hope theory shares some theoretical basis for the self-efficacy theory. Both of the theories are goal-directed. On the other hand, despite their relatedness, as Magaleta and Oliver (1999) stated self-efficacy and hope are not identical constructs. The main difference is that while in hope theory both agency (motivation to move forward) and pathways (ways to achieve) are seen as necessary for hopeful thinking (Snyder, 2002), Bandura emphasis on the importance of efficacy expectations –ones' beliefs about their efficient functioning. Indeed, Bandura (1982) characterized self-efficacy as the strongest predictor of behavior. Literature already has shown that having hope which refers to carrying goals and motivation merely to reach them, helps individuals to demonstrate positive attitudes towards different aspects of life. However, the results of the present study, which pointed out that that self-efficacy is a mediator and moderator between hope and peace attitudes, could be interpreted in a way that hope is not enough, that adolescents need to believe that they have control over their experiences. In other words, self-efficacy refers to feeling powerful and capable of achieving the desired goals, and adolescents need to think and feel a positive perception of control over their experiences. Hattiangadi, Mevded, & Gilovich (1995) found out that individuals regret the actions that they have not taken rather than the actions they have taken. This could be interpreted as one might have hopeful thinking, but without beliefs in his/her self-efficacy, one might not take the necessary actions to realize the wishes true. In line with this, Bandura (2008) stated that positive thinking could be 'cognitive failing' if positive visions are not turned into realities and that believing in capability is required.

As on another perspective, the findings could also be discussed with respect to development theories, e.g. life-span developmental approach (Erikson, 1964). Adolescent is a period of 'storm and stress' in which many changes occurs. Regarding the psychological development, it is time for adolescents to gain identity and control over their thoughts, behaviors, and experience (Eryılmaz, 2009b). The development of a sense of self-efficacy is the central developmental task in adolescence. As they have more positive beliefs about their capacities and capabilities, they demonstrate more level of adaptive behaviors to their families and society (Erikson, 1964). The findings of this study supported these theoretical explanations and discovered the significant role of self-efficacy as a mechanism influencing and strengthening the relation between hope and attitudes towards peace. In other words, the present study pointed out that, self-efficacy is essential so that hope can enhance positive attitudes towards peace. Therefore, contributions and implications of this result should be emphasized.

One contribution is that the results of this study contribute to peace psychology by extending our knowledge regarding psychological constructs and skills related to peace attitudes. Vriens (1999) in his overview of research in the field of peace that cover last five decades asserts that research cannot tell us what should be. Vriens (1999) also claimed that there is a gap in peace research because research fails to indicate the initiatives we can take to create peace. Similarly, Danesh (2006) claimed that there is an absence of agreed approach to peace, and this is one of the reasons of we are witnessing a high rate of conflict and war. Therefore, there is a need for a more implacable theoretical structure for peace. The results of the current study could be clarifying and explanatory for instructors and counselors in their studies to conduct programs and courses in peace education. Peace education aims to equip students with skills necessary to develop peaceful attitudes when they face a conflict or violence. Schools should be safe to provide the best possible situation for teaching and learning. It is important not only to prevent violence in schools and but also to establish a peace culture where adolescents can learn and teachers can teach in a positive and, healthy and secure setting (Christine, 2006). The educational context could provide programs addressing the skills and strengths to demonstrate positive peace attitudes in all levels of education.

Smilarly, Synder, Ilardi, Michael, and Chaevens (2000) identified education as one of the main hope enhancement areas. Using hopeful thinking, students can develop their capabilities to find out several pathways towards their goals. After Snyder and his colleagues, Halpin (2001) also pointed out the essential role of hope in educational environments. Moreover, Snyder, Feldman, Taylor, Schroeder, & Adams (2000) indicated that hope has important roles both in primary prevention and in secondary prevention. The results of the present study supported these theoretical explanations and suggestions. Besides, the results indicated that self-efficacy strengthened the influence of hope on peace attitudes. The results provide a deeper insight into what may be essential to increase positive attitudes towards peace among adolescents.

However, there are some limitations of the present study. Firstly, the study group was composed of high school students, which limits the generalizability of the results. Secondly, the presence of a mediating role and moderating role of self-efficacy has been presented in the present study. The future study in the field can extend with the identification of possible mediators or mediators or moderators such as self-esteem. Thirdly, the data in the present study was gathered only by self-report measures. Employment of diverse data collection methods can provide further insights as the current study relied on self-report instruments

Despite the limitations, this study makes a contribution to the growing peace psychology and positive psychology literature. Positive psychology has placed emphasis on identifying psychological strengths that enhance healthy development. Self-efficacy has been known to be an important construct for human functioning and well-being. The present study found evidence of its effect as a mediator and moderator role in the relation between hope and peace attitudes. Regarding the implications of this finding in the field of counseling, it could be suggested that services and studies focused on increasing self-efficacy may help students to be less violent and demonstrate more peaceful attitudes. Also, it could be important that school counselors provide consultation services to the parents emphasizing the importance of supportive parental attitude. There is already evidence in the literature that supporting parental attitudes could increase students' self-efficacy. If school counselors could help parents to be more supportive, this could increase the self-efficacy levels of the adolescents, and that could enhance adolescents' positive attitudes towards peace. To conclude, it is significant that school counselors and mental health professionals give emphasis on enhancing self-efficacy of adolescents to establish a peace culture in schools and society as well.

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