A Positive Model for Reducing and Preventing School Burnout in High School Students

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Abstract
This study aims to develop and test the validity of a model limited to attitude towards the future and subjective well-being for reducing and preventing the school burnout that high school students can experience. The study is designed as a relational screening model conducted over 389 high school students. The data in this study are analyzed using the structural equation modeling technique. In this regard, confirmatory factor analyses have been conducted to determine whether the scale's factor structures can be confirmed through the research data in terms of attitudes toward the future, subjective well-being, and school burnout. After revealing that the models defined for the factor structures of the scales had a good fit with the data gathered, a model regarding the relationships among the attitudes towards the future, subjective well-being and school burnout was established. These relationships were modeled using a path diagram. According to the developed model, a positive relationship exists between subjective well-being and attitude toward the future. Both attitude toward the future and subjective well-being negatively relate to school burnout. The developed model can be used for reducing high school students' burnout.

Keywords
School burnout • Subjective well-being • Attitudes toward the future • Structural equation model • High school students

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School is an essential institution that provides children with opportunities for cognitive, affective, behavioral, and social development; it equips them with the necessary qualifications for them to make their place in society and at work. Although one of school’s most important functions is to help children in their learning processes (Zigler, Kagan, & Muenchow, 1982), this institution can become a stress factor (Chang, Rand, & Strunk, 2000) that causes students to experience emotional, academic, behavioral, and interpersonal problems (Erdur-Baker, Özmen, & Özmen, 2011). Students have difficulty concentrating on activities related to school (Jacob, 2005); their lack of concentration negatively affects their level of learning while damaging the academic and social aspects of their development not just in school but also in their future (Beaman & Wheldall, 1997; Little & Hudson, 1998; Stornes & Bru, 2011). For example, negative thinking and depression, avoiding academic tasks, lack of concentration, and fear of school are the most serious problems encountered at school (Poulou & Norwich, 2000). In particular, children who are in a demanding and competitive education system can find themselves in a process where they are forced to be under greater internal and external pressures regarding outperforming their peers.

In addition to high grade point averages playing an important role in moving to the next educational stage starting with elementary school, students also face difficult exams that they need to pass. While moving to the next stage of education is challenging in that it requires a new process of self-adaptation (Anderman, Maehr, & Midgley, 1999; Anderman & Midglay, 1997; Bernd & Mekos, 1995; Rice, 2001; Simmons, Carlton-Ford, & Blyth, 1987; Wigfield, Eccles, Maclver, Reuman, & Midgley, 1991), this transition period, which comes after a rather painful process, makes students’ new school life even more difficult. The transition from middle school to high school is one of the most important transitions in adolescence (Salmela-Aro, Savolainen, & Holopainen, 2009). When coming to high school with an accumulation of fatigue, boredom, and stress, students are under pressure to prepare for tests that will determine their future; it gives them serious direction in terms of their profession. In this process, they also try to form a sense of identity as a result of the developmental stage they are going through while trying to fulfill developmental tasks in terms of social, professional, and sexual aspects (Steinberg, 2007). Over one’s school career, the high school years have particular significance for experiencing school burnout. Students’ risk of experiencing school burnout increases at this time because of the negative influences from their accumulated experiences in the education system, as well as the from the stress and sense of tiredness due to the challenging and painful process when passing from middle school to high school. These things combine with the cognitive, affective, social, and behavioral turmoil of adolescence. Bask and Salmela-Aro’s (2013) findings, based on their longitudinal study, confirm this view. They found that the burnout levels of high school students between 16-18 years old
show an increase, and these students are at risk of losing their self-confidence and having their self-efficacy beliefs diminish.

When students encounter excessive demands with respect to school and education, they start having difficulty meeting these demands. As a result, they experience intense stress and pressure. When students cannot cope with being under stress and pressure for a long time (Friesen & Sarros, 1989; Torun, 1997; Kaçmaz, 2005), they develop burnout symptoms that stem from school (McCarthy, Pretty, & Catano, 1990; Yang & Farn, 2005). School-burnout syndrome, which leads to serious consequences such as depression (Salmela-Aro et al., 2009), school absenteeism, loss of motivation for classes, dropping out of school (Bask & Salmela-Aro, 2013; McCarthy et al., 1990; Yang & Farn, 2005), and suicide (Dyrbye et al., 2008), shows its symptoms in three dimensions: physical, affective, and cognitive. Physical symptoms can include chronic tiredness; decreased energy and resistance to disease; head, back, and muscle aches; and disrupted sleep patterns. Affective symptoms include insecurity, a lack of confidence about the future, constantly feeling tense and irritable, being angry and irritable, exhibiting less polite/respectful attitudes when relating with others, and developing negative attitudes towards friendship (Çimen & Ergin, 2001). Cognitively, burnout can manifest as being discontented with work, being disinclined to engage in work and work-related environments, not going to work, and developing negative attitudes and beliefs towards life and its meaning (Aslan et al., 2005).

In their study, Schaufeli, Leiter, and Maslach (2009) reviewed 35 years of research and practice on the concept of burnout, stating that burnout has long been regarded as a negative notion. They added that, in studies on burnout, this approach began to change with Schaufeli and Salanova (2007), who positively defined the concept of engagement as the opposite of burnout and then, after the emergence of positive psychology, defined burnout as an erosion of a positive psychological state. According to Schaufeli et al. (2009), this point of view defines burnout as the negative pole of continuous subjective well-being and engagement as its positive pole. Researchers claim that further studies applying this scientific approach to burnout will reveal the extent to which the psychological processes responsible for developing burnout and engagement differ from each other. As an example in this regard, studies on preventing burnout can also reveal findings on how to increase engagement (i.e., the positive pole of subjective well-being).

The new point of view that defines burnout syndrome as the negative pole of continuous subjective well-being (Schaufeli et al., 2009) requires a review of the relationship between burnout and subjective well-being. Subjective well-being has an important function in the powerful nature of spirit (Gürgan, 2006). An increase in duties and responsibilities that reduces an individual’s subjective well-being or
causes a significant decrease in their energy negatively affects one’s spiritual health (Kaçmaz, 2005). An individual’s levels of life satisfaction and of positive and negative feelings are expressed in psychology through the concept of subjective well-being (Diener, 1984; Hyborn, 2000). Individuals with high levels of life satisfaction and whose emotions in their affective states are predominantly positive are said to have a high level of subjective well-being (Lyubomirsky, Sheldon, & Schkade, 2005).

Significant relationships exist between school burnout and subjective well-being. Aypay and Eryılmaz (2011), in their study on the relationship between school burnout and subjective well-being in adolescents, found that the sub-dimensions of school burnout include a lack of interest in school, and burnout due to family is a significant and important predictor of subjective well-being. According to the results of their study, as adolescents’ scores for lack of interest in school and burnout due to family increase, their scores for subjective well-being decrease.

In the literature, one of the variables that have been found to relate to both burnout and subjective well-being is the characteristic of optimism. Seligman (2006) suggests that when compared to pessimism, optimism is a more adaptive personal characteristic because of its functions in problem-solving and stress-reduction. Optimism has been found to positively relate to the ability to proactively cope with problems (Sohl & Moyer, 2009; Uskul & Greenglass, 2005). Optimists are inclined to notice sources of stress early and take precautions (Riolli & Savicki, 2003). Together, optimism and proactive coping behaviors greatly contribute to individuals’ subjective well-being (Uskul & Greenglass, 2005). Chang et al. (2000) revealed that optimism is negatively related to burnout and helps reduce it. In a similar study, Chang and Chan (2015) found that optimism has a strong negative relationship with the three dimensions of burnout (emotional burnout, insensitivity, and declining sense of personal achievement), and individuals who experience proactive coping experience burnout syndrome less.

In proactive coping, which focuses on increasing the quality of life (Greenglass, 2002), individuals have a vision about their distant future. With these visions, they set and manage goals in the present as well as for the future. Making long-term plans is a typical characteristic of these ways of coping, in addition to being a typical characteristic of proactive coping. However, this style of coping includes planning that focuses more on preventing risk factors that can be encountered in the future or on reducing the amount of stress that can be caused by possible stress factors because this way of coping is managed through feelings of anxiety and fear (Schwarzer, 2000). As optimism and planning are important for spiritual health, the feelings of fear that enable one to protect the self from certain vital risks and to perform activities towards one’s need to be safe contribute differently to spiritual health.
Reflections of the characteristics of optimism, planning, and fear are hidden in individuals’ attitudes toward their future. These attitudes have two aspects, positive (optimistic and planned) and negative (fearful; İnamoğlu & Güler-Edwards, 2007). These aspects affect how individuals achieve their future goals. For example, Scheier and Carver (1985) and Snyder et al. (1991) suggested that those who have a positive attitude towards the future, namely, those who look at the future with hope and think they’ll perform well in the future, are more persistent at achieving their goals and do not give up easily when encountering difficulties.

Examining the relationship between burnout and attitude towards the future shows that attitude towards the future is related to the affective symptoms of burnout. A lack of confidence about the future, which is included in the affective symptoms of burnout, is evaluated through a different interpretation as individuals’ future orientation heading towards a negative dimension (Çimen & Ergin, 2001) and leading them into depression. In their study, MacLeod and Byrne (1996) revealed that depressed individuals have less positive expectations of the future compared to the control group. According to the results of studies conducted under a Turkish context, high school students’ positive attitudes toward the future positively affect their levels of subjective well-being (Eryılmaz, 2011; Karakoç, Bingöl, & Karaca, 2013). On the other hand, as an individual’s attitude towards the future becomes positive, the level of burnout decreases (Çimen & Ergin, 2001; MacLeod & Byrne, 1996). In addition to all these points, Baumgartner, Peters, and Bagozzi (2008) found in their study on feelings toward the future that in cases where the possibility of encountering unwanted consequences in the future exists, negative feelings such as fear and anxiety more strongly motivate behaviors than positive feelings do. These findings suggest that improving one’s attitude towards the future (i.e., positive, planned, and fearful) can be an effective factor in preventing burnout.

No studies that have examined together the effects of subjective well-being and attitude towards the future on preventing burnout in high school students are encountered in the literature. Therefore, this study aims to test a model that has been defined in terms of the relationships among attitude towards the future, subjective well-being, and school burnout based on the findings in the literature. The relationships between attitude towards the future and subjective well-being, as well as among these two variables with school burnout, have been examined within this model. In this respect, the theoretical model and the hypotheses regarding this model have been tested, as presented in Figure 1.
The hypotheses are as follows:

**H1.** Is there a direct relationship between attitude towards the future and school burnout?

**H2.** Is there a direct relationship between attitude towards the future and subjective well-being?

**H3.** Is there a direct relationship between subjective well-being and school burnout?

### Method

This study aims to develop an effective model for reducing and preventing school burnout. Based on this aim, the dependent variable of the study is school burnout. The independent variables are subjective well-being and attitude towards the future. The study uses a relational screening model, as it examines the relationships among the variables of school burnout, attitude towards the future, and subjective well-being.

### Participants

That students in the sample provide sincere answers to the items on the instruments is important in order for the data to be considered valid and reliable. For this reason, the sample consists of 389 students from a high school located in Eskişehir Province, Turkey, which is accessible to the researcher. The students were informed about the study prior to the procedure, and only those who volunteered to participate have been included in the sample. Of the students, 228 are female and the remaining 161 are male; 153 are in ninth grade, 101 are in tenth grade, 86 are in eleventh grade, and 49 are in twelfth grade.

### Data Gathering Tools

The study employs the Adolescent Subjective Well-Being Scale, the School Burnout Scale for High School Students, and the shortened form of the Attitude towards the Future Scale. Information regarding the psychometric characteristics of these scales is presented below.

**Adolescent Subjective Well-Being Scale (ASWBS).** This scale was developed by Eryılmaz (2009) to measure adolescents’ levels of subjective well-being. A 4-point Likert-type grading system is used for the scale’s items. The scale measures subjective
well-being in a four-factor structure: satisfaction in the relationships with family, satisfaction in the relationships with other important individuals, life satisfaction, and emotional satisfaction. These factors explain 61.64% of the variation. The eigenvalues for these factors are 5.36, 1.45, 1.30, and 1.11, respectively. The variances explained by the factors are as follows: 35.79%, 9.70%, 8.69%, and 7.44%, respectively. Factor loading values for the items in each factor range from .78 to .72, .70 to .64, .79 to .75, and .73 to .63, respectively. The Cronbach alpha reliability values calculated for the scale’s dimensions are .83, .73, .81, and .66, respectively. In order to determine whether the model defined for the factor structure of the ASWBS could be confirmed with the data used in this study, confirmatory factor analysis was performed over the four-factor structure. Prior to confirmatory factor analysis, the data were tested for normal distribution. For this purpose, skewness and kurtosis values were examined, and the values are between ±1. This is accepted as showing normal distribution within the dataset (Pituch & Stevens, 2016, p. 228). The fit indices for the model tested with confirmatory factor analyses have also been examined, and the chi-square value was calculated as χ² = 267.51, df = 84, p < .01. The other fit indices of the model (CFI = 0.98, IFI = 0.98, GFI = 0.92, AGFI = 0.90, NFI = 0.98, NNFI = 0.98, χ²/df = 3, RMSEA = 0.07, SRMR = .06) also show that the model has good fit with the data. The Cronbach alpha internal consistency coefficients for the scale’s factors are .92, .92, .92, and .81, respectively. In addition, the internal consistency coefficient for the whole scale was found to be .94.

School Burnout Scale for High School Students (SBSHSS). This scale was developed by Aypay (2012) to measure burnout syndrome in high school students. A 4-point Likert-type grading system is used for the scale’s items. Explanatory (EFA) and confirmatory factor analyses (CFA) were conducted on the scale data. The results of the factor analyses reveals that the scale measures school burnout as a 7-factor structure. These factors explain 61% of the variation. The factors are: loss of interest in school, burnout from studying, burnout due to family, burnout from homework, feeling suffocated and bored by teachers’ attitudes, need for rest and to have fun, and incompetency at school. The eigenvalues for the factors are 3.70, 3.65, 3.22, 2.60, 2.58, 2.52, and 2.33, respectively. The variances explained by the factors are 10.89%, 10.75%, 9.48%, 7.66%, 7.60%, 7.41%, and 6.86%, respectively. The factor loading values for the items in each factor range from .86 to .66, .85 to .50, .82 to .47, .71 to .55, .74 to .56, .84 to .55, and .81 to .50, respectively. CFA obtained a chi-square value for the model calculated as χ² = 1141.11, df = 506, p < .01. The model’s other goodness-of-fit indices (GFI = 0.93, AGFI = 0.91, PGFI = 0.90, RMSEA = 0.05, CFI = 0.94) show good fit between the model and data. The Cronbach alpha internal reliability coefficients calculated for the dimensions of school burnout are .86, .82, .83, .67, .75, .72, and .72, respectively. In order to determine whether the data used in this study can confirm SBSHSS’ factor structure, CFA was performed. The fit indices
for the model obtained from the CFA have also been examined, and the chi-square value is calculated as $\chi^2 = 1323.97$, $df = 399$, $p < .01$. The model’s other fit indices ($CFI = 0.96$, $IFI = 0.96$, $GFI = 0.96$, $AGFI = 0.92$, $NFI = 0.95$, $NNFI = 0.94$, $\chi^2 / df = 3.3$, $RMSEA = 0.07$, $SRMR = .05$) also show that the model has good fit with the data. The Cronbach alpha internal consistency coefficients for the scale’s factors are .89, .84, .86, .81, .71, .76, and .79, respectively. Lastly, the internal consistency coefficient for the whole scale is found as .92.

**Shortened form of the Attitude towards the Future Scale (SFATFS).** This scale, developed by Güler (2004), aims to identify students’ attitudes toward their own future. The scale was initially developed with 40 items, after which a shortened form with 15 items was prepared. The shortened form is found to measure attitude towards the future as a 3-factor structure, and each of these factors includes five items. These factors are: positive future orientation, anxious future orientation, and planned future orientation, which together explain 59% of the variation in attitude towards the future. The eigenvalues for the factors are 5.13, 2.43, and 1.31, respectively. Each factor explains the variances as follows: 34.17%, 16.17%, and 8.74%, respectively. Factor loading values for the items in each factor range from .83 to .55, .87 to .62, and .85 to .46, respectively. The Cronbach alpha values calculated for the scale’s factors are .80, .81, and .79, respectively. The reliability coefficients obtained for the factors using the test/retest method are .70, .76, and .71, respectively. In order to determine whether the data used in the study can confirm the factor structure of the SFATFS, a CFA was performed. The fit indices for the model obtained from the CFA have also been examined, and the chi-square value is calculated as $\chi^2 = 310.85$, $df = 84$, $p < .01$. The model’s other fit indices ($CFI = 0.94$, $IFI = 0.94$, $GFI = 0.90$, $AGFI = 0.90$, $NFI = 0.91$, $NNFI = 0.92$, $\chi^2 / df = 3.7$, $RMSEA = 0.08$, $SRMR = .07$) also show the model to have good fit with the data. The Cronbach alpha internal consistency coefficients for the scale factors are .70, .70, and .85, respectively. The internal consistency coefficient for the whole scale is found to be .81.

**Data Analysis**

The data have been analyzed using the techniques of descriptive statistics, confirmatory factor analysis, and structural equation modeling; the reliability of the factors has been revealed by calculating Cronbach’s alpha coefficients. While working with the structural equation modeling techniques, factor-total scores were used instead of items as the observable variable. Frequencies and percentages were retrieved for the sample’s demographic characteristics (i.e., gender and grade), and means and standard deviations were calculated with regard to the data-gathering tools. In order to determine whether the instruments’ factor structures conform with the data used in this study, confirmatory factor analyses was performed. Additionally,
the Cronbach alpha reliability coefficients were calculated for the scales and their factors. The relationships among attitude towards the future, subjective well-being, and school burnout have been tested using a structural equation model.

**Findings**

The results of the descriptive analysis for the high school students’ scores in the sub-dimensions of school burnout, subjective well-being, and attitude towards the future are presented in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout Due to Family</td>
<td>12.50</td>
<td>4.19</td>
</tr>
<tr>
<td>Loss of Interest in School</td>
<td>14.38</td>
<td>4.77</td>
</tr>
<tr>
<td>Satisfaction with the Relationships with Family</td>
<td>13.60</td>
<td>3.18</td>
</tr>
<tr>
<td>Satisfaction with the Relationships with Significant Others</td>
<td>13.00</td>
<td>3.21</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>8.60</td>
<td>2.78</td>
</tr>
<tr>
<td>Positive Feelings</td>
<td>12.42</td>
<td>2.89</td>
</tr>
<tr>
<td>Planning Orientation</td>
<td>17.94</td>
<td>3.59</td>
</tr>
<tr>
<td>Fear Orientation</td>
<td>14.34</td>
<td>4.10</td>
</tr>
<tr>
<td>Negative Orientation</td>
<td>12.61</td>
<td>3.30</td>
</tr>
</tbody>
</table>

The model regarding the relationships among attitude towards the future, subjective well-being, and school burnout were modeled using a path diagram. According to the model presented in and developed in this study, a positive relationship exists between attitude towards the future and subjective well-being. Both attitude towards the future and subjective well-being negatively relate to school burnout.

The fit indices of the model developed for the relationships among attitude towards the future, subjective well-being, and school burnout have been calculated as ($\chi^2 = 71.57$, $SD = 24$, $\chi^2 / SD = 2.98$, $RMSEA = .07$, $SRMR = .05$, $CFI = .95$, $IFI = .95$, $GFI = .96$, $AGFI = .92$, $NFI = .93$, $NNFI = .92$). According to Kline (1998; 2005), these values indicate that the model has an acceptable fit. Because the model-data fit is good, no further modifications have been made.
Whether attitude towards the future significantly explains school burnout was tested. According to the model, attitude towards the future contributes a negative and significant explanation of school burnout ($\beta = -0.85$, $t = -6.13$). Whether attitude towards the future significantly explains subjective well-being was also tested. According to the model, attitude towards the future contributes to a positive and significant explanation of subjective well-being ($\beta = 0.29$, $t = 4.42$). Whether subjective well-being explains school burnout was then tested. According to the model, subjective well-being contributes a negative and significant explanation of school burnout ($\beta = -0.39$, $t = 3.59$). As can be seen in the model, when students develop an attitude towards the future their levels of subjective well-being increase. Meanwhile school burnout is observed to decrease as attitude towards the future develops and levels of subjective well-being increase.

**Discussion**

This study develops and tests the validity of a model limited to subjective well-being and attitude towards the future in order to reduce and prevent school burnout in high school students. Analyses results show it to be an acceptable model. This model’s most important variable for preventing school burnout in high school students was observed to be attitude towards the future. The reason behind this finding is that attitude towards the future is closely related to both the affective and cognitive aspects of burnout. In burnout, individuals experience a lack of confidence...
regarding their future (Çimen & Ergin, 2001), and developing negative attitudes and beliefs about the meaning of life (Aslan et al., 2005) may push them to break their ties with their future. Depression, as an important consequence of burnout, is found to relate to a decrease in positive future expectations (MacLeod & Byrne, 1996). At this point, in order to speed up the improvement of existing burnout, increasing individuals’ positive expectations toward the future, encouraging them to make plans and set goals for the future, and ensuring that they have a bit of anxiety about their future, which triggers these two characteristics in a way, is regarded as significant (Chang & Chan, 2015). The reason being that having an optimistic attitude towards the future develops one’s characteristics for adapting to life (Seligman, 2006) while also directing one to set goals and make plans about the future (Sohl & Moyer, 2009; Uskul & Greenglass, 2005). Because individuals who have positive expectations about the future and who make plans to achieve the goals they set are more resilient in the face of difficulties (Scheier & Carver, 1985; Snyder et al., 1991), this will also contribute to improving their subjective well-being (Uskul & Greenglass, 2005).

Developing a positive attitude towards the future also includes employing proactive coping strategies that allow one to notice possible sources of stress early on and to take precautions against them (Riolli & Savicki, 2003) This way of coping is more related to managing the feeling of fear (Schwarzer, 2000). Because fear functions as a strong source of motivation when individuals act for their own safety (Baumgartner et al., 2008), developing a fearful attitude towards the future is thought able to contribute to coping with the syndrome of burnout. Consequently, enabling individuals to develop attitudes that strengthen their ties with the future can be argued as significant for protecting them from burnout or for speeding up improvements for existing burnout.

Another finding of this study is that subjective well-being is the second most important variable affecting high school students’ school burnout. One important reason for this situation is the nature of subjective well-being. From its new perspective to the concept of burnout as stated by Schaufeli et al. (2009), burnout is defined as the negative pole of continuous subjective well-being whereas engagement is defined as the positive pole. In this case, as individuals’ subjective well-being becomes more positive, they move from the negative dimension to the positive dimension affectively and cognitively. This means that the intensity of their burnout syndrome naturally decreases.

A second explanation for this finding comes from research in the field of positive psychology. According to Hefferon and Boniwell (2010), the positive feelings that individuals experience have three important functions: the building effect, the expanding effect, and the repairing effect. In particular, the repairing effect means to
eliminate previous negative experiences. In the context of this study, one can argue that an increase in high school students’ subjective well-being repairs the damage from their experienced burnout.

Another finding of the present study is the positive relationship between attitude towards the future and subjective well-being. This finding can be explained by the target theory of subjective well-being. According to the target theory, two important factors increase the subjective well-being of individuals. One is an individual’s goals that express one’s desires about the future; this is defined as the cognitive representation of their desires (Sheldon & Kasser, 1998). Having a positive attitude towards the future also means to have the hope that future demands will be met. From another perspective, individuals with goals related to the future lead them to have more positive expectations toward the future. In other words, they develop positive attitudes. If individuals who have goals related to the future are happy in their current life, their positive beliefs and attitudes regarding their ability to achieve their goals in the future become even more strengthened.

Although a limitation of this study is that it was conducted on a small sample, it is thought to contribute to the literature because it reveals a positive perspective on reducing and preventing the syndrome of school burnout. The findings obtained from this study can be argued to provide a different perspective to psychological counselors working in schools, as well as to professionals who provide clinical help to students with respect to coping with burnout. As an example based on these findings, school psychological counselors can enable students to develop their attitude towards their own futures and help them by implementing programs for improving their subjective well-being. In the model developed in this study, two variables related to school burnout have been examined. Future studies can test the role of other variables in preventing burnout.

References


