

The Study of Relations between Life Satisfaction, Burnout, Work Engagement and Hopelessness of High School Students

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Abstract

The purpose of this research is to determine the relations between high school students' life satisfaction, burnout, work engagement and hopelessness scores and examine the contribution of their burnout, work engagement and hopelessness scores in the prediction of their life satisfaction scores. The Satisfaction with Life Scale (SWLS), Maslach Burnout Inventory–Student Survey (MBI-SS), Utrecht Work Engagement Scale–Student Survey (UWES-SS), Beck Hopelessness Scale (BHS) and “Personal Information Form”, has been applied on a total of 461 students, 225 (%48.8) of them being girl students and 236 (%51.2) of them being male students, who were continuing the 12th grade in varying high school classes during the 2011-2012 school year within the provincial boundaries of the Mersin Municipality and had voluntarily accepted to participate in the research. Confirmatory factor analysis (CFA), correlation analysis and multiple regression analysis have been used in the analysis of the data. It is observed as a result of the analyses that high school students' life satisfaction scores have a negative relation with exhaustion, cynicism, efficacy and hopelessness scores; on the other hand, these have a positive relation with vigor, dedication and absorption scores. Also it has been observed that life satisfaction scores only predict hopelessness, absorption and efficacy in a meaningful way.

Keywords: high school students, life satisfaction, burnout, work engagement, hopelessness

1. Introduction

The notion of well-being is examined in two aspects, those being subjective well-being and psychological well-being. While the subjective well-being amongst these notions rather corresponds to the hedonistic view predicting the individual's elusion from pain and approach to pleasure, psychological well-being corresponds to ensuring the individual's personal development and realizing one's on potentials, going beyond the search of pleasure and which includes physiological and spiritual health (Sahranç, 2007).

The notion of subjective well-being, which looks into the individuals' positive utilization of their lives (Diener, 1984) has two components, those being emotional and cognitive (Pavot and Diener, 1993), including the elements life satisfaction with positive and negative emotions (Andrews and Withey, 1976). Life satisfaction, which forms the cognitive assessment of satisfaction by one's standing in life and which is a key indicator of subjective well-being (Linley, Maltby, Wood, Osborne and Hurling, 2009), is conceptualized as a construct representing positive evaluation of the quality of one's life as a whole (Diener, Emmons, Larsen and Griffin, 1985; Diener, Suh, Lucas, and Smith, 1999; McDowell, 2010; Pavot and Diener, 1993).

It is stated that individuals' life satisfaction is affected by factors such as having pleasure in life, finding the meaning of life, consistency in reaching one's life goals, positive individual identity, feeling physically well, economic security and social factors (Keser, 2005; Schmitter, 2003). Moreover it is stated that in order to have a high satisfaction in life, individuals must motivate themselves, go on with their lives despite misfortunes, refrain from thinking negative and troubling thoughts, put themselves in others' shoes and never allow their hopes to perish (Palmer, Donaldson and Stough, 2002).

Life satisfaction ensures people to feel themselves better in many ways and thereby positively affects their overall well-being (Pasupuleti, Allen, Lambert and Cluse-Tolar, 2009). Overall well-being is taken up and assessed in terms of different life roles such as home, marriage, family and work (profession). Among those, work (profession) represents an important context in terms of individuals' well-being and ranks among the top

levels of life satisfaction determinants (Rothmann, 2010). The work environment has a direct effect on the workers' life satisfaction. If the work environment has a pleasant and fun property, it will in turn provide the worker with a higher level of life satisfaction. However, if the work environment has a property which causes negative feelings, the worker's life satisfaction may be very much adversely affected by this satisfaction. At the same time, a low level of life satisfaction may have some unwanted effects on the workers' health and well-being such as low self-esteem and high levels of pessimism (Zastrow and Kirst-Ashman, 2004).

Contrary to the past, the educational process nowadays encompasses a wide time frame. Although being a student is not considered to be a profession, it is assumed from a psychological point of view that the most basic activities of being a student (mandatory activities such as attending courses and fulfilling the obligations related to courses and orientations towards a specific intention such as passing exams) can be defined as "work" and may express a meaning equal to "work" (Schaufeli and Taris, 2005). From this point of view, burnout and its opposing work engagement structures, which had previously started to be examined in professional fields requiring face to face interaction such as health and education have now come to be taken up in student populations. For example; Schaufeli, Martinez, Marques-Pinto, Salanova and Bakker, 2002a; Schaufeli, Salanova, Gonzalez-Roma and Bakker, 2002b) have adapted the Maslach Burnout Inventory-General Survey (MEI-GS) widely used in the area and the Utrecht Work Engagement Scale (UWES) composed by consideration of MBI-GS items and sub-scales (Maslach, Jackson and Leiter, 1996; Maslach and Leiter, 1997) with the purpose of applying these on students. Therefore, the word "work" is taken as the student's performance of all activities and responsibilities with respect to his school education throughout this study.

According to Anttonen and Vainio (2010), while the precursors of well-being were initially explained to be usually related to personal traits, later on the work of the individual, his work environment and entire life style were included in the scope of his well-being at work. Well-being research in work life has been focused on the physical demands of employees' professional duties that causes them to experience tension and stress. It can be said the factors like years of exam marathon and the expectations of the family and society have turned studentship into a very stressful job/occupation. According to Mäkelä and Uotila (2011), as a result of the long-term of the tension and stress came out burnout on the workers. Freudenberger (1974) has defined burnout, which has been a very widespread research topic from the 1970s on till present (Maslach and Leiter, 1997) and initially used by Bradley (1969), as a phenomenon of physical, emotional and mental fatigue accompanied by the symptoms of reduced personal accomplishment, depersonalization and decrease of interest in work. Maslach, has taken up burnout as a multi-dimensional syndrome comprised of three components, those being emotional exhaustion, depersonalization and reduced personal accomplishment revealed by symptoms of behavioral changes and changes in attitude related to work (Maslach and Jackson, 1981). Individuals who suffer from burnout approach their works/occupation with a high level of idealism and expectations, while their motivation is broken down when these are not adequately satisfied within the process and their life satisfaction is negatively affected. According to Lambert, Hogan and Altheimer (2010), there is a negatively meaningful relation between burnout and life satisfaction. A great many research in literature indicating that such relation is present both for university students (Chan, 2011; Çapri, Özkendir, Özkurt and Karakuş, 2012) and workers from varying professions (Anand and Arora, 2009; Avşaroğlu, Deniz and Kahraman, 2005; Çakınberk, 2011; Demerouti, Bakker, Nachreiner and Schaufeli, 2000; Gümüş, 2006; Hayes and Weathington, 2007; Hombrados-Mendieta and Cosano-Rivas, 2011; Lee, Hwang, Kim and Daly, 2004; Örkün, 2011; Özkan and Özdevecioğlu, 2012; Şahin, 2008; Şahin, 2010; Ünal, Karlıdağ and Yoloğlu, 2001) are attention drawing.

Recently, structures such as work engagement which is the positive opponent of burnout draw attention and it is observed that the number of research whereby these structures and well-being are taken up increase continuously (Mäkelä and Uotila, 2011). According to Cropanzano and Wright (2001), work engagement is one of the notions constituting the significant dimensions of well-being related to work such as workers' work stress, work satisfaction and burnout. While according to one view, the notion of work engagement is conceptualized as an exact opposing notion of burnout (Maslach, Schaufeli and Leiter, 2001; Schaufeli and Bakker, 2004), it is taken up by another viewpoint as a mental state which develops independently from burnout and which is a positive and satisfying state related to work such as vigor, dedication and absorption (Schaufeli and Bakker, 2001; Schaufeli et al., 2002b). A great many research studies reporting that work engagement has positive results for the individual, family and the organization, are related to life satisfaction and predicts the latter in a positively meaningful way are attention drawing (De Cuyper, Notelaers and De Witte, 2009; Hakanen and Schaufeli, 2012; Nilsson, Bernspang, Fisher, Gustafson and Lofgren, 2007; Wessels, 2009; Williamson, 2011). However, it is seen that all these studies which have been conducted were made on workers from different professional groupings and that no study has been conducted on students.

On the other hand According to Abramson, Metalsky and Alloy (1989), the notion of hopelessness, which is another important variable related to life satisfaction, is defined as the occurrence of negative incidences life and the etiology of depression sub-type in terms of the cognitive fragility's functioning. The reason why hopelessness occurs, similar to the reasons of burnout, is the occurrence of avoidant consequences as a result of individuals', having very high expectations, inability to change the probability of these expectations being met and their perception of themselves and their future with negative properties. According to Beck and Steer (1989), hopeless individuals believe that they will not be able to correct anything which is right and important for themselves, will not be able to succeed anything they endeavor to do, will never be able to attain their important goals and targets and will never be able to solve bad and negative problems. At this point, it is seen that research on hopelessness which is expressed to be a useful indicator of a low level subjective well-being (Haatainen et al., 2004) and life satisfaction were conducted on different populations. For example, studies conducted on the overall population (Haatainen et al., 2004) and hemodialysis patients (Erdem, Karabulutlu, Okanlı and Tan, 2004) and students (Gençay and Gençay, 2011; Gündoğar, Sallan-Gül, Uskun, Demirci and Keçeci, 2007; Masal, 2012; Steenwyk, Atkins, Bedics and Whitley, 2010; Tümkaya, Çelik and Aybek, 2011) have reported that hopelessness has a negatively meaningful relation with life satisfaction and is found to be a meaningful predictor of the latter and that hopelessness decreases when life satisfaction increases. It is striking that only Tümkaya, Çelik and Aybek's (2011) study from amongst these research studies conducted on students were on high school students, whereas others were conducted on university students.

When assessed in consideration of the above summarized research results, it is seen that studies conducted on life satisfaction which is one of the most important dimensions of subjective well-being and the variables of burnout, work engagement and hopelessness generally analyzed in adult research groups and with a professional viewpoint, while a great part of the research conducted on students are performed on university sample. In particular, there is no research in literature which has examined a combination of variables of life satisfaction, burnout, work satisfaction and hopelessness. Therefore, finding the level at which burnout, work engagement and hopelessness levels affect the life satisfaction of high school students, who are at a most important turning point in terms of career planning and professional choice processes while going through the most important and unsteady years of their adolescence, will be able to make important contributions to Psychological Counseling and Guidance field, which will make preventive studies for protecting these students' spiritual health.

In light of all these explanations, the general purpose of this research is to determine the relations between high school students' life satisfaction, burnout, work engagement and hopelessness scores and examine the contribution of their burnout, work engagement and hopelessness scores in the prediction of their life satisfaction scores. Answers to the following questions were searched for in line with this general purpose.

- 1) Is there a meaningful relation between high school students' life satisfaction, burnout, work engagement and hopelessness scores?
- 2) Is the burnout, work engagement and hopelessness scores of high school students predict their life satisfaction scores?

2. Method

This research is a field scanning made by the descriptive method.

2.1 Research Group

The research group is comprised of a total of 461 students, 225 (% 48.8) of them being girl students and 236 (% 51.2) of them being male students, who have voluntarily accepted to participate in the study and who continue their 12th grade education during the 2011-2012 school term at varying types of high schools within the provincial boundaries of the Mersin Municipality. 185 (% 40.1) of the students, the age range of whom varies between 16 and 20 continue their education at Anatolian high schools, while 157 of them being (% 34.1) attend vocational high schools and 119 (% 25.8) of them being attended regular high schools.

2.2 Instruments

The Satisfaction with Life Scale (SWLS): SWLS has been developed by Diener et al. (1985) in order to measure individuals' life satisfaction. The SWLS consists of 5-items that are completed by the individual whose life satisfaction is being measured. Each item is scored from 1 to 7 in terms of "strongly agree" to "strongly dis-agree". The Turkish validity and reliability study of the scale has been made by Köker (1991) and Yetim (1993). While Köker (1991) reported that the scale's test-retest reliability coefficient is 0,85 and the Cronbach alpha internal consistency coefficient is 0.80, Yetim (1991) reported that the corrected split-half value is 0,75 and the Kuder Richardson-20 value is 0,78. The Cronbach alpha internal consistency coefficient obtained from the

data within the scope of this research however is found to be $r = .79$.

Maslach Burnout Inventory-Student Survey (MBI-SS): MBI-SS is the version of MBI-GS, developed by Schaufeli, Leiter, Maslach and Jackson (1996), which has been adapted to be used on students (Schaufeli et al., 2002a). The inventory which has been adapted to Turkish by Çapri, Gündüz and Gökçakan (2011) is a 7-point frequency rating scale and is comprised of 16 items and three subscales. From amongst these sub-scales, the exhaustion [exhaustion, EX] sub-scale is comprised of 5 articles, the cynicism [cynicism, CY] sub-scale is comprised of 5 items and the efficacy [efficacy, EF] sub-scale is comprised of 6 items. Scale items are scored between “0 never” and “6 always”. Three different burnout points are calculated for each person and high scores on EX and CY and low scores on EF are indicative for burnout (EF items are reverse scored). Ergin (1992), who has previously adapted the Maslach Burnout Inventory (MBI), which had been developed by Maslach and Jackson (1981) for professional employees working face to face with people, to Turkish, has stated that the 7-point frequency rating scale is not appropriate for the Turkish culture. Therefore, a 5-point frequency rating scale (“1 never”, “5 always”) has been adopted in this study.

Findings related to the Factor Structure of MBI-SS

In order to determine the factor structure of MBI-SS, the verification of the three factor structure obtained by Çapri, Gündüz and Gökçakan (2011) on university students on the 469 high school students within the scope of this research was tested. Findings related to the model fit indicators obtained according to the results of the Confirmatory Factor Analysis (CFA) made for this purpose are shown in Table 1.

Table 1. Model fit indicators according to MBI-SS’s confirmatory factor analysis results

MBI-SS	χ^2	<i>sd</i>	χ^2/sd	GFI	RMSEA	CFI	SRMR	NNFI
	302.78	101	2.99	0.92	0.066	0.93	0.066	0.92

When the analysis findings related to the Confirmatory Factor Analysis made for MBI-SS in Table 1 is examined, it is seen that the results indicate an adequate fit and verify the three factor structure of the scale at an acceptable level ($\chi^2=302.78$, $df=101$, $p=.000<.001$; $\chi^2/df=2.99$; GFI=.92; RMSEA, .066; CFI=.93; SRMR=.066; NNFI=.92). Depending on these results, it is possible to say that the three factor structure of MBI-SS, previously adapted to Turkish for university students, is verified on the high school students being the participants of this research and may also be used on this population.

Utrecht Work Engagement Scale-Student Survey (UWES-SS): UWES-SS has been developed by Schaufeli et al. (2002b). UWES-SS is a 7-point frequency rating scale and is comprised of 17 items and three sub-scales. Among these scales, the vigor [vigor, Z] sub-scale is comprised of 6 items (1, 4, 8, 12, 15, 17), the dedication [dedication, A] sub-scale is comprised of 5 items (2, 5, 7, 10, 13), while the absorption [absorption, B] sub-scale is comprised of 6 items (3, 6, 9, 11, 14, 16). Scale items are scored as “0 never” to “6 always”. While scoring, it is possible to obtain total score and sub-scale scores for each person. In this research, Utrecht Work Engagement Scale (UWES), the adaptation into Turkish, reliability and validity studies of which have been made by Gündüz, Çapri and Gökçakan (2013), was used. In order to make the implementation of UWES’ items on student populations, a relatively small alteration has been made by replacing the word “work” with “class”, as done by Schaufeli et al. (2002b)’. Since the original of the scale has been made in line with MBI-GS’s items, a five point grading (“1 never”, “5 always”) in this research according to the above justification was adopted.

Findings related to the Factor Structure of UWES-SS

In order to determine the factor structure of UWES-SS the verification of the three factor structure obtained by Gündüz, Çapri and Gökçakan (2013) on the 469 high school students within the scope of this structure was tested. Findings related to the model fit indicators obtained according to the results of the Confirmatory Factor Analysis (CFA) made for this purpose are given in Table 2.

Table 2. Model fit indicators according to UWES-SS’s confirmatory factor analysis results

UWES-SS	χ^2	<i>sd</i>	χ^2/sd	GFI	RMSEA	CFI	SRMR	NNFI
	418.60	116	3.60	0.90	0.075	0.97	0.042	0.97

When the Confirmatory Factor Analysis findings in Table 2 are examined, it is seen that the results indicate an adequate fit and that the three factor structure of the scale is at an acceptable level ($\chi^2=418.60$, $df=116$, $p=.000<.001$; $\chi^2/df=3.60$; $GFI=.90$; $RMSEA=.075$; $CFI=.97$; $SRMR=.042$; $NNFI=.97$). Depending on these results, it is possible to say that the three factor structure of UWES previously adapted to Turkish for employees is verified for the high school student being the participants of this research and may also be used on this population.

Beck Hopelessness Scale: This scale, which can be applied to adolescents and adults, was developed by Beck, Weissman, Lester and Trexler (1974) in order to determine the negative future expectations of the individual. The self-report scale is comprised of 20 items and is scored by points 0-1. The answer “yes” gets 1 point in 11 questions, while the answer “no” gets it in 9 questions. When the points obtained are high, it is assumed that the hopelessness of the individual is high (as cited in Savaşır and Şahin, 1997). The adaptation of the scale into Turkish has been made by Seber (1991). The validity and reliability study however has been conducted by Seber (1991) and Durak (1994). During the reliability study of the scale, Dilbaz and Seber (1993) found the internal consistency coefficient to be .86, item-total test correlations to be .07 to .72 and the test-retest reliability coefficient to be .74. Durak (1994), who has conducted similar studies found the internal consistency coefficient to be .85, item-total test correlations to be .31 to .67 and the split-half reliability to be .85. The Cronbach alpha internal consistency co-efficient yielded from data within this research however has been found to be $r=.83$.

Personal Information Form: This form which contains information on socio-demographic variables such as the gender, age, education level has been drawn up by the researchers.

2.3 Procedure

After giving participants information about the purpose of research, applications were made on the participant’s educational environment and in between classes.

2.4 Data Analysis

In order to analyze the factor structure of MBI-SS and UWES-SS, the Confirmatory Factor Analysis (CFA) was implemented. CFA analyses were made by using Lisrel 8.71 (Jöreskog and Sörbom, 2004). Maximum Likelihood method was used during the analyses. In order to assess the goodness of model fit various model fit index criteria were used. The oldest and most frequently used statistics as calculated for model-data fits with CFA is χ^2/df . Since χ^2 is sensitive to the model fit statistics sampling size, it poses a problem especially for samplings the sample size of which is more than 250. In order to eliminate this problem, it is suggested that different fit indexes are used in addition to χ^2 (Bentler, 1990). In this respect, frequently used fit indexes χ^2/sd , GFI (Goodness of fit index; Jöreskog and Sörbom, 1981), RMSEA (Root mean square error of approximation; Steiger and Lind, 1980), CFI (Comparative fit index; Bentler, 1990), RMR (root mean square error of approximation), SRMR (Standardized root mean square error of approximation) were used. Among those, values of χ^2/sd and values of 3 or lower are accepted to be a good model fit, while values up to 5 are accepted as an adequate model fit (Kline, 1998; Marsh and Hocevar, 1988). GFI and CFI values above .90 are considered to be acceptable, while their being above .95 are recognized as indicators of a good fit (Hu and Bentler, 1999; Schermelleh-Engel, Moosbrugger and Müller, 2003). On the other side, it’s been .05 below RMSEA, RMR and SRMR indexes indicates very proximate model data fit; models up to .08 indicates acceptable fit; while models which are $\geq .10$ indicate a weak model data fit (Browne and Cudeck, 1993; Schermelleh-Engel, Moosbrugger and Müller, 2003). On the other hand, while Pearson product moment correlation coefficient was used to determine the relations between participants’ life satisfaction, burnout, work engagement and hopelessness scores, the multiple regression analysis was used to examine the contribution of burnout, work engagement and hopelessness scores in the prediction of life satisfaction scores. The upper limit of the error margin has been recognized as 0.05.

3. Results

In this section, findings obtained in line with the sub purposes of the research are given.

3.1 Results as to whether There is a Meaningful Relationship between High School Students’ Life Satisfaction, Burnout, Work Engagement and Hopelessness Scores

Correlation coefficients related to life satisfaction, burnout, work engagement and hopelessness scores are shown in Table-3.

Table 3. The relationship between life satisfaction, burnout, work engagement and hopelessness scores

		1	2	3	4	5	6	7	8	\bar{X}	Ss
SWLS	1. Life satisfaction	1								20.31	6.76
	2. Exhaustion	-.18**	1							13.31	4.37
MBI-SS	3. Cynicism	-.19**	.52**	1						12.79	3.49
	4. Efficacy	-.55**	.18**	.13**	1					15.98	4.44
	5. Vigor	.18**	-.41**	-.25**	-.45**	1				16.11	5.34
UWES-SS	6. Dedication	.23**	-.36**	-.23**	-.51**	.81**	1			15.48	4.48
	7. Absorption	.36**	-.21**	-.12**	-.32**	.33**	.35**	1		20.85	4.05
BHS	8. Hopelessness	-.42**	.30**	.25**	.26**	-.27**	-.31**	-.26**	1	6.03	4.31

**p<.05

When Table 3 is examined, it is striking that while there is a negative meaningful relationship between high school students life satisfaction scores with MBI-SS's exhaustion ($r = -.18$, $p < .05$), cynicism ($r = -.19$, $p < .05$), efficacy ($r = -.55$, $p < .05$) sub-scale scores and hopelessness scores ($r = -.42$, $p < .05$), there is a positive meaningful relationship between UWES-SS's vigor ($r = .18$, $p < .05$), dedication ($r = .23$, $p < .05$) and absorption ($r = .36$, $p < .05$) sub-scale score

3.2 Results as to whether High School Students' Burnout, Work Engagement and Hopelessness Scores Predict Their Life Satisfaction Scores

It is seen from the correlation analysis in Table 3 that there are statistically meaningful relations between dependent and independent variables. Depending on these results, burnout, work engagement and hopelessness scores were included in the multi regression analysis in order to examine their contribution to predicting high school students' life satisfaction scores and the results were given in Table 4.

Table 4. Results of multiple regression analysis related to prediction of life satisfaction

Predicted Variable	Analysis Phase	Predicting Variables	B	Standard Error	β	t	p	Zero-Order	ΔR^2
Life Satisfaction		CONSTANT	17.143	2.155		7.954	.000		
		HOPELESSNESS							
	1	$R = 0.416$ $R^2 = 0.173$ $F_{(1,459)} = 95.855^*$	-.515	.067	-.329	-7.674	.000	-.416	.173
		ABSORPTION							
	2	$R = 0.489$ $R^2 = 0.239$ $F_{(2,458)} = 72.076^*$.405	.073	.243	5.553	.000	.358	.067
		EFFICACY							
3	$R = 0.496$ $R^2 = 0.246$ $F_{(3,457)} = 49.768^*$	-.136	.067	-.089	-2.039	.042	-.254	.007	

**p<.05

When Table 4 is examined, three different regression models were yielded as a result of the multiple regression analysis on high school students' life satisfaction scores. When the zero-order correlation value between predicting variables and the predicted variable has been examined, it is seen that there is a negative level relationship $r = -.42$ in the first regression model between life satisfaction scores and their hopelessness scores. In

the second regression model, it is seen that there is a positive level relation $r = .36$ in the zero-order correlation value between life satisfaction scores and UWES-SS's absorption sub-scale scores. In the third regression model, it is seen that there is a negative level relation $r = -.25$ in the zero-order correlation value between life satisfaction scores and MBI-SS's efficacy sub-scale scores.

When the R values in the Table 4 are examined, it is seen that while the correlation coefficient for the hopelessness variable is obtained to be $R = .42$, it is raised to $R = .49$ with the addition of the absorption variable and $R = .50$ with the addition of the efficacy variable respectively. When the R^2 values are examined, however, it is seen that the hopelessness variable explains % 17 of the variance in life satisfaction, % 24 of the absorption variable and % 25 of the efficacy variable respectively. When all the variables approached altogether it has been seen to explain approximately % 25 of the variance in life satisfaction. It is seen that the variable which the best predicts life satisfaction is the hopelessness variable. While hopelessness variable explains % 17.3 of the variance in life satisfaction, this variable is followed by absorption with % 6.7 and efficacy with % 0.7 respectively.

Moreover, according to the standardized regression coefficient (β), the relative ranking of the predicting variables' importance for "life satisfaction" is "hopelessness", followed by "absorption" and "efficacy". When the results of the t-test for the meaningfulness of regression coefficients however, it is seen that all variables within the three regression models are a statistically meaningful predictor of life satisfaction at the level of 0,05.

4. Discussion

As a result of this research, which was conducted to analyze the relations between high school students' life satisfaction, burnout, work engagement and hopelessness scores and the contributions of burnout, work engagement and hopelessness scores to predicting life satisfaction scores, it has been seen that there is a negative relation between high school students' life satisfaction scores and their exhaustion, cynicism, efficacy and hopelessness scores, while there is a positively meaningful relation between their vigor, dedication and absorption scores and that life satisfaction scores are meaningfully predicted only by hopelessness, absorption and efficacy scores.

Maslach and Jackson (1981) state that the activation of MBI's three sub-dimensions, being emotional exhaustion, depersonalization and reduced personal accomplishment sub-scales may cause work-related problems such as absenteeism and demoralization in the individual's life, alongside health problems and serious consequences such as an overall decrease in life satisfaction. In this research, the conclusion that there are negatively meaningful relations between life satisfaction and MBI-SS's three sub-scale scores show consistencies with the results of the research in literature conducted by university students (Chan, 2010; Çapri et al., 2012) and different professional workers employees (Anand and Arora, 2009; Avşaroğlu, Deniz and Kahraman, 2005; Çakınberk, 2011; Demerouti et al., 2000; Gümüş, 2006; Hayes and Weathington, 2007; Hombrados-Mendieta and Cosano-Rivas, 2011; Lee et al., 2004; Örkün, 2011; Özkan and Özdevecioğlu, 2012; Şahin, 2008; Şahin, 2010; Ünal, Karlıdağ and Yoloğlu, 2001) indicating that there is such a relation, pointing at the fact that the higher students' life satisfaction gets, the more their burnout will decrease. In such case, it is considered that if students' life satisfaction can be increased, from serious consequences of the problems (related to health and work) result from the burnout may be avoided. On the other hand, it is striking that merely the efficacy sub-scale of burnout has a meaningful effect on the variance in life satisfaction and that the exhaustion and cynicism sub-scales do not have any meaningful effect. While the obtained results show similarities with the results of the research conducted by Hayes and Weathington (2007), which had found that only reduced personal accomplishment sub-scale predicts life satisfaction, it differs from the Lambert, Hogan and Altheimer's (2010) research results found that only the emotional exhaustion sub-scale has a meaningful contribution to the variance in life satisfaction. According to Maslach, Schaufeli and Leiter (2001) as well as Schaufeli and Taris (2005), the exhaustion and cynicism sub-scales express the stress dimension of burnout and the basic factors of the burnout structure by being at the center of the notion. Additionally, the efficacy sub-scale reflects more of a personal trait and not burnout (Cordes and Dougherty, 1993 as cited in Schaufeli and Salanova, 2007). It is possible to consider that the results yielded from this research support the views that efficacy, apart from the structure of burnout, reflects a personal trait.

According to another conclusion of the research is that life satisfaction shows a positively meaningful relation with the vigor, dedication and absorption sub-scale scores of work engagement. This result which has been yielded is similar to the results of the research which has found that work engagement by different professional employees is related to life satisfaction (De Cuyper, Notelaers and De Witte, 2009; Hakanen and Schaufeli, 2012; Nilsson et al., 2007; Wessels, 2009; Williamson, 2011). In addition, it is seen that the meaningful contribution to

the variance in life satisfaction is only made by absorption sub-scale scores, while vigor and dedication sub-scale scores do not have a meaningful contribution. According to Maslach, Schaufeli and Leiter (2001), work engagement is an exact opposite notion of burnout. The “Vigor” sub-scale of UWES is conceived as the opposite of the exhaustion from MBI’ sub-scales, while the “dedication” sub-scale of UWES is conceived as the opposite of the cynicism from MBI’ sub-scales. On the other hand, vigor and dedication sub-scales (like exhaustion and cynicism sub-scales) are expressed as the core dimensions of work engagement (Schaufeli and Bakker, 2004). In fact, dimensions of vigor and dedication of UWES are the opposite pole dimensions of exhaustion and cynicism of the burnout, respectively, vigor and exhaustion have been called “energy”, while the continuum formed by dedication and cynicism has been labeled “identification” and also these constructs of work engagement and burnout have identified two bipolar dimensions (Gonzalez-Roma, Schaufeli, Bakker and Lloret, 2006). In this research, it is considered that the results yielded as to vigor and dedication sub-scales, as is the case with exhaustion and cynicism sub-scales, are not meaningful predictors of life satisfaction, can form the evidence of the presence of the suggested two bipolar dimensional (Gonzalez-Roma et al., 2006).

Additionally, regression analysis results have shown that the highest contribution to students’ variance in life satisfaction is made by the hopelessness variable (% 17). It is considered in the literature this obtained result is consistent with the research result finding that there is a negatively meaningful relationship between hopelessness and life satisfaction and is a meaningful predictor of the life satisfaction (Erdem et al., 2004; Gençay and Gençay, 2011; Gündoğar et al., 2007; Masal, 2012; Steenwyk et al., 2010; Tümkaya, Çelik and Aybek, 2011) and that it is in line with the views that the more life satisfaction increases the further hopelessness will diminish. Seen from this viewpoint, it is possible to say that hopelessness has a very important place with respect to its influence on high school student’s life satisfaction. On the other hand, Beck, Steer, Kovacs and Garrison (1985) state that depressed individuals with a tendency of hopelessness, have a higher intention to commit suicide compared to other depressed individuals who do not have such tendencies and that hopelessness is in fact a more important risk factor for suicidal tendencies compared to depression. At the same time, studies in the literature indicate that hopelessness is related to depression and suicidal tendencies and is a meaningful predictor of them both (Alford, Lester, Patel, Buchanan and Giunta, 1995; Beck et al., 1985; Nimeus, Traskman-Bendz and Alsen, 1997; O’Connor, Connery and Cheyne, 2000; Young, Fogg, Scheftner, Fawcett, Akiskal and Maser, 1996). In such case, if high school students’ life satisfaction can be increased, while decreasing their hopelessness levels, risk factors such as suffering from depression and suicidal tendencies may also be prevented.

When assessed by taking all results into consideration, it will be possible to increase high school students’ life satisfaction to the extent their work engagement can be increased and their burnout and hopelessness levels are lowered. From this viewpoint, educational and psychological strategies must be developed to decrease high school students’ burnout and hopelessness levels and to increase their work engagement. For example; experimental studies to increase life satisfaction of students may be undertaken and interventions related to burnout, work engagement and hopelessness levels may be made during these studies. Alongside the variables taken up during this research, different psychological and social structures may be worked with during the research to be conducted in the future such as depression, suicidal tendencies, parental attitude, peer support-victimization, participation in socio-cultural activities and teacher attitudes. Moreover, conducting similar studies in the future on students attending different class grades and individuals involved in the work life will enhance the scope of studies and enrich the literature with new knowledge. In addition when the effect of hopelessness on life satisfaction is taken into consideration, bearing in mind the different psychological symptoms such as depression and suicidal tendencies for new studies will contribute to clarifying the unexplainable part of the life variance in satisfaction.

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