

THE ROLE OF SELF-ESTEEM, PSYCHOLOGICAL WELL - BEING, EMOTIONAL SELF - EFFICACY, AND AFFECT BALANCE ON HAPPINESS: A PATH MODEL

Tayfun Dogan, PhD

Research Fellow, The University of Kansas,
Department of Psychology, Lawrence, Kansas, USA

Tarık Totan, PhD

Assistant Professor, Adnan Menderes University, Faculty of Education,
Department of Guidance and Counselling, Aydın, TURKEY

Fatma Sapmaz, PhD

Assistant Professor, Sakarya University, Faculty of Education, Department
of Guidance and Counselling, Sakarya, TURKEY

Abstract

The objective of this study is to examine the effects of self-esteem, psychological well-being, emotional self-efficacy and affect balance variables on happiness. The participants of the study are 340 (female $n= 213$; male $n= 109$) university students from Turkey. Oxford Happiness Questionnaire-Short Form, Self-Liking/Self-Competence Scale, Flourishing Scale, Emotional Self-efficacy Scale, and Positive-Negative Events Scale were used as data acquisition tools in the study. The relationships between the variables were examined via path analysis. According to the analysis it was determined that there are positive and significant relationship between psychological well-being, emotional self-efficacy and affect balance; and that psychological well-being and affect balance have positive effects on self-esteem and happiness, emotional self-efficacy has a positive effect on self-esteem and that self-esteem has a positive effect on happiness ($\chi^2= 1.84$, $df= 1$, $\chi^2/df= 1.8$, GFI= .99, CFI= .99, NFI= .99, RFI= .95, IFI= .99, TLI= .98, RMSEA= .05). In addition, it was concluded that 46% of the total variance regarding self-esteem is explained by psychological well-being, emotional self-efficacy and affect balance. It was also concluded that psychological well-being, emotional self-efficacy, affect balance and self-esteem explain 51% of the total variance regarding happiness.

Keywords: Happiness, self-esteem, psychological well-being, emotional self-efficacy, affect balance

Introduction

Happiness is defined as the cognitive and emotional evaluation of life (Diener, 1984). The evaluations and judgments of individuals regarding various areas of life (marriage, health, professional life etc.) signify the cognitive aspect of happiness. Whereas the frequency of positive or negative emotions comprise the emotional aspect of happiness. Accordingly, those who experience positive emotions more frequently in comparison with negative emotions are considered to be individuals who have a high level of life satisfaction (Myers & Diener 1995). Many studies have been conducted to determine what the psychological, biological, and social elements that affect happiness are (Lyubomirsky, 2001). Accordingly, findings have been obtained which show that genetic factors are the most important predictors of happiness. The studies carried out have put forth that genetic factors have a 40%-50% effect on happiness (Lykken & Tellegen, 1996). Whereas it has been determined that life conditions and demographic factors (age, gender, education level, marital status etc.) have a 10% effect on happiness. It has also been concluded that purposeful activities (positive thinking, altruism, coping with stress etc.) have a 40% effect on happiness (Lyubomirsky, 2001; Lyubomirsky, Sheldon, & Schkade, 2005). Happiness has many other benefits for the life of an individual besides giving happiness, positive emotions, welfare and peace. Research results indicate that happiness strengthens the immune system of individuals along with their energy and creativity while providing that they are preferred more in their social relations, increase efficiency at the workplace and provide a longer life (Lyubomirsky, King, & Diener, 2005).

The variables of self-esteem, psychological well-being, emotional self-efficacy and affect balance are also evaluated within the study areas of positive psychology similar to happiness. There are many studies that examine the relationships between happiness and self-esteem which is one of the psychological signifiers of happiness. These studies have put forth that self-esteem is an important precursor of happiness and that it has a positive relationship with happiness (DeNeve & Cooper, 1998; Diener & Diener, 1995; Lyubomirsky & Lepper, 2006). Psychological well-being is another describing important aspects of human functioning ranging from positive relationships, to feelings of competence, to having meaning and purpose in life (Diener et. al., 2010). Whereas the concept of emotional self-efficacy is related to the effective use of emotions by an individual. Emotional self-efficacy is a multidimensional concept and is composed of emotion regulation, understanding the emotions of oneself and others, perception of

emotions and use of emotions to support thoughts dimensions (Kirk, Schutte, & Hine, 2008). Another variable of the study is affect balance. Positive affect is defined as enjoying many emotions and moods and negative balance is defined as enjoying less emotions and moods whereas affect balance can be defined as the balance between enjoying and not enjoying the various positive and negative emotions (Diener, 2000; Diener et. al., 2010). The increase of affect balance signifies that the individual experiences negative emotions less and positive emotions more (Diener et. al., 2010). In the light of this inference, affect balance can be thought of as the skill for balancing emotions arising due to negative and positive experiences. Whereas psychological well-being, another exogenous variable of the study, contains the cognitive and affective evaluations of an individual and signifies that he/she is satisfied of the emotions that he/she has less negative emotions and is highly satisfied of life (Diener, Lucas, & Oishi, 2002). Hence, it is anticipated that affect balance and psychological well-being have direct effects on happiness.

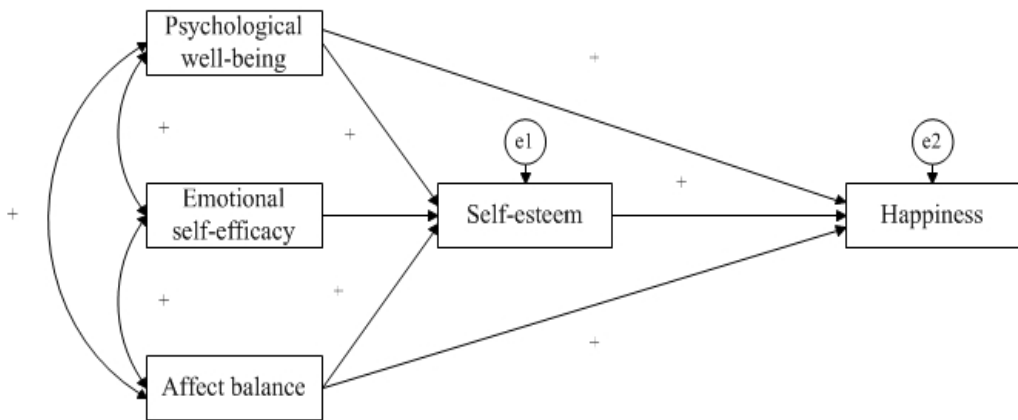


Figure 1. Hypothesis model for the effects of Self-esteem, psychological well-being, emotional self-efficacy, and affect balance on happiness

When the hypothesis model of the study is examined, it is assumed that there will be positive relationships between psychological well-being, emotional self-efficacy and affect balance and that these three variables will have a positive effect on self-esteem and that in addition, psychological well-being, affect balance and self-esteem will have positive effects on happiness. Another assumption is that emotional self-efficacy will not have a direct effect on happiness, however it will have an indirect effect on happiness by way of self-esteem. Whereas in the hypothesis model psychological well-being, emotional self-efficacy and affect balance are exogenous variables, self-esteem and happiness are endogenous variables.

Method

Participants

The participants of the study are 340 university students currently continuing their educations at the Dokuz Eylül University Buca Faculty of Education in Izmir during the 2011-2012 academic year. Of the participants, 67.9% are female ($n= 213$), 32.1% are male ($n= 109$) university students whereas 17.2% are students of pre-school teaching ($n= 58$), 13.7% are students of Turkish teaching ($n= 46$), 12.9% are students of elementary school mathematics teaching ($n= 44$), 11.2 are of science teaching ($n= 73$) whereas 23.5% are guidance and psychological guidance ($n= 80$) students. The average age of the participants has been determined as 20 years 6 months.

Data tools

Oxford Happiness Questionnaire-Short Form (OHQ-SF)

The scale was developed by Hills & Argyle (2002). The scale is composed of 8 items and a correlation of .93 has been determined with its 29 item original. The Turkish adaptation of OHQ-SF has been made by Doğan and Çötök (2011). Accordingly, as a result of confirmatory factor analysis, a single factor structure with 7 items with an eigenvalue of 2.782 has been obtained that explains 9.74% of the total variance. The single factor structure of OHQ-SF has been examined using confirmatory factor analysis and the goodness of fit indexes have been determined to be ($\chi^2/df= 2.77$, AGFI= .93, GFI= .97, CFI= .95, NFI= .92, IFI= .95, RMSEA= .074). The relationships between OHQ-SF and Life Satisfaction Scale (Diener, Emmons, Larsen, & Griffin, 1985), Life Orientation Test (Scheier & Carver, 1985) and Zung Depression Scale (Zung, 1965) have been examined and correlations of .61, .51 and -.48 have been determined respectively. The internal consistency coefficient of OHQ-SF has been determined as .74, whereas the test-re-test reliability coefficient has been determined as .85.

Self-Esteem Scale (Self-Liking/Self-Competence Scale-SLSC)

SLSC is a 16 self-report scale developed by Tafarodi and Swan (2001). The scale measures self-esteem with two dimensions namely self-liking and self-competence. Tafarodi and Swan (2001) have determined the internal consistency of the scale for the self-competence sub-dimension as .83 for females and for males .82 and for self-liking sub-dimension as .90 for both males and females. Whereas the test-re-test reliability coefficient was reported as .78 for the self-competence sub-dimension and as .75 for the self-liking sub-dimension. The Turkish adaptation of SLSC has been made by Doğan (2011). Accordingly, the internal consistency coefficients for the sub-dimensions of self-liking and self-competence have been determined to be .83 and .74. The two factor structure of the scale has been examined via confirmatory factor analysis and the goodness of fit indexes have been

determined as AGFI= .91, GFI= .94, CFI= .97, NFI= .95 and RMSEA= .49. Correlations of .75 and .69 have been obtained between self-liking and self-competence and the Rosenberg Self-Esteem Scale within the scope of criterion related validity.

Psychological Well-being Scale (PWBS)

The scale is an 8 item Likert type (1- I totally agree, 7- I totally disagree) measurement tool with seven degrees developed by Diener et al. (2010) in order to evaluate psychological well-being or flourishing. The Turkish adaptation of the scale has been done by Telef (2011a). The researcher has determined as a result of descriptive factor analysis that the single dimensional structure explains 41.94% of the variance. As a result of confirmatory factor analysis, the researcher has also reported that the single dimensional structure is confirmed in Turkish language as well (RMSEA= .08, SRMR= .04, GFI= .96, NFI= .94, RFI= .92, CFI= .95, IFI= .95). The internal consistency and the test-re-test coefficient have been determined as .80 and .86 respectively.

Emotional Self-efficacy Scale (ESES)

The five degree Likert type scale that has been developed by Kirk, Shutte, & Hine (2008) and adapted into Turkish by Totan, İkiz, & Karaca (2010) contains 32 items. Even though during the Turkish adaptation study the four factor structure of the scale has been confirmed, the single dimensional structure of the scale has been used in this study Kirk, Shutte, & Hine (2008) have reported the internal consistency coefficient of the single dimensional structure of the scale as .96 and the test-re-test coefficient as .85. During the Turkish adaptation study, Totan, İkiz, & Karaca (2010) have determined that the scale preserves its single dimensional structure in Turkish ($\chi^2= 1508.96$, $df= 462$, $\chi^2/df= 3.27$, RMSEA= .071, NFI= .92, IFI= .94, RFI= .91, RMR= .073, GFI= .88) and have calculated the internal consistency coefficient and the test-re-test coefficient of the scale as .93 and .62 respectively.

Positive-Negative Events Scale (PNES)

The scale developed by Diener et. al. (2009-2010) is a Likert type five degree (1- Never, 5 Always) scale composed of twelve items. Telef (2011b), who has made the Turkish adaptation of the scale has determined that there are significant relationships of .95 for positive experiences and .90 for negative experiences between the Turkish and English forms. As a result of the descriptive factor analysis, the researcher has determined that positive experiences explain 33.31% of the total variance whereas negative experiences explain 26.70%. The researcher has also determined as a result of confirmatory factor analysis that the scale is valid in Turkish as well (RMSEA= .07, SRMR=.04, GFI= .93, NFI= .96, RFI= .95, CFI= .97, IFI= .97). The internal consistency coefficient of the scale for positive experiences

was reported as .88 and as .83 for negative experiences whereas the test-retest coefficients were reported to be .86 and .85 for positive and negative experiences respectively.

Data collection and analysis

The research data was acquired from the students at the Dokuz Eylül University Buca Faculty of Education during the 2011-2012 academic year. The participant were included in the study following a short brief about the research. As a result of the examinations carried out regarding the acquired data, the data of participants who did not answer over 5% of the items in the data acquisition tools and the data for measurements that have been accepted as univariate outlier value ($z = \pm 3.26$) were taken out of the data set (Tabachnick & Fidell, 2008). Following this data cleansing operation, it was determined that there are no multivariate outliers (Mahalanobis D^2). The normality assumption was examined via Kolmogorov-Smirnov analyses and was then reported. The multicollinearity problem was examined for the bilateral relationships between the exogenous and endogenous variables and it was determined that the relationships between the variables was smaller than .90. The significance level of the study was taken as .05 and the analyses have been carried out via IBM PAWS SPSS 18 (SPSS, 2009) and IBM SPSS AMOS 19 (Arbuckle, 2010) software.

Findings

In the hypothesis model that was formed to explain happiness, it was put forward that there are significant relationships between psychological well-being, emotional self-efficacy and affect balance and that in addition these three variables explain self-esteem while psychological well-being and affect balance explain happiness. Prior to the path analysis examination of this model, the variables in the model were calculated using Pearson Product Moment Correlation coefficients. Bonferroni Correction has been made ($.05/10 = .005$) during the correlation analyses and the significance level has been evaluated to be .005 (Green & Salkind, 2008).

Table 1. Relationships coefficients, Cronbach alpha values, and descriptive statistics for dependent and independent variables

Variables	1	2	3	4	Cronbach alfa	Mean	s.d.
Psychological well-being (1)	-	-	-	-	.87	43.34	7.34
Emotional self-efficacy (2)	.52*	-	-	-	.91	54.41	12.69
Affect balance (3)	.33*	.17*	-	-	.85	40.02	6.55
Self-esteem (4)	.65*	.49*	.30*	-	.88	57.49	8.86
Happiness (5)	.59*	.41*	.50*	.60*	.75	24.67	4.35

As a result of the correlation analyses, it was determined that there are positive and significant relationships between all the variables in the

model. According to the results, happiness has been positively and significantly related with psychological well-being ($r^2 = .35$), emotional self-efficacy ($r^2 = .17$), affect balance ($r^2 = .25$) and self-esteem ($r^2 = .36$). In addition, positive and significant relationships have been calculated between psychological well-being and emotional self-efficacy ($r^2 = .27$), affect balance ($r^2 = .03$) and self-esteem ($r^2 = .24$) whereas positive and significant relationships have been calculated between affect balance and self-esteem ($r^2 = .09$). Internal consistency coefficients of the variables were determined to be high and between .75 - .91. When the normality assumption was examined using Kolmogorov-Smirnov analyses, it was determined that normality was obtained for psychological well-being ($Z = 1.094, p = .182$), emotional self-efficacy ($Z = .811, p = .526$), affect balance ($Z = 1.345, p = .054$), self-esteem ($Z = .523, p = .948$) and happiness ($Z = 1.028, p = .242$). The significant relationships between variables and the high levels of internal consistency coefficients were accepted to be signifiers of sufficiency for path analysis and thus path analysis was carried out.

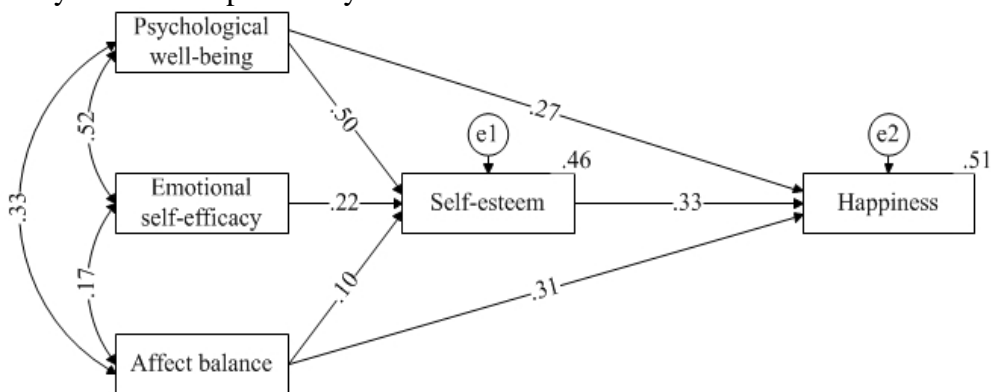


Figure 2. Result of path analysis regarding the effects of Self-esteem, psychological well-being, emotional self-efficacy, and affect balance on happiness

As a result of the path analysis for the hypothesis model, it was determined that there are significant and positive relationships between psychological well-being, emotional self-efficacy and affect balance and that psychological well-being and affect balance have positive effects on self-esteem and happiness, emotional self-efficacy has positive effects on self-esteem and that self-esteem has positive effects on happiness ($\chi^2 = 1.844, df = 1, \chi^2/df = 1.8, GFI = .99, CFI = .99, NFI = .99, RFI = .95, IFI = .99, TLI = .98, RMSEA = .05$). The standardized regression coefficients are about .50 of the coefficient between psychological well-being and self-esteem, .22 of the coefficient between emotional self-efficacy and self-esteem, .10 of the coefficient between affect balance and self-esteem, .27 of the coefficient between psychological well-being and happiness, .31 of the coefficient between affect balance and happiness and .33 of the coefficient between self-

esteem and happiness. 46% of the total change in self-esteem is explained by psychological well-being, emotional self-efficacy and affect balance. 51% of the change in happiness is explained by psychological well-being, emotional self-efficacy, affect balance and self-esteem.

Table 2. Multiple regression analysis for self-esteem, psychological well-being, emotional self-efficacy, and affect balance on happiness

Paths	Estimate	S.E.	C.R.	p
Emotional self-efficacy → Self-esteem	.114	.029	3.947	.000
Affect balance → Self-esteem	.143	.068	2.114	.035
Psychological well-being → Self-esteem	.638	.072	8.831	.000
Self-esteem → Happiness	.167	.030	5.526	.000
Psychological well-being → Happiness	.177	.039	4.578	.000
Affect balance → Happiness	.218	.033	6.527	.000
Psychological well-being ↔ Emotional self-eff.	59.307	8.196	7.236	.000
Affect balance ↔ Emotional self-efficacy	18.055	6.825	2.645	.008
Psychological well-being ↔ Affect balance	14.315	2.942	4.866	.000
Emotional self-efficacy	274,966	24,743	11,113	.000
Affect balance	40,656	3,658	11,113	.000
Psychological well-being	47,544	4,278	11,113	.000
Error 1 (e1)	41,266	3,713	11,113	.000
Error 2 (e3)	9,850	,886	11,113	.000

It was concluded as a result of path analysis that the paths between endogenous and exogenous variables are significant. According to the results, the linear paths between emotional self-efficacy and self-esteem, affect balance and self-esteem, psychological well-being and self-esteem, self-esteem and happiness, psychological well-being and happiness, affect balance and happiness are positively significant. The relationships between psychological well-being and emotional self-efficacy, affect balance and emotional self-efficacy and psychological well-being and affect balance are positively significant. It was understood that the modification suggestions in the path analysis output do not have a high level of contribution to the adaptation of the model. As a result of these results and the goodness of fit results, it was concluded that the hypothesis model has been confirmed without any requirement for further revisions.

Conclusion

The study has been structured on the path analysis of the direct and indirect effects of the concepts of self-esteem, psychological well-being, affect balance and emotional self-efficacy on happiness. As a result of the analyses, it was determined that there are positive and significant relationships between self-esteem, psychological well-being, affect balance, emotional self-efficacy and happiness. As a result of the path analysis, it was determined that the exogenous variables of psychological well-being and affect balance have positive effects on happiness. Whereas it was determined

that emotional self-efficacy which has a direct effect on self-esteem has an indirect effect on happiness. The path analysis results have put forth that the hypothesis model is acceptable without any need for modification. It was concluded that the variables relevant to the model explain about 51% of the total variance regarding happiness.

Even though in literature there are studies regarding the relationships between the research variables of self-esteem, psychological well-being, affect balance and emotional self-efficacy with psychological well-being (DeNeve & Cooper, 1998; Diener & Diener, 1995; Lyubomirsky & Lepper, 2006; Totan, Doğan, & Sapmaz, 2013), there is no study that handles all these variables together. Hence it is thought that this study will make a contribution to the literature. In this study, significant relationships have been determined between self-esteem and happiness. Studies that examine the relationships between self-esteem, which can be defined as one's self-satisfaction (Rosenberg, 1965) with happiness, positive and significant relationships between the two variables have been put forth (Furnham & Cheng, 2000; Lyubomirsky & Lepper, 2006). In this study it was concluded that emotional self-efficacy has an indirect effect on happiness via self-esteem. The frequency of positive and negative experiences comprise one of the fundamental dimensions of happiness (Diener, 1984). When the research findings are handled from this perspective, it can be evaluated that the positive effect of high emotion using skills on self-esteem and thus indirectly on happiness is significant. The theory of psychological well-being is one which emphasizes the necessity of the use of the potential of an individual to ensure self-acceptance and continue the relationships with others as well as a meaningful life (Ryff, 1989). Whereas subjective well-being (happiness) is handled as a *hedonic* look at well-being, psychological well-being is handled as an *eudaimonik* perspective (Ryan & Deci, 2001). The results obtained in this study have put forth that psychological well-being has significant effects on the subjective well-being of an individual. Lastly, direct and indirect significant relationships have been determined between affect balance and happiness. Individuals live through many positive and negative experiences in daily life. It can be stated that the existence of the ability to balance the emotions that arise due to these events and experiences has a positive effect on happiness.

In conclusion, hypothesis model based on theoretical content was verified statistically. Path analysis has shown direct and indirect effects of psychological well-being and affects balance on happiness. Whereas it has been understood that emotional self-efficacy has indirect effects on happiness via self-esteem. The effects of terminal and desired variables on happiness have been examined for the psychological health of the individual. The examination of the hypothesis model for different age groups and

communities including various variables that are undesired in social relationships and daily lives will contribute to the determination of the hidden variables that effect happiness thus helping to obtain data which can be used by mental health psychological counseling.

References:

- Arbuckle, J., L. (2010). *IBM SPSS Amos 19 user's guide*. California, IL: SPSS, Inc.
- Deneve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197–229.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-75.
- Diener, E. (2000). Subjective well-being. The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34-43.
- Diener, E. & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653–663.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Diener E. et. al. (2009). New measures of well-being. *Social Indicators Research Series*, 39, 247-266.
- Diener, E. et. al. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97, 143-156.
- Doğan, T. (2011). Two dimensional self-esteem: Adaptation of the Self-Liking/Self Competence Scale into Turkish: A validity and reliability scale. *Education and Science*, 36 (162), 126-137.
- Doğan, T. & Çötök, N. A. (2011). Adaptation of the short form of the Oxford Happiness Questionnaire into Turkish: A validity and reliability study. *Turkish Journal of Psychological Counselling and Guidance*, 4(36), 165-172.
- Furnham, A. & Cheng, H. (2000). Lay theories of happiness. *Journal of Happiness Studies*, 1, 227–246.
- Green, S., B. & Salkind, N., J. (2008). *Using SPSS for Windows and Macintosh. Analyzing and understanding data*. (5th Edition). New Jersey: Pearson, Prentice Hall.
- Hills, P. & Argyle, M. (2002). The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, 33, 1073–1082.
- Kirk, B. A., Schutte, N. S., & Hine, D. W. (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and Individual Differences*, 45(5), 432-436.

- Lykken, D., Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science*, 7, 186–189.
- Lyubomirsky, S. (2001). Why are some people happier than others: The role of cognitive and motivational processes in wellbeing. *American Psychologist*, 56, 239-249.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefit of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803-855.
- Lyubomirsky, S. & Lepper, H. S. (2006). What are the differences between happiness and self-esteem? *Social Indicators Research*, 78, 363–404.
- Lyubomirsky, S., Sheldon, K.M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111-131.
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, 6(1), 10-17.
- Rosenberg, M. (1965). *Society and adolescent self- image*. Princeton, NJ: Princeton University Press.
- Ryan, R. M. & Deci, E. L. (2001). To be happy or to be self-fulfilled: A review of research on hedonic and eudaimonic well-being. In S. Fiske (Ed.), *Annual Review of Psychology*, 52, 141-166.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th Edition). Boston: Allyn and Bacon.
- Tafarodi, R. W. & Swan, W. B. (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and Individual Differences*, 31, 653-673.
- Telef, B. B. (2011a). The validity and reliability of the Turkish version of The Psychological Well-being Scale. Paper presented at The 11th National Congress of Counseling and Guidance, October, 3-5, Selçuk-İzmir, Turkey.
- Telef, B. B. (2011b). The adaptation to Turkish of Positive-Negative Events Scale: Validity and reliability study. Paper presented at The 11th National Congress of Counseling and Guidance, October, 3-5, Selçuk-İzmir, Turkey.
- Totan, T., Doğan, T., & Sapmaz, F. (2013). Emotional self-efficacy, emotional empathy, and emotional approach coping as sources of happiness. *Cypriot Journal of Educational Sciences*, 8(2), 247-256.
- Totan, T., İkiz, E., & Karaca, R. (2010). Duygusal öz-yeterlik ölçeğinin Türkçeye uyarlanarak tek ve dört faktörlü yapısının psikometrik özelliklerinin incelenmesi [In Turkish: The adaptation of the emotional self-efficacy scale to Turkish university students and the examination of the

psychometric characteristics of its structure in one and four factors]. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 28, 71-95.

Scheier, M. F. & Carver, C. S. (1985). Optimism, coping and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.

SPSS (2009). *PAWS Statistics 18 core system user's guide*. California, IL: SPSS Inc.

Zung, W.W. K. (1965). A Self-rating Depression Scale. *Archive General Psychiatry*, 12, 63-70.